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 or Not for Bid or Not for Bid Report** will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID

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

ADDENDA AND REVISIONS

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

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

The Internet is the Department's primary way of doing business. The subscription service emails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletins/transportation-bulletin 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 <u>Timothy.Garman@illinois.gov.</u>

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, <u>do not</u> include the blank pages of the schedule of prices that came with the proposal package.

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

After page 4 – Insert the following documents: Cost Adjustments for Steel, Bituminous and Fuel (if applicable) and the Contractor Letter of Assent (if applicable). The general rule should be, if you don't know where it goes, put it after page 4.

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

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

Page 11 (Paragraph L) – 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 <u>signature and date must be original</u> for each letting. Do not staple the forms together. If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.

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

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

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

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

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

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

QUESTIONS: pre-letting up to execution of the contract

Contractor pre-qualification	
Small Business, Disadvantaged Business Enterprise (DBE)	
Contracts, Bids, Letting process or Internet downloads	
Estimates Unit.	
Aeronautics	
IDNR (Land Reclamation, Water Resources, Natural Resources)	

QUESTIONS: following contract execution

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

Proposal Submitted By

112

Name

Address

City

Letting January 15, 2016

NOTICE TO PROSPECTIVE BIDDERS

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

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

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

Illinois Department of Transportation

Springfield, Illinois 62764

Contract No. 64F84 HENRY County Section 101VBR Route FAS 223 Project ACRS-0223(002) District 2 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

A Bid Bond is included.

A Cashier's Check or a Certified Check is included

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

Prepared by

Checked by

(Printed by authority of the State of Illinois)

F

Page intentionally left blank



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

Taxpayer Identification Number (Mandatory)

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

Contract No. 64F84 HENRY County Section 101VBR Project ACRS-0223(002) Route FAS 223 District 2 Construction Funds

This project consists of removing and replacing the superstructure (SN 037-0126) carrying IL 81 over the Burlington Northern and Santa Fe railway at Lynn Center.

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

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

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

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

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

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

Attach Cashier's Check or Certified Check Here

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

The proposal guaranty check will be found in the bid proposal for:	Item	
	Section No.	
	County _	

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

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

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

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

Schedule of Combination Bids

Combination		Combination B	id
No.	Sections Included in Combination	Dollars	Cents

- 7. SCHEDULE OF PRICES. The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices will govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. **AUTHORITY TO DO BUSINESS IN ILLINOIS.** Section 20-43 of the Illinois Procurement Code (the Code) (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to transact business or conduct affairs in the State of Illinois prior to submitting the bid.
- 9. EXECUTION OF CONTRACT: The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer (CPO) or the State Purchasing Officer (SPO) is for approval of the procurement process and execution of the contract by the Department. Neither the CPO nor the SPO shall be responsible for administration of the contract or determinations respecting performance or payment there under except as otherwise permitted in the Code.

10. The services of a subcontractor will be used.

Check box Yes Check box No

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

C-92-179-12 State Job # -

Project Number ACRS-0223/002/

Route

FAS 223

County Name -HENRY--Code -73 - -District -2 - -Section Number - 101VBR

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
A2000114	T-ACERX FREM AB 1-3/4	EACH	5.000				
A2007814	T-TILIA AMER 1-3/4	EACH	5.000				
X0324636	WATER VALVE BOX ABAND	EACH	1.000				
X0325318	LT WT CELL CONC FILL	CU YD	1,539.000				
X0696100	PARKING BLOCKS	EACH	2.000				
X5030305	CONC WEARING SURF 5	SQ YD	310.400				
X5509900	ABANDON FILL SS	FOOT	199.000				
X5860110	GRANULAR BACKFILL STR	CU YD	561.000				
X6023840	REMOVE & REL INLETS	EACH	1.000				
X6024210	DOUBLE INLET SPL	EACH	1.000				
X6024240	INLETS SPL	EACH	7.000				
X6024244	INLETS SPL N2	EACH	1.000				
X6024250	INLETS SPL N5	EACH	1.000				
X7010216	TRAF CONT & PROT SPL	L SUM	1.000				
Z0001900	ASB BEARING PAD REMOV	EACH	48.000				

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C-92-179-12 State Job # -

Project Number ACRS-0223/002/ Route

FAS 223

County Name -HENRY--Code -73 - -District -2 - -Section Number - 101VBR

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
Z0007601	BLDG REMOV NO 1	L SUM	1.000				
Z0007602	BLDG REMOV NO 2	L SUM	1.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0023800	FILL EX SEPTIC TANK	EACH	1.000				
Z0025505	PROPERTY MARKERS	EACH	6.000				
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0049801	R&D FRIABL ASB BLD 1	L SUM	1.000				
Z0049901	R&D NON-FR ASB BLD 1	L SUM	1.000				
Z0049902	R&D NON-FR ASB BLD 2	L SUM	1.000				
Z0056608	STORM SEW WM REQ 12	FOOT	140.000				
Z0056612	STORM SEW WM REQ 18	FOOT	65.000				
Z0073002	TEMP SOIL RETEN SYSTM	SQ FT	1,363.000				
20100110	TREE REMOV 6-15	UNIT	44.000				
20100210	TREE REMOV OVER 15	UNIT	123.000				
20200100	EARTH EXCAVATION	CU YD	395.000				

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C-92-179-12 State Job # -

County Name -

Section Number -

Code -

District -

HENRY--

73 - -

2 - -

101VBR

Project Number Route ACRS-0223/002/ **FAS 223**

Unit of ltem Number Measure Quantity **Unit Price Total Price** Pay Item Description Х = 20400800 FURNISHED EXCAVATION CU YD 35.000 CU YD 20800150 TRENCH BACKFILL 201.000 21101615 TOPSOIL F & P 4 SQ YD 4.865.000 25200100 SODDING SQ YD 4.865.000 25200200 SUPPLE WATERING UNIT 44.000 28000250 TEMP EROS CONTR SEED POUND 397.000 FOOT 60.000 28000305 TEMP DITCH CHECKS FOOT 28000400 PERIMETER EROS BAR 205.000 28000500 INLET & PIPE PROTECT EACH 2.000 28000510 INLET FILTERS EACH 7.000 SQ YD 28100107 STONE RIPRAP CL A4 16.000 SQ YD 16.000 28200200 FILTER FABRIC SQ YD 30300112 AGG SUBGRADE IMPR 12 647.000 40600275 BIT MATLS PR CT POUND 5,717.000 TON 40600525 LEV BIND HM N50 3.000

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C-92-179-12 State Job # -

Project Number ACRS-0223/002/

Route

FAS 223

County Name -HENRY--Code -73 - -District -2 - -Section Number - 101VBR

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
40600627	LB MM IL-9.5FG N50	TON	272.000				
40600982	HMA SURF REM BUTT JT	SQ YD	1,956.000				
40600990	TEMPORARY RAMP	SQ YD	316.000				
40603080	HMA BC IL-19.0 N50	TON	644.000				
40603310	HMA SC "C" N50	TON	312.000				
40800050	INCIDENTAL HMA SURF	TON	450.000				
42001430	BR APPR PVT CON (FLX)	SQ YD	300.000				
42300300	PCC DRIVEWAY PAVT 7	SQ YD	177.000				
42400200	PC CONC SIDEWALK 5	SQ FT	790.000				
42400800	DETECTABLE WARNINGS	SQ FT	10.000				
44000100	PAVEMENT REM	SQ YD	15.000				
44000158	HMA SURF REM 2 1/4	SQ YD	1,790.000				
44000200	DRIVE PAVEMENT REM	SQ YD	158.000				
44000500	COMB CURB GUTTER REM	FOOT	530.000				
44000600	SIDEWALK REM	SQ FT	807.000				

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C-92-179-12 State Job # -

Project Number ACRS-0223/002/

Route

FAS 223

County Name -HENRY--Code -73 - -**District** -2 - -Section Number -101VBR

Unit of ltem Number Measure Quantity **Unit Price Total Price** Pay Item Description Х = 44201377 CL C PATCH T2 12 SQ YD 60.000 SQ YD 44201381 CL C PATCH T3 12 22.000 SQ YD 368.000 48203020 HMA SHOULDERS 5 3/4 50100100 REM EXIST STRUCT EACH 1.000 50104400 CONC HDWL REM EACH 1.000 50104650 SLOPE WALL REMOV SQ YD 868.000 CU YD 50200100 STRUCTURE EXCAVATION 1,796.000 CU YD 50300225 CONC STRUCT 1,181.000 50300255 CONC SUP-STR CU YD 165.300 50300260 BR DECK GROOVING SQ YD 563.000 50300300 PROTECTIVE COAT SQ YD 672.000 SQ FT 50400405 P P CONC DK BM 21 DP 2,794.000 POUND 50800205 REINF BARS, EPOXY CTD 677,720.000 51500100 NAME PLATES EACH 1.000 51603000 DRILLED SHAFT IN SOIL CU YD 867.500

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Project Number ACRS-0223/002/ Route

FAS 223

County Name -HENRY--Code -73 - -District -2 - -Section Number - 101VBR

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
542D0220	P CUL CL D 1 15	FOOT	42.000				
54213450	END SECTIONS 15	EACH	2.000				
54213663	PRC FLAR END SEC 18	EACH	1.000				
54244405	FL INLT BX MED 542546	EACH	1.000				
550A0040	STORM SEW CL A 1 10	FOOT	8.000				
550A0090	STORM SEW CL A 1 18	FOOT	47.000				
550A0340	STORM SEW CL A 2 12	FOOT	85.000				
550A0380	STORM SEW CL A 2 18	FOOT	167.000				
550A0980	STORM SEW CL A 4 18	FOOT	32.000				
59100100	GEOCOMPOSITE WALL DR	SQ YD	459.000				
60107600	PIPE UNDERDRAINS 4	FOOT	293.000				
60200205	CB TA 4 DIA T1F CL	EACH	2.000				
60236200	INLETS TA T8G	EACH	1.000				
60500060	REMOV INLETS	EACH	5.000				
60605000	COMB CC&G TB6.24	FOOT	551.000				

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Project Number ACRS-0223/002/ Route

FAS 223

County Name -HENRY--Code -73 - -District -2 - -Section Number - 101VBR

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
63000001	SPBGR TY A 6FT POSTS	FOOT	137.500				
63100085	TRAF BAR TERM T6	EACH	4.000				
63100167	TR BAR TRM T1 SPL TAN	EACH	1.000				
63100169	TR BAR TRM T1 SPL FLR	EACH	2.000				
63200310	GUARDRAIL REMOV	FOOT	182.000				
63500105	DELINEATORS	EACH	4.000				
66700305	PERM SURV MKRS T2	EACH	1.000				
66900105	UNDERGR STOR TANK REM	EACH	1.000				
66900200	NON SPL WASTE DISPOSL	CU YD	205.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	2.000				
67000400	ENGR FIELD OFFICE A	CAL MO	9.000				
67100100	MOBILIZATION	L SUM	1.000				
70100450	TRAF CONT-PROT 701201	L SUM	1.000				
70102640	TR CONT & PROT 701801	L SUM	1.000				

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C-92-179-12 State Job # -

Project Number	Route
ACRS-0223/002/	FAS 223

County Name -HENRY--Code -73 - -District -2 - -Section Number - 101VBR

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
70103815	TR CONT SURVEILLANCE	CAL DA	20.000				
70106800	CHANGEABLE MESSAGE SN	CAL MO	9.000				
70300100	SHORT TERM PAVT MKING	FOOT	708.000				
70301000	WORK ZONE PAVT MK REM	SQ FT	118.000				
78001110	PAINT PVT MK LINE 4	FOOT	1,599.000				
78001180	PAINT PVT MK LINE 24	FOOT	38.000				
78200410	GUARDRAIL MKR TYPE A	EACH	23.000				
78200520	BAR WALL MKR TYPE B	EACH	8.000				
78201000	TERMINAL MARKER - DA	EACH	3.000		<u> </u>		

Page 8 12/17/2015 CONTRACT NUMBER

64F84

THIS IS THE TOTAL BID \$

NOTES:

- 1. Each PAY ITEM should have a UNIT PRICE and a TOTAL PRICE.
- 2. The UNIT PRICE shall govern if no TOTAL PRICE is shown or if there is a discrepancy between the product of the UNIT PRICE multiplied by the QUANTITY.
- 3. If a UNIT PRICE is omitted, the TOTAL PRICE will be divided by the QUANTITY in order to establish a UNIT PRICE.
- 4. A bid may be declared UNACCEPTABLE if neither a unit price nor a total price is shown.

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. <u>Revolving Door Prohibition</u>

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. <u>Reporting Anticompetitive Practices</u>

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 void if any of the certifications completed pursuant to this Section are false.

E. Section 42 of the Environmental Protection Act

Section 50-14 Environmental Protection Act violations.

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

F. Educational Loan

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

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

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

G. Bid-Rigging/Bid Rotating

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

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

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

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

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

H. International Anti-Boycott

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

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

I. Drug Free Workplace

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

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

J. Disclosure of Business Operations in Iran

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

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

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

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

Check the appropriate statement:

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

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

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

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

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

NA-FEDERAL_____

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

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 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 committee established to promote the candidacy of the officeholder responsible for making any political contributions to any political committee established to promote the candidacy of the officeholder making any political contributions to any political committee established to promote the candidacy of the officeholder responsible for awarding the pending contract during the period beginning on the date the invitation for bids or request for proposals or any other procurement opportunity is issued and ending on the day after the date of award or selection if the entity was not awarded or selected. Section 20-160 requires certification of registration of affected business entities in accordance with procedures found in Section 9-35 of The Election Code.

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

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

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

M. Lobbyist Disclosure

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

(i) Disclose all costs, fees, compensation, reimbursements, and other remunerations paid or to be paid to the lobbyist related to the contract,

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

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

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

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

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

Or

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

Name and address of person:

All costs, fees, compensation, reimbursements and other remuneration paid to said person:

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

IV. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

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

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

2. <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. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> 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
- 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		
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. <u>See Disclosure Form Instructions</u>.

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDIVIDUAL	(type or print information)		
NAME:			
ADDRESS			
Type of own	ership/distributable income share	:	
stock	sole proprietorship	Partnership	other: (explain on separate sheet):
% or \$ value	of ownership/distributable income sh	nare:	

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	employr	ment of services.
		Yes	No

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

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ____No ___
- 2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary.

- If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive
 (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor? Yes ____ No ___
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes No ___
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ____No ___
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess 100% of the annual salary of the Governor? Yes ____ No ___
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?

Yes ___ No ___

Yes No

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

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

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

(f) Relationship to anyone	holding appointive office	currently or in the	previous 2 years;	spouse, fa	ather, mother,
son, or daughter.			Yes _	No	

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

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes <u>No</u>
- (i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes No
- (j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes <u>No</u>

3. Communication Disclosure.

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

Name and address of person(s):

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

Name of person(s):

Nature of disclosure:

APPLICABLE STATEMENT

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

Completed by:

Signature of Individual or Authorized Representative

Date

	NOT APPLICABLE STATEMENT					
Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.						
This Disclosure Form A	is submitted on behalf of the CONTRACTOR listed on the pr	evious page.				
	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 Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
•		, , , , , , , , , , , , , , , , , , ,

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

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes No

If "No" is checked, the bidder only needs to complete the signature box on this page.

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

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Representative	Date

OWNERSHIP CERTIFICATION

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

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

🗌 Yes 🗌 No	□ N/A (Form A disclosure(s) established 100% ownership)
------------	--	---

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.



Contract No. 64F84 **HENRY County** Section 101VBR Project ACRS-0223(002) Route FAS 223 **District 2 Construction Funds**

PART I. IDENTIFICATION

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

Name of Bidder:

PART II. WORKFORCE PROJECTION

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

TOTAL Workforce Projection for Contract										C			-	S				
			MINORITY EMPLOYEES TRAINEES										TO BE ASSIGNED TO CONTRACT					
JOB CATEGORIES		TAL OYEES	BL	ACK	HISP	ANIC		THER NOR.	APPI TIC			HE JOB INEES			OTAL OYEES		MINO EMPLO	
	М	F	Μ	F	М	F	М	F	М	F	M	F		М	F		М	F
OFFICIALS (MANAGERS)																		
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
	TAE	BLE C									Г	FOI	- 					
Т	OTAL Tra	aining Pro	ojectio	n for C	ontract							FOF	ιDE	PARIN	IENT USE		I∟ Y	
EMPLOYEES		TAI					*0	THER	7									

TOTAL Training Projection for Contract									
EMPLOYEES	TO	TAL					*OT	HER	
IN	EMPLO	DYEES	BLA	ACK	HISP	ANIC	MINOR.		
TRAINING	М	F	М	F	М	F	М	F	
APPRENTICES									
ON THE JOB TRAINEES									

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

BC 1256 (Rev. 12/11/07)

Note: See instructions on page 2

Contract No. 64F84 HENRY County Section 101VBR Project ACRS-0223(002) Route FAS 223 District 2 Construction Funds

PART II. WORKFORCE PROJECTION - continued

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

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

office or base of operation is located.

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

Company _____

Telephone Number _____

Address	

	NOTICE REGARDING SIGNATURE							
	signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs ed only if revisions are required.							
Signature:	Title: Date:							
Instructions:	All tables must include subcontractor personnel in addition to prime contractor personnel.							
Table A -	Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.							
Table B -	Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.							
Table C -	Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.							

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

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 _____
 - 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. 64F84 HENRY County Section 101VBR Project ACRS-0223(002) Route FAS 223 District 2 Construction Funds

PROPOSAL SIGNATURE SHEET

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

(IF AN INDIVIDUAL)	Firm Name	
	Signature of Owner	
	Business Address	
	Firm Name	
(IF A CO-PARTNERSHIP)		
		Name and Address of All Members of the Firm:
	Corporate Name	
	Ву	
(IF A CORPORATION)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)		Signature
	Corporate Name	
(IF A JOINT VENTURE)	Ву	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	
	Rucinoca Address	Signature
	DUSITIESS AUDIESS	·



Return with Bid

Division of Highways Annual Proposal Bid Bond

This Annual Proposal Bid Bond shall become effective at 12:01 AM (CDST) on

and shall be valid until

11:59 PM (CDST).

KNOW ALL PERSONS BY THESE PRESENTS, That We

as PRINCIPAL, and

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

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer day of A.D., .		In TESTIMONY WHEREOF, the instrument to be signed by its of day of	ne said SURETY has caused this officer A.D., .
day of	A.D.,	day of	^.U.,
(Coi	mpany Name)	(Comp	any Name)
Ву		Ву	
(S	ignature and Title)	(Signature	of Attorney-in-Fact)
Notary for PRINCIPAL		Notary for SURETY	
STATE OF		STATE OF	
Signed and attested before	re me on (date)	Signed and attested before me	e on (date)
by		by	
(Name	of Notary Public)		Notary Public)
(Seal)		(Seal)	
	(Signature of Notary Public)		(Signature of Notary Public)
	(Date Commission Expires)		(Date Commission Expires)

BDE 356A (Rev. 1/21/14)

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

Electronic Bid Bond ID #

Company/Bidder Name

Signature and Title

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



Division of Highways Proposal Bid Bond

Item No.

Letting Date

KNOW ALL PERSONS BY THESE PRESENTS, That We

as PRINCIPAL, and

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

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer		In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer		
day of	A.D.,	day of A.D.,		
	(Company Name)	(Company Name)		
Ву		Ву		
	(Signature and Title)	(Signature of Attorney-in-Fact)		
Notary for PRINCIP	AL	Notary for SURETY		
STATE OF		STATE OF		
		COUNTY OF		
Signed and attested before me on (date) by		Signed and attested before me on (date) by		
(N	lame of Notary Public)	(Name of Notary Public)		
(Seal)		(Seal)		
	(Signature of Notary Public)	(Signature of Notary Public)		
	(Date Commission Expires)	(Date Commission Expires)		
proposal the Princip		d form, the Principal may file an Electronic Bid Bond. By signing the bond has been executed and the Principal and Surety are firmly		

bound unto the State of Illinois under the conditions of the bid bond as shown above.

Electronic Bid Bond ID #

Signature and Title



(1) Policy

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

(2) Obligation

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

(3) Project and Bid Identification

Complete the following information concerning the project and bid:

Route	Total Bid		
Section	Contract DBE Goal		
Project		(Percent)	(Dollar Amount)
County			
Letting Date			
Contract No.			
Letting Item No.			

(4) Assurance

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

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

Disadvantaged Business Participation _____ percent

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

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

Disadvantaged Business Participation _____ percent

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

	Company	The "as read" Low Bidder is required to com	ply with the Special Provision.
Ву		Submit only one utilization plan for each pro submitted in accordance with the special pro	
Title		Bureau of Small Business Enterprises 2300 South Dirksen Parkway Springfield, Illinois 62764	Local Let Projects Submit forms to the Local Agency
Date			

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.



DBE Participation Statement

Subcontractor Reg	istration Number
-------------------	------------------

Participation Statement

Item No.

Letting

This form must be completed for each disadvantaged business participating in the Utilization Plan. This form shall be submitted in accordance with the special provision and will be attached to the Utilization Plan form. If additional space is needed complete an additional form for the firm. Trucking participation items; description must list what is anticipated towards goal credit.

(2) Work:

(1) Instructions

Please indicat	e: J/V Manufacturer Supplier (60%)	Subcont	tractor	Trucking
Pay Item No.	Description (Anticipated items for trucking)*	Quantity	Unit Price	Total
			Total	

(3) Partial Payment Items (For any of the above items which are partial pay items)

Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount: *Applies to trucking only

(4) Commitment

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

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

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

Signature for Contractor 1 st Tier 2 nd Tier	Signature for DBE Firm1 st Tier2 nd Tier
Date	Date
Contact Person	Contact Person
Title	Title
Firm Name	Firm Name
Address	Address
City/State/Zip	City/State/Zip
Phone	Phone
Email Address	Email Address
	E
The Department of Transportation is very estimation displaying of information that is approximate a second list the se	WC

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

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:	
Address:	
Phone No.	

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

Contract No. 64F84 HENRY County Section 101VBR Project ACRS-0223(002) Route FAS 223 District 2 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. Debt Delinguency

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 or 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. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

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

(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)

4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ____ NO ___

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

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

If the answer to each of the above questions is "NO", then the <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</u> <u>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		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, and for all 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.

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDIVIDUAL	(type or print information)		
NAME:			
ADDRESS			
Type of owne	ership/distributable income share	:	
stock	sole proprietorship	Partnership	other: (explain on separate sheet):
% or \$ value of	of ownership/distributable income sh	nare:	

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

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

Yes No

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

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ____No ___
- 2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary.

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

Yes No

- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ____No ___
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes <u>No</u>

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ____No ___
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of of 100% of the annual salary of the Governor? Yes No ___
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?

Yes <u>No</u>

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

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

- (e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ____No ___
- (f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes <u>No</u>
- (g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ____No ___

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ____No ___
- (i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ____No ___
- (j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes <u>No</u>

3 Communication Disclosure.

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

Name and address of person(s): _____

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:

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ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

ail Address	Fax Number (if available)
1	ail Address

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

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

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

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive

information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Officer	Date

OWNERSHIP CERTIFICATION

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

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

🗌 Yes	🗌 No	□ N/A (Form A disclosure(s) established 100% ownership)
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NOTICE TO BIDDERS



- TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 a.mJanuary 15, 2016. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after 10:00 a.m.
- 2. DESCRIPTION OF WORK. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 64F84 HENRY County Section 101VBR Project ACRS-0223(002) Route FAS 223 District 2 Construction Funds

This project consists of removing and replacing the superstructure (SN 037-0126) carrying IL 81 over the Burlington Northern and Santa Fe railway at Lynn Center.

- **3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.
 - (b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS. This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the Illinois Department of Transportation

Randall S. Blankenhorn, Secretary

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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)

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RECURRING SPECIAL PROVISIONS

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

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STATE OF ILLINOIS

SPECIAL PROVISIONS

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 FAS Route 223 (IL 81), Project ACRS-0223 (002), Section 101VBR, Henry County, Contract No. 64F84 and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

1.5 miles west of I-74 carrying IL 81 over the BNSF Railway at Lynn Center

DESCRIPTION OF PROJECT

The existing structure (037-0126) is a three span PPC deck beam superstructure. Replacing it with single span PPC deck beam on new abutments.

TRAFFIC CONTROL PLAN

Effective: January 14, 1999

Revised: July 22, 2015

Traffic Control shall be according to the applicable sections of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the National Manual on Uniform Traffic Control Devices for Streets and Highways, Illinois Supplement to the National Manual on Uniform Traffic Control Devices, these special provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications for Road and Bridge Construction and the following Highway Standards relating to traffic control.

Standards:

701001	701006	701011	701201	701301
701311	701801	701901		

Details:

Detour Sign Detail Road Closure Plan Typical Application for Road Closure (40.1)

Signs:

No bracing shall be allowed on post-mounted signs.

Post-mounted signs shall be installed using standard 720011, 728001, 729001, on 4"x4" wood posts, or on any other "break away" connection if accepted by the FHWA and corresponding letter is provided to the resident.

All signs are required on both sides of the road when the median is greater than 10 feet and on one way roadways.

The "WORKERS" (W21-1a(O)-48) signs shall be replaced with symbol "Right or Left Lane Closed Ahead" (W4-2R or L(O)-48) signs on multilane roadways.

"BUMP" (W8-1(O)48) signs shall be installed as directed by the Engineer.

"UNEVEN LANES" W8-11(O)48 signs shall be installed at 1 mile intervals or as directed by the Engineer.

"LOW SHOULDER" W8-9(O)48 signs shall be installed at 1 mile intervals or as directed by the Engineer.

When covering existing Department signs, no tape shall be used on the reflective portion of the sign. Contact the District sign shop for covering techniques.

All regulatory signs shall be maintained at a 5 foot minimum bottom (rural), 7 foot minimum (urban).

Plate altering signs shall have the same sheeting as the base sign.

No more than one plate shall be used to alter a sign.

Any post stubs without a sign in place and visible shall have a reflector placed on each post.

Devices:

Cones or reflectorized cones shall not be used during hours of darkness.

A minimum of 3 drums spaced at 4 feet shall be placed at each return when the sideroad is open.

On all standards and devices listed in Section 701 of the Standard Specifications, the device spacing shall be revised to the following dimensions:

Where the spacing shown on the standard is 25 feet, the devices shall be placed at 20 feet.

Where the spacing shown on the standard is 50 feet, the devices shall be placed at 40 feet.

Where the spacing shown on the standard is 100 feet, the devices shall be placed at 80 feet.

Flaggers:

Flagger at Sideroads and Commercial Entrances:

Effective: August 1, 2011

Revised: July 22, 2015

Flaggers shall comply with all requirements contained in the Department's "Flagger Handbook" dated September 2011. The flagger equipment listed for flaggers employed by the Illinois Department of Transportation shall apply to all flaggers.

In addition to the flaggers shown on applicable standards, on major sideroads, flaggers shall be required on all legs of the intersection. Major sideroads for this project shall be none.

In addition to the flaggers shown on applicable standards, a flagger shall be required on high volume commercial entrances listed below. High volume commercial entrances for this project shall be none.

When the mainline flagger is within 200 feet of an intersection, the sideroad flagger shall be required.

When the road is closed to through traffic and it is necessary to provide access for local traffic, one flagger will be required for each separate operation where two-way traffic is maintained.

Revise the first and second paragraph of Article 701.20(i) of the Standard Specifications to read:

"Signs, barricades, other traffic control devices, or flaggers required by the Engineer, over and above those shown in the contract documents, will be paid for according to Article 109.04.

Pavement Marking:

All temporary pavement markings that will be operational during the winter months (December through March) shall be paint.

Short term pavement markings on a milled surface shall be paint.

Temporary pavement markings shall not be included in the cost of the standard rather it shall be paid for separately at the contract unit prices of specified temporary pavement marking items.

District Standards Application.

<u>Traffic Control for Road Closure</u>: This work shall be done according to the Road Closure Standard, Road Closure Plan – IL81, and Section 701 of the Standard Specifications, and contained herein.

"ROAD CLOSED AHEAD" (W20-3(O)-48) with flasher and the appropriate arrow plate (W1-6(O)-36x18 or W1-7(O)-36x18) shall be required on all side roads within the limits of the mainline "ROAD CLOSED AHEAD" signs.

No sideroads shall be considered Condition I Major sideroad closures for signing as shown on the District Standard Traffic Control for Road Closure Detail. Bengston Street will be open at all times. The alley can be closed during construction.

The Contractor shall notify the Traffic Operations Section of the Bureau of Operations by fax (815/284-5489) and the Bureau of Project Implementation (815/284-5348) in writing by means of fax (to the numbers provided), and also by letter through US Mail to the District Office. The Contractor shall also notify the following individuals via email: Kristie Nyderek at kristie.nyderek@illinois.gov in order to contact the State Permit Office regarding oversize loads and the road closure, and Kurt Glazier at kurt.glazier@illinois.gov regarding the detour notice and the road closure. This request shall be submitted a minimum of three weeks (21 days) and no earlier than four weeks (28 days) prior to the anticipated closure date to allow the State adequate time to set the detour route.

Signing and devices required to close the road, according to the Traffic Control for Road Closure detail and contained herein, shall be the responsibility of the Contractor. Detour signing required to detour traffic to alternate routes shall be the responsibility of the Department. The day the detour signing begins, the detour will be in effect at 2:00 p.m., or when the Traffic Operations Section has notified the Resident Engineer or personnel on the project. No detour shall be erected on Friday, Saturday or Sunday. The road shall <u>not</u> be closed until the detour signing is completely installed, verified, and ready to accept traffic.

The "ROAD CLOSED" sign on the Type III barricades shall be unobstructed and visible to traffic at all times. No equipment, debris, or other materials shall be stored within 20 feet of the first set of Type III barricades, unless approved by the Engineer.

The Contractor shall not drive around the outside of the Type III barricades, but shall relocate the barricades temporarily for access. When it is necessary for the barricades to be moved for access, the Contractor shall move the devices into the left lane and/or left shoulder area behind barricades that are to remain in place. At no time shall the barricades be turned parallel to traffic flow for access purposes.

If a path becomes evident around the outside of the barricades, the Contractor shall be required to place additional Type III barricades to prevent driving around the existing barricades. Additional barricades shall be included in the cost of applicable Traffic Control Standards. Any damage caused by vehicles driving around the outside of barricades shall be repaired by the Contractor to the satisfaction of the Engineer at no additional expense to the Department.

This work shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

<u>Road Closure – Culvert Replacements, Closures within Closures</u>: The road closure shall be completed using Type III barricades in compliance with Standards 701901, and signing according to Traffic Control for Road Closure detail. Two flashers shall be installed above each Type III barricade. The "ROAD CLOSED" (R11-2) or "ROAD CLOSED TO THRU TRAFFIC" (R11-4) signs shall be placed as shown in Standard 701901. Flashers shall be installed above all warning signs involving a night time road closure. If a portion of the road is completely closed between a sideroad and any entrances, the roadway will be kept open to local access in the other direction between that closure and the next road.

The Contractor shall be required to notify the Bureau of Project Implementation and affected residents prior to a complete closure.

All cost involved in conforming with this provision shall be considered a part of TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

The portable changeable message sign will be paid for at the contract unit price per calendar month for each sign as CHANGEABLE MESSAGE SIGN.

Maintenance of Traffic:

The mainline shall be kept open to one-way traffic at all times during working hours and two-way traffic during non-working hours when detour is not in use.

The Contractor shall be required to notify the Henry County Highway Department, the corresponding Township Commissioner, emergency response agencies (i.e.: fire, ambulance, police), school bus companies and the Department of Transportation (Bureau of Project Implementation) regarding any changes in traffic control.

The Contractor shall be required to notify the Henry County Highway Department and/or corresponding Township Commissioner for any sideroad closure or opening.

Guardrail work shall be completed prior to opening the road.

The mainline shall be closed for reconstruction using the detour.

ENGINEER'S FIELD OFFICE TYPE A

Effective: January 1, 2012

Engineer's Field Office Type A shall be in accordance with Article 670.02 of the Standard Specifications:

Add (s) to the end of 670.02

(s) Cellular phone with a minimum of 500 anytime minutes per month for use by the site resident engineer/technician.

HOT-MIX ASPHALT SURFACE COURSE, LEVEL BINDER, AND BINDER

Effective: June 15, 2010

Revised: June 23, 2014

The maximum allowed average bulk specific gravity for the approved mix design (Gmb) will be:

2.460 for Mixture C

2.470 for Mixture D

2.610 for Mixture E

2.710 for Mixture F

The maximum allowed average bulk specific gravity for the approved mix design (Gmb) for all other uses will be 2.470.

PCC QC/QA ELECTRONIC REPORTS SUBMITTAL

Effective: January 1, 2015

The Contractor's QC personnel shall be responsible for electronically submitting BMPR MI654 "Concrete Air, Slump, and Quantity," BMPR MI655 "P.C. Concrete Strength," and BMPR MI504 "Aggregate Gradation" reports to the Department. The format for the electronic submittals shall be the QC/QA package reporting program, which will be provided by the Department. Microsoft Excel 2007 or newer and Microsoft Outlook is required for this program which shall be provided by the Contractor.

PROPERTY MARKERS

Effective: July 1, 1994

Revised: January 30, 2008

This work shall consist of locating, protecting, preserving and relocating property markers, monuments or pins which are discovered and which will be disturbed in the normal course of construction. An Illinois Registered Land Surveyor will relocate the markers, monuments or pins to the new or relocated right-of-way line in such a location as to legally define the location of the new or reestablished property corner(s). The Contractor shall be required to furnish one copy of the final plat or plats to the State upon completion of the work.

The Surveyor shall place as a minimum a 36" x ³/₄" round iron pin for the property marker. This work will be paid for at the contract unit price per Each for PROPERTY MARKERS.

STORM SEWER (WATER MAIN REQUIREMENTS)

Effective: June 12, 1997

Revised: January 29, 2010

Description: This work shall consist of furnishing and installing water main quality pipe at the locations shown on the plans.

Materials:

a) Ductile iron water main Class 52

Joints for Ductile Iron pipe shall be:

- 1. Mechanical Joints AWWA C111 and C600
- 2. Push-On-Joints AWWA C111 and C600
- b) Polyvinyl Chloride (PVC) Class 12454B (PVC 1120) or Class 12454C (PVC 1220).

Schedule 40 is required for 8" diameter and schedule 80 for larger sizes.

CONSTRUCTION REQUIREMENTS

The storm sewer water main shall be installed according to the applicable portions of Section 550 and 561 of the Standard Specifications and the Standard Specifications for Water and Sewer Main Construction. In case of conflict between the Standard Specifications, the Standard Specifications for Water and Sewer Main Construction in Illinois shall take precedence and shall govern.

No testing or disinfections of the newly laid storm sewer water main will be required. A water-tight connection is required between the storm sewer water main and the storm sewer.

<u>Method of Measurement</u>: Storm sewer water main of the various diameters will be measured for payment in feet, measured in place.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per Foot for STORM SEWER (WATER MAIN REQUIREMENTS), of the diameter specified.

WORK ZONE PAVEMENT MARKING AND REMOVAL

Effective: December 29, 2008

This work shall consist of installing and removing temporary pavement marking according to Section 703 of the Standard Specifications and the following:

Paint pavement marking shall be used on the final wearing surface when the temporary pavement marking will conflict with the permanent pavement marking such as on tapers, crossovers and lane shifts.

All temporary paint on the final wearing surface shall be removed according to Article 1101.12 Water Blaster with Vacuum Recovery and the applicable portions of Section 703 of the Standard Specifications and as described herein.

Add the following paragraph to Article 1101.12 of the Standard Specifications.

For the high pressure water spray, the pressure at the nozzle shall be approximately 25,000 psi with maximum flow rate of 15 gal/min. The nozzle shall be in close proximity to the pavement surface.

ABANDON AND FILL EXISTING STORM SEWER

<u>Description</u>. This work shall consist of filling existing sewers that are to be abandoned at the locations shown on the plans or as directed by the Engineer.

<u>Construction Requirements</u>. Based on a review of available information it is believed that there are no existing active connections draining into the pipe to be abandoned. However, before the pipe is abandoned, the Contractor must field verify there are no existing active connections draining into the pipe to be abandoned. In the event there are existing active connections, the Contractor must either re-route the existing active connection or maintain the existing pipe so as not to block flow from the existing active connections at no additional cost.

After field verification there are no existing active connections draining into the pipe to be abandoned, the Contractor must plug the pipe with Class SI Concrete or brick and suitable mortar to the satisfaction of the Engineer, and fill the remaining empty length of pipe with Controlled Low-Strength Material. The Controlled Low-Strength Material (CLSM) must meet material requirements of Article 593.02.

<u>Method of Measurement.</u> This work will be measured for payment in feet for the pipe to be abandoned in place.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot which price shall include all materials, labor, tools and equipment, backfilling of any excavation necessary for ABANDON AND FILL EXISTING STORM SEWER at locations shown in the plans, as specified herein, and as directed by the Engineer.

FILLING EXISTING SEPTIC TANK

This work shall consist of all work necessary to abandon the existing septic tank at the locations shown on the plans.

The existing waste in the septic tank shall be removed and disposed of in accordance with "Private Sewage Disposal Licensing Act and Codes", Section 905.170 and as directed by the Engineer. The top of the existing septic tank shall be removed to at least 6 inches below the ground line, the walls and floors shall be cracked, and the outlet sealed with concrete or brick masonry, and the structure filled with sand or earth and thoroughly tamped.

All backfill and compaction operations shall be completed in accordance with applicable section 205 of the current IDOT Standard Specifications for Road and Bridge Construction. Septic tanks which are filled with earth shall be filled by placing not more than 6 inches of loose earth at a time and each layer compacted by some method approved by the Engineer before the next layer is placed.

This work will be paid for at the contract unit price each for FILLING EXISTING SEPTIC TANK and no additional compensation will be allowed.

PROCEDURE PRIOR TO ROAD CLOSURE

The contractor must contact the following personal 4 weeks and again 1 week before road closure:

Osco Fire Department Roger Stancliff, Chief		309-235-0502
Henry County Engineer	Steven Brandan	309-937-3346
Orion School District David	Deets, Superintendent	309-526-3388
Orion School District Deput	y A. Casteel (Communications Supervisor)	309-937-3614

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

This work shall be according to Article 669 of the Standard Specifications and the following: Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

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

All contaminated materials shall be managed as either "uncontaminated soil" or non-special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. **Phase I Preliminary Engineering information is available through the District's Environmental Studies Unit.** Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit whichever is less.

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

Site 2872-4 Dar Pro Solutions

- Station 42+10 to Station 43+65 {IL Route 81), 0 to 80 feet LT (Dar Pro Solutions, PESA Site 2872-4, 202 Bengston Street, Lynn Center). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene,Benzo(b)flouranthene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)pyrene.
- Station 43+65 to Station 45+55 (IL Route 81), 0 to 35 feet LT (Dar Pro Solutions, PESA Site 2872-4, 202 Bengston Street, Lynn Center). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, and Manganese.
- Station 45+55 to Station 46+20 (IL Route 81), 0 to 80 feet LT (Dar Pro Solutions, PESA Site 2872-4, 202 Bengston Street, Lynn Center). This material meets the criteria of Article n 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

Site 2872-8- Residence

Station 46+20 to Station 47+50 (IL Route 81), 0 to 40 feet LT (Residence, PESA Site 2872-8, 302 South Street, Lynn Center). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

Any waste generated as special waste or a waste not certified as a non-special waste from this project should be manifested off-site using the generator number associated with Henry County. **The generator number for Henry County is 0738995006.**

MILLING RESTRICTIONS

Milling operations shall be performed such that a vertical milled face no greater than 1½ inches exists between adjacent open lanes of traffic at any time. This may be accomplished by the following treatment methods: Make multiple passes with the mill, each one less the 1½ inches; place a temporary wedge or have milled sloped edge with a minimum 1:3 slope; or mill all lanes in a given area so that no difference in elevation exists when all adjacent lanes are opened to traffic. Other methods may be used if approved by the Engineer prior to implementing the procedure.

This work shall be included in the cost of HMA Surface Removal, at the thickness specified.

COMPLETION DATE PLUS WORKING DAYS

Effective: December 29, 2006

Revised: April 10, 2014

Revise Article 108.05(b) of the Standard Specifications to read:

"(b) Completion Date Plus Working Days. When a completion date plus working days is specified, the Contractor shall complete the project by 11:59 p.m. on or prior to <u>November 4</u>, <u>2016</u>. The PROJECT shall have all work completed, except the landscape items and punch list items, for the PROJECT to be considered complete.

The Contractor will be allowed 10 working days after the completion date to complete landscaping items and punch list items.

START DATE

No work shall be started on this project until March 29, 2016

GUARDRAIL REMOVAL

Effective: August 20, 1990

Revised: April 10, 2014

This work shall be done in accordance with Section 632 of the Standard Specifications except that all removed guardrail will become the property of the Contractor.

This work will be paid for at the contract unit price per Foot for GUARDRAIL REMOVAL, measured from center-to-center of end posts.

PCC AUTOMATIC BATCHING EQUIPMENT

Effective: January 1, 2015

Portland cement concrete provided shall be produced from batch plants that conform to the requirements of Article 1103.03 (a) and (b) of the Standard Specifications for Road and Bridge Construction. Semi-automatic batching will not be allowed.

Plants shall have computerized batching interfaced with a printer. Batch weights, aggregate mixtures, water added, amount of each admixture or additive, and percent variance from design shall be printed for each batch. Tickets shall state the actual water-cement ratio as batched, and the amount of water that can be added to the batch without exceeding the maximum water-cement ratio. Truck delivery tickets are still required as per Article 1020.11(a)(7) of the Standard Specifications.

HOT-MIX ASPHALT MIXTURE IL-9.5FG (BMPR)

Effective: July 1, 2005

Revised: December 28, 2010

<u>Description</u>. This work shall consist of constructing fine graded hot-mix asphalt (HMA) surface course or leveling binder with an IL-9.5FG mixture. Work shall be according to Sections 406, 407 and 1030 of the Standard Specifications, except as modified herein.

Materials. 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, or FA 21. For mixture IL-9.5FG, the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof."

"High ESAL, MIXTURE COMPOSITION (% PASSING) ^{1/}				
Sieve	IL-9.5FG			
Size	min	max		
1 1/2 in (37.5 mm)				
1 in. (25 mm)				
3/4 in. (19 mm)				
1/2 in. (12.5 mm)		100		
3/8 in. (9.5 mm)	90	100		
#4 (4.75 mm)	60 ^{4/}	75 ^{4/}		
#8 (2.36 mm)	45 ^{4/}	60 ^{4/}		
#16 (1.18 mm)	25	40		
#30 (600 μm)	15	30		
#50 (300 μm)	8	15		
#100 (150 μm)	6	10		
#200 (75 μm)	4	6.5		
Ratio Dust/Asphalt Binder		1.0		

Mixture Design. Add the following to the table in Article 1030.04(a)(1):

4/ When used as level binder placed less than 1 in. (25 mm) thick, the min and max percent passing shall each be increased 5%.

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

"VOLUMETRIC REQUIREMENTS High ESAL						
Voids in the Mineral Aggregate Voids Filled (VMA), % minimum with Asphalt						
N _{design}	IL-25.0	IL-19.0	IL-12.5	IL-9.5	Binder (VFA), %	
50					65 - 78	
70	12.0	13.0	14.0	15 ^{1/}		
90	12.0	13.0	14.0	15	65 - 75 ^{2/}	
105						

1/ The VMA for IL-9.5FG shall be a minimum of 15.0 percent.

2/ The VFA range for IL-9.5FG shall be 65 - 78 percent."

<u>Quality Control/Quality Assurance (QC/QA)</u>. Revise the second table in Article 1030.05(d)(4) to read:

DENSITY CONTROL LIMITS						
Mixture Co	omposition	Parameter	Individual Test ^{3/}			
Lifts < 1.25 in. (32 mm)		N _{design} 50 - 105	91.0 – 97.0% ^{2/}			
IL-9.5FG Lifts ≥ 1.25 in. (32 mm)		N _{design} 50 - 105	93.0 - 97.0%			
IL-9.5, IL-12.5		N _{design} ≥ 90	92.0 - 96.0 %			
IL-9.5, IL-9.5L, IL-12.5		N _{design} < 90	92.5 – 97.4 %			
IL-19.0, IL-25.0		N _{design} ≥ 90	93.0 - 96.0 %			
IL-19.0, IL-19.0L, IL-25.0		N _{design} < 90	93.0 – 97.4 %			
All Other		N _{design} = 30	93.0 ^{1/} - 97.4 %			

1/ 92.0 % when placed as first lift on an unimproved subgrade.

- 2/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.
- 3/ Bulk Specific Gravity and Density that are determined using coated samples must be in accordance with ASTM 1188-96.

CONSTRUCTION REQUIREMENTS

<u>Leveling Binder</u>. Revise the 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-9.5, IL-9.5 FG, or IL-9.5L
> 1 1/4 to 2 (32 to 50)	IL-9.5, IL-9.5FG, IL-9.5L, or IL-12.5

The density requirements of Article 1030.05(d)(4) shall apply for leveling binder, machine method, when the nominal, compacted thickness is: 3/4 in. (19 mm) or greater for IL-9.5FG mixtures, 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures, and 1 1/2 in. (38 mm) or greater for IL-12.5 mixtures."

"TABL	E 1 - MINIMUM	ROLLER REG	UIREMENTS FO	R HMA
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Level Binder: (When the density requirements of Article 406.05(c) do not apply.)	P 3/		VS, P 3/, TB, TF, 3W	To the satisfaction of the Engineer.
Level Binder: (When placed at ≤ 1 ¼ (32 mm) and density requirements apply.)	TB, 3W	P 3/	VS, TB, TF	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
Binder and Surface 1/ (When the density requirements of Article 406.05(c) apply.)	VD, P 3/, TB, 3W	P 3/	VS, TB, TF	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
Bridge Decks 2/	ТВ		TF	As specified in Articles: 582.05 and 582.06.

Compaction. Revise Table 1 in Article 406.07(a) of the Standard Specifications to read:

1/ If the average delivery at the job site is 85 ton/hr (75 metric ton/hr) or less, any roller combination may be used provided it includes a steel wheeled roller and the required density and smoothness is obtained.

- 2/ One TB may be used for both breakdown and final rolling on bridge decks 300 ft (90 m) or less in length, except when the air temperature is less than 60 °F (15 °C).
- 3/ A vibratory roller (VD) may be used in lieu of the pneumatic-tired roller on mixtures containing polymer modified asphalt binder.

<u>Basis of Payment</u>. Add the following two paragraphs after the third paragraph of Article 406.14 of the Standard Specifications:

"Mixture IL-9.5FG will be paid for at the contract unit price per ton (metric ton) for LEVELING BINDER (HAND METHOD), IL-9.5FG, of the Ndesign specified; LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the Ndesign specified; or HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the Ndesign specified.

Mixture IL-9.5FG in which polymer modified asphalt binders are required will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED LEVELING BINDER (HAND METHOD), IL-9.5FG, of the Ndesign specified; POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the Ndesign specified; or POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the Ndesign specified."

REMOVE AND RELOCATE INLETS

If the Resident Engineer determines the Inlet at Station 47+19 and 31' right is in the way for the new driveway and to close for the drainage to work properly then this is how the item will be paid for. This work shall consist of removing and relocating existing inlet structure and frame and grate to a location as directed by the Engineer and in accordance with the applicable sections of Section 602 and Section 605 of the Standard Specifications. Work shall also include the installation of storm sewer quality pipe and connections necessary to reconnect the relocated inlet to the new drainage system as directed by the Engineer and in accordance with the applicable sections of Section 550 of the Standard Specifications. Any damage to the inlet or existing appurtenances during the removal, relocation, and installation of the inlet shall be repaired and/or removed and replaced as directed by the Engineer. All necessary grading to provide positive drainage to the inlet shall be considered included in the cost of this item. Restoration of the disturbed areas will not be paid for, but will be considered included in this work.

Trench backfill for storm sewer installation, properly compacted in accordance with the Standard Specifications shall be used as backfill and will be included in the cost of Remove and Relocate Inlets.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per each installed in place for REMOVE AND RELOCATE INLETS.

RAILROAD PROTECTIVE LIABILITY INSURANCE (5 AND 10) (BDE)

Effective: January 1, 2006

<u>Description.</u> Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications, except the limits shall be a minimum of \$5,000,000 combined single limit per occurrence for bodily injury liability and property damage liability with an aggregate limit of \$10,000,000 over the life of the policy. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
The BNSF Railway Company 80 40 th Avenue N.E. Minneapolis, Minnesota 55421	0	25 per day at 50 MPH
Calvin Nutt, Manager of Public Project	S	
DOT/AAR No.: 065 636R RR Division: Chicago	RR Mile Post 22.62 RR Sub-Division: Fit	fth
For Freight/Passenger Information Co Manager of Truck Maintenance (MTM)	0	Phone: 406-670-9935 brian.langloss @ bnsf.com
For Insurance Information Contact	Rosa Martinez (Marsh USA)	Phone: 214-303-8519

Comments:

Railroad flaggers are required if working within 25 feet of the tracks. Contact Brian Langloss.

<u>Approval of Insurance.</u> The original and one certified copy of each required policy shall be submitted to the following address for approval:

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

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

<u>Basis of Payment.</u> Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

STATUS OF UTILITIES TO BE ADJUSTED

Effective: September 25, 2015

Name & Address of			Estimated Date
Utility	Туре	Location	Relocation Complete
Ameren IP	Underground	On South Side of IL 81	No conflicts are anticipated
1824 Knox HWY 9	Gas	Sta. 41+60 to 42+32 RT	
Galesburg, IL 61401		& Down Bengston St.	
		Sta. 46+40 to 48+32 Rt	
MidAmerican Energy			Relocation work is estimated
Company	Overhead	On South Side of IL 81	to be completed 3/1/16
2811 -5th Avenue	Electric	Sta. 41+60 to 48+32 RT	
		41+62 LT, 42+91 Lt,	
Rock Island, IL 61201		43+25 Lt	
	•	46+78 Lt & 47+68 Lt	
	Communicatio		Relocation work is estimated
Frontier Legacy	ns	On South Side of IL 81	to be completed 3/20/16
214 S. First	underground	Sta. 41+60 to 48+32 RT	
Monmouth, IL 61462		41+94 RT & LT	
		47+68 RT & LT	
Lynn Center Water	Water	Alley 22+50 to 20+00	None water main to relocate
		-	water quality storm sewer pipe
207 Bengston Street	underground		will be used in conflict areas
			call before you start any
Lynn Center, IL 61262			digging

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Section 102 and Articles 105.07, 107.20, 107.37, 107.38, 107.39, 107.40, and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

The applicable portions of Article 105.07 of the Standard Specification shall apply except for the following: The Contractor shall be responsible to locate the vertical depths of the underground utilities which may interfere with construction operations. This work will not be measured or paid for separately, but shall be considered as included in the unit bid price for the item of construction involved.

The estimated utility relocation dates should be part of the progress schedule submitted by the Contractor.

** Above utility relocation information reflected as of November 17, 2015 relocation complete dates are unknown at this time due to right of way acquisitions. Per SB 699 (90 day utility relocation law), once the proposed right of way is clear to award the project, a notice will be sent to the utility companies instructing them to have their facilities relocated within 90 days. EXISTING UTILITIES:

The Contractor shall familiarize himself with the locations of all utilities and structures that may be found in the vicinity of the construction. The Contractor shall conduct his operations to avoid damage to the above-mentioned utilities and structures. Should any damage occur due to the Contractor's negligence, repairs shall be made by the contractor at his expense in a manner acceptable to the Engineer.

The Contractor shall notify all utility owners of his construction schedule and shall coordinate construction operations with utility owners so that relocation of utility lines and structures may proceed in an orderly manner. Notification shall be in writing, with copies transmitted to the Engineer.

BUILDING REMOVAL - CASE I (NON-FRIABLE AND FRIABLE ASBESTOS ABATEMENT) (BDE)

Effective: September 1, 1990

Revised: April 1, 2010

BUILDING REMOVAL: This work shall consist of the removal and disposal of 2 building(s), together with all foundations, retaining walls, and piers, down to a plane 1 ft (300 mm) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the building(s) in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable granular material. The building(s) are identified as follows:

<u>Bldg. No.</u>	Parcel <u>No.</u>	Location	Description
1	218001	203 South Street	single family residence
2	218001	Lynn Center, Illinois 61262	two car garage

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services and the removal of the metering devices that serve the building(s) according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any building(s) he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR HIGHWAY CONSTRUCTION TO BE DEMOLISHED BY THE

VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any building(s) prior to the time that the State becomes the owner of the respective building(s).

All friable asbestos shall be removed from the building(s) prior to demolition. The Contractor has the option of removing the non-friable asbestos prior to demolition or demolishing the building(s) with the non-friable asbestos in place. Refer to the Special Provisions titled "Asbestos Abatement (General Conditions)", "Removal and Disposal of Friable Asbestos Building No.1", and "Removal and Disposal of Non-Friable Asbestos Building No. 1 & 2" contained herein.

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein. The lump sum unit price(s) for this work shall represent the cost of demolition and disposal assuming all asbestos, friable and non-friable, is removed prior to demolition. Any salvage value shall be reflected in the contract unit price for this item.

EXPLANATION OF BIDDING TERMS: Three separate contract unit price items have been established for the removal of each building. They are:

- 1. BUILDING REMOVAL NO. 1 & 2
- 2. REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1
- 3. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1 & 2

The Contractor shall have two options available for the removal and disposal of the non-friable asbestos.

The pay item for removal and disposal of non-friable asbestos will not be deleted regardless of the option chosen by the Contractor.

<u>ASBESTOS ABATEMENT (GENERAL CONDITIONS)</u>: This work consists of the removal and disposal of friable and non-friable asbestos from the building(s) to be demolished. All work shall be done according to the requirements of the U.S. Environmental Protection Agency (USEPA), the Illinois Environmental Protection Agency (IEPA), the Occupational Safety and Health Administration (OSHA), the Special Provisions for "Removal and Disposal of Friable Asbestos, Building No. 1" and "Removal and Disposal of Non-Friable Asbestos, Building No. 1 & 2", and as outlined herein.

Sketches indicating the location of Asbestos Containing Material (ACM) are included in the proposal on pages 27 thru 31 for Appendix A. Also refer to the Materials Description Table on pages 33 thru 36 for Appendix B for a brief description and location of the various materials. Also included is a Materials Quantities Table on pages 38 thru 40 for Appendix C. This table states whether the ACM is friable or non-friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid.

The work involved in the removal and disposal of friable asbestos, and non-friable asbestos if done prior to demolition, shall be performed by a Contractor or Sub-Contractor prequalified with the Illinois Capital Development Board.

The Contractor shall provide a shipping manifest, similar to the one shown on page 42, of Appendix D to the Engineer for the disposal of all ACM wastes.

Permits: The Contractor shall apply for permit(s) in compliance with applicable regulations of the Illinois Environmental Protection Agency. Any and all other permits required by other federal, state, or local agencies for carrying on the work shall be the responsibility of the Contractor. Copies of these permits shall be sent to the district office and the Engineer.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least ten days prior to commencement of any asbestos removal or demolition activity. Separate notices shall be sent for the asbestos removal work and the building demolition if they are done as separate operations.

Asbestos Demolition/Renovation Coordinator Illinois Environmental Protection Agency Division of Air Pollution Control P. O. Box 19276 Springfield, Illinois 62794-9276 (217)785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

Submittals:

- A. All submittals and notices shall be made to the Engineer, except where otherwise specified herein.
- B. Submittals that shall be made prior to start of work:
 - 1. Submittals required under Asbestos Abatement Experience.
 - 2. Submit documentation indicating that all employees have had medical examinations and instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures as specified in <u>Worker Protection Procedures</u>.
 - 3. Submit manufacturer's certification stating that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI 29.2.
 - 4. Submit to the Engineer the brand name, manufacturer, and specification of all sealants or surfactants to be used. Testing under existing conditions will be required at the direction of the Engineer.

- 5. Submit proof that all required permits, site locations, and arrangements for transport and disposal of asbestos-containing or asbestos-contaminated materials, supplies, and the like have been obtained (i.e., a letter of authorization to utilize designated landfill).
- 6. Submit a list of penalties, including liquidated damages, incurred through noncompliance with asbestos abatement project specifications.
- 7. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination units, the sequencing of work, the respiratory protection plan to be used during this work, a site safety plan, a disposal plan including the location of an approved disposal site, and a detailed description of the methods to be used to control pollution. The plan shall be submitted to the Engineer prior to the start of work.
- 8. Submit proof of written notification and compliance with Paragraph "Notifications".
- C. Submittals that shall be made upon completion of abatement work:
 - 1. Submit copies of all waste chain-of-custodies, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area;
 - 2. Submit daily copies of work site entry logbooks with information on worker and visitor access;
 - 3. Submit logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls; and
 - 4. Submit results of any bulk material analysis and air sampling data collected during the course of the abatement including results of any on-site testing by any federal, state, or local agency.

Certificate of Insurance:

- A. The Contractor shall document general liability insurance for personal injury, occupational disease and sickness or death, and property damage.
- B. The Contractor shall document current Workmen's Compensation Insurance coverage.
- C. The Contractor shall supply insurance certificates as specified by the Department.

Asbestos Abatement Experience:

A. Company Experience: Prior to starting work, the Contractor shall supply evidence that he/she has been prequalified with the Illinois Capital Development Board and that he/she has been included on the Illinois Department of Public Health's list of approved Contractors.

- B. Personnel Experience:
 - 1. For Superintendent, the Contractor shall supply:
 - a. Evidence of knowledge of applicable regulations in safety and environmental protection is required as well as training in asbestos abatement as evidenced by the successful completion of a training course in supervision of asbestos abatement as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to the Engineer prior to the start of work.
 - b. Documentation of experience with abatement work in a supervisory position as evidenced through supervising at least two asbestos abatement projects; provide names, contact, phone number, and locations of two projects in which the individual(s) has worked in a supervisory capacity.
 - 2. For workers involved in the removal of friable and non-friable asbestos, the Contractor shall provide training as evidenced by the participation and successful completion of an accredited training course for asbestos abatement workers as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to all employees who will be working on this project.

<u>ABATEMENT AIR MONITORING</u>: The Contractor shall comply with the following:

- A. Personal Monitoring: All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits shall be monitored daily. Personal monitoring is the responsibility of the Contractor. Additional personal samples may be required by the Engineer at any time during the project.
- B. Contained Work Areas for Removal of Friable Asbestos: Area samples shall be collected for the department within the work area daily. A minimum of one sample shall be taken outside of the abatement area removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- C. Interior Non-Friable Asbestos-Containing Materials: The Contractor shall perform personal air monitoring during removal of all nonfriable Transite and floor tile removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.

D. Exterior Non-Friable Asbestos-Containing Materials: The Contractor shall perform personal air monitoring during removal of all nonfriable cementitious panels, piping, roofing felts, and built up roofing materials that contain asbestos.

The Contractor shall conduct down wind area sampling to monitor airborne fiber levels at a frequency of no less than three per day.

- E. Air Monitoring Professional
 - 1. All air sampling shall be conducted by a qualified Air Sampling Professional supplied by the Contractor. The Air Sampling Professional shall submit documentation of successful completion of the National Institute for Occupational Safety and Health (NIOSH) course #582 - "Sampling and Evaluating Airborne Asbestos Dust".
 - 2. Air sampling shall be conducted according to NIOSH Method 7400. The results of these tests shall be provided to the Engineer within 24 hours of the collection of air samples.

<u>REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1</u>: This work consists of the removal and disposal of all friable asbestos from the building(s) prior to demolition. The work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)" and as outlined herein.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1, as shown, which price shall include furnishing all labor, materials, equipment and services required to remove and dispose of the friable asbestos.

<u>REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1 & 2</u>: The Contractor has the option of removing and disposing of the non-friable asbestos prior to demolition of the building(s) or demolishing the building(s) with the non-friable asbestos in place.

Option #1 - If the Contractor chooses to remove all non-friable asbestos prior to demolition, the work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)".

Option #2 - If the Contractor chooses to demolish the building(s) with the non-friable asbestos in place, the following provisions shall apply:

- 1. Continuously wet all non-friable ACM and other building debris with water during demolition.
- 2. Dispose of all demolition debris as asbestos containing material by placing it in lined, covered transport haulers and placing it in an approved landfill.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. <u>1 & 2</u>, as shown.

The cost for this work shall be determined as follows:

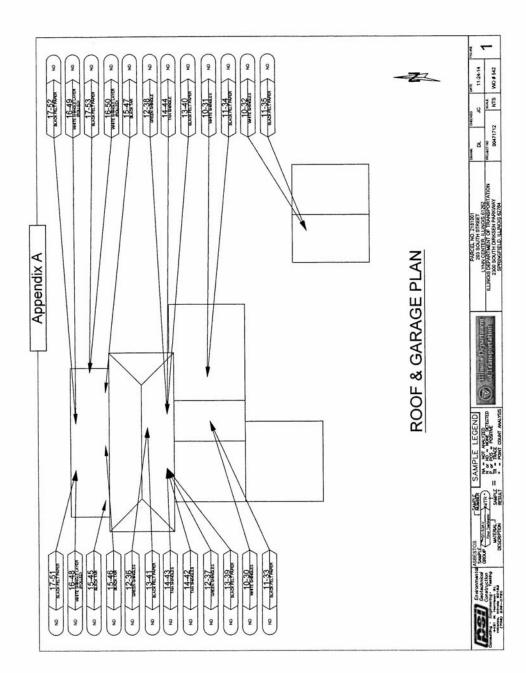
- Option #1 Actual cost of removal and disposal of non-friable asbestos.
- Option #2 The difference in cost between removing and disposing of the building if all non-friable asbestos is left in place and removing and disposing of the building assuming all non-friable asbestos is removed prior to demolition.

The cost of removing and disposing of the building(s), assuming all asbestos, friable and non-friable is removed first, shall be represented by the pay item "BUILDING REMOVAL NO. <u>1 & 2</u>".

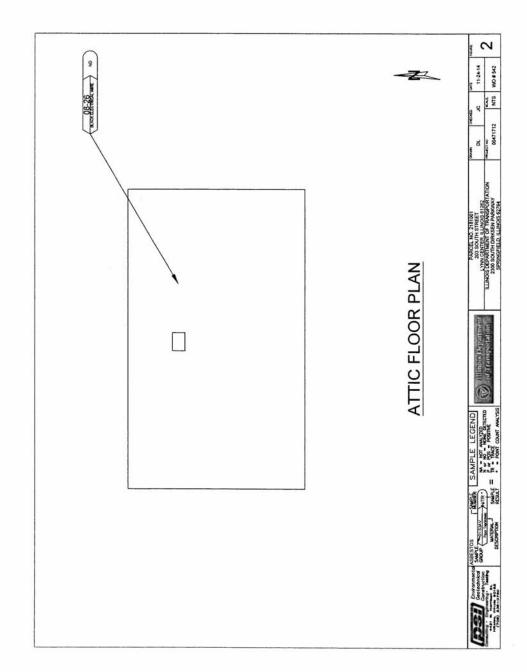
Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay item BUILDING REMOVAL NO. <u>1 & 2</u> be deleted.

BUILDING REMOVAL APPENDICES

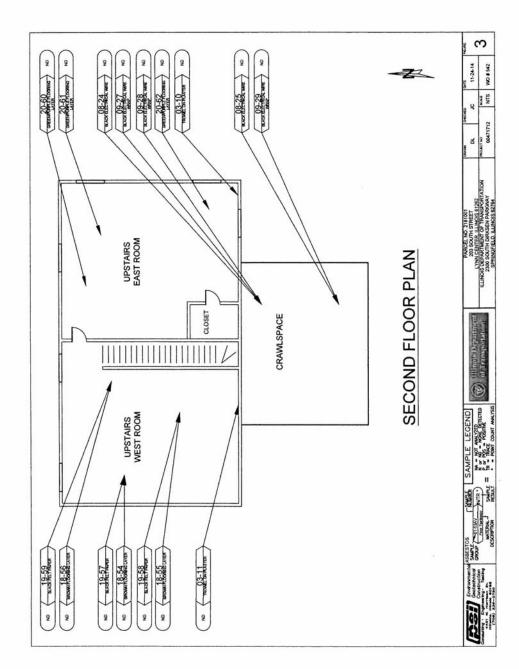
APPENDIX A



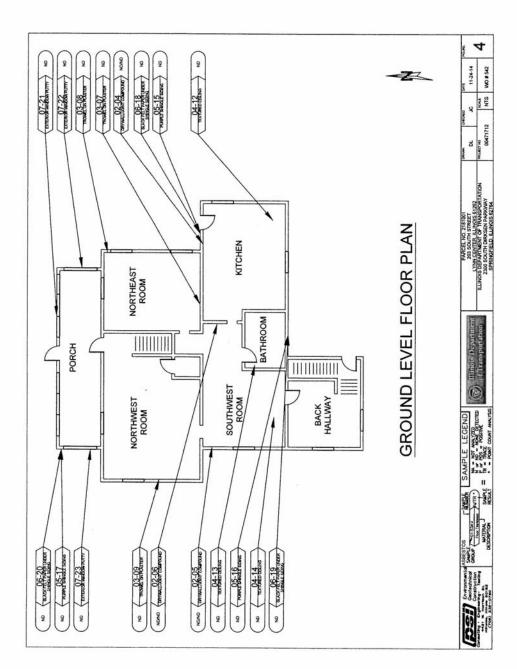
25



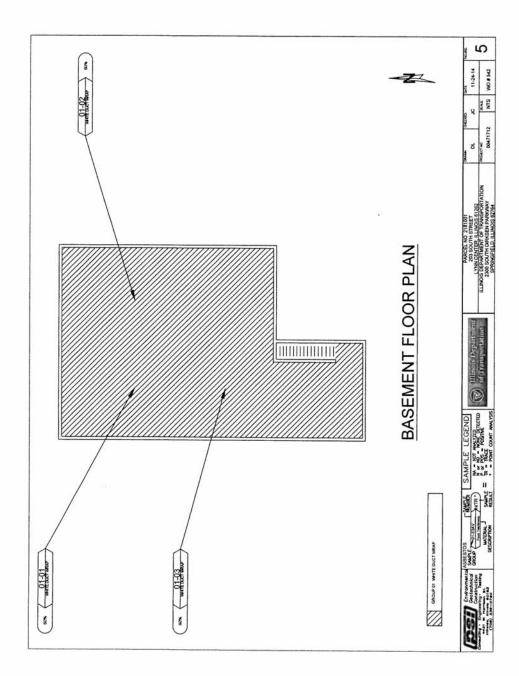
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27



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APPENDIX B

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APPENDIX B

Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) Analyst's Comment	Asbestos Content (Percent and Type)	Non-asbestos Fibers (Percent and Type
1-1	001A	(1) White, Duct Wrap, Homogeneous	60% Chrysotile	40% Cellulose Fiber
1-2	002A	Sample Not Tested		
1-3	003A	Sample Not Tested		
2-4	004A	 Gray, Drywall, Homogeneous White, Joint Compound, Homogeneous 	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	10% Cellulose Fiber None Reported
2-5	005A	 Gray, Drywall, Homogeneous White, Joint Compound, Homogeneous 	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	10% Cellulose Fiber None Reported
2-6	006A	 Gray, Drywall, Homogeneous White, Joint Compound, Homogeneous 	NO ASBESTOS DETECTED NO ASBESTOS DETECTED	10% Cellulose Fiber None Reported
3-7	007A	(1) Tan, Plaster, Homogeneous	NO ASBESTOS DETECTED	1% Cellulose Fiber 2% Hair
3-8	008A	(1) Tan, Plaster, Homogeneous	NO ASBESTOS DETECTED	1% Cellulose Fiber 2% Hair
3-9	009A	(1) Tan, Plaster, Homogeneous	NO ASBESTOS DETECTED	1% Cellulose Fiber 2% Hair

Analyst:	D	A	Work Order:	1411218		Page: 2 of 4
Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) Analyst's Comment		Asbestos Content (Percent and Type)		Non-asbestos Fibers ercent and Type)
3-10	010A	(1) Tan, Plaster, Homogeneou	IS	NO ASBESTOS DETECTED	1% 2%	
3-11	011A	(1) Tan, Plaster, Homogeneou	IS	NO ASBESTOS DETECTED	1% 2%	Cellulose Fiber Hair
4-12	012A	(1) White, Texture, Homogene	eous	NO ASBESTOS DETECTED	No	one Reported
4-13	013A	(1) White, Texture, Homogene	ous	NO ASBESTOS DETECTED	No	one Reported
4-14	014A	(1) White, Texture, Homogene	ous	NO ASBESTOS DETECTED	No	one Reported
5-15	015A	(1) Purple, Shingle, Homogene	eous	NO ASBESTOS DETECTED	5%	Cellulose Fiber
5-16	016A	(1) Purple, Shingle, Homogene	eous	NO ASBESTOS DETECTED	5%	Cellulose Fiber
5-17	017A	(1) Purple, Shingle, Homogene	eous	NO ASBESTOS DETECTED	5%	Cellulose Fiber
6-18	018A	(1) Black, Felt, Homogeneous		NO ASBESTOS DETECTED	20%	Cellulose Fiber
6-19	019A	(1) Black, Felt, Homogeneous		NO ASBESTOS DETECTED	20%	Cellulose Fiber
5-20	020A	(1) Black, Felt, Homogeneous		NO ASBESTOS DETECTED	20%	Cellulose Fiber
7-21	021A	(1) Gray, Putty, Homogeneous		NO ASBESTOS DETECTED	No	ne Reported
-22	022A	(1) Gray, Putty, Homogeneous		NO ASBESTOS DETECTED		ne Reported
-23	023A	(1) Gray, Putty, Homogeneous		NO ASBESTOS DETECTED		ne Reported
3-24	024A	(1) Black, Wire, Homogeneous		NO ASBESTOS DETECTED	35%	Synthetic Fiber
-25	025A	(1) Black, Wire, Homogeneous		NO ASBESTOS DETECTED	35%	Synthetic Fiber
-26	026A	(1) Black, Wire, Homogeneous		NO ASBESTOS DETECTED	35%	Synthetic Fiber
-27	027A	(1) Black, Wire, Homogeneous Wrap		NO ASBESTOS DETECTED	45%	Fibrous Glass
-28	028A	(1) Black, Wire, Homogeneous Wrap	< a	NO ASBESTOS DETECTED	45%	Fibrous Glass

Analyst:	I	DA	Work Order:	1411218		Page: 3 of 4
Client ID	Lab ID (Layer)	Sample Description (Color, Texture, Etc.) Analyst's Comment		Asbestos Content (Percent and Type)		Non-asbestos Fibers crcent and Type)
9-29	029A	(1) Black, Wire, Homogeneo Wrap	bus	NO ASBESTOS DETECTED	45%	Fibrous Glass
10-30	030A	(1) White, Shingle, Homoger	neous	NO ASBESTOS DETECTED	15%	Fibrous Glass
10-31	031A	(1) White, Shingle, Homoger	neous	NO ASBESTOS DETECTED	15%	Fibrous Glass
10-32	032A	(1) White, Shingle, Homoger	neous	NO ASBESTOS DETECTED	15%	Fibrous Glass
11-33	033A	(1) Black, Felt, Homogeneou	IS	NO ASBESTOS DETECTED	70%	Cellulose Fiber
11-34	034A	(1) Black, Felt, Homogeneou	IS	NO ASBESTOS DETECTED	70%	Cellulose Fiber
11-35	035A	(1) Black, Felt, Homogeneou	IS	NO ASBESTOS DETECTED	70%	Cellulose Fiber
12-36	036A	(1) Green, Shingle, Homoge	neous	NO ASBESTOS DETECTED	10%	Fibrous Glass
12-37	037A	(1) Green, Shingle, Homoge	neous	NO ASBESTOS DETECTED	10%	Fibrous Glass
12-38	038A	(1) Green, Shingle, Homoger	neous	NO ASBESTOS DETECTED	10%	Fibrous Glass
13-39	039A	(1) Black, Felt, Homogeneou	s	NO ASBESTOS DETECTED	70%	Cellulose Fiber
13-40	040A	(1) Black, Felt, Homogeneou	s I	NO ASBESTOS DETECTED	70%	Cellulose Fiber
13-41	041A	(1) Black, Felt, Homogeneou	s I	NO ASBESTOS DETECTED	70%	Cellulose Fiber
14-42	042A	(1) Tan, Shingle, Homogeneo	ous	NO ASBESTOS DETECTED	15%	Cellulose Fiber
14-43	043A	(1) Tan, Shingle, Homogeneo	ous I	NO ASBESTOS DETECTED	15%	Cellulose Fiber
14-44	044A	(1) Tan, Shingle, Homogeneo	ous M	NO ASBESTOS DETECTED	15%	Cellulose Fiber
5-45	045A	(1) Black, Tar, Homogeneous	5 N	NO ASBESTOS DETECTED	7%	Cellulose Fiber
5-46	046A	(1) Black, Tar, Homogeneous	5 N	O ASBESTOS DETECTED	7%	Cellulose Fiber
5-47	047A	(1) Black, Tar, Homogeneous	5 N	IO ASBESTOS DETECTED	7%	Cellulose Fiber
6-48	048A	(1) White, Shingle, Homogen	eous N	IO ASBESTOS DETECTED	20%	Cellulose Fiber
6-49	049A	(1) White, Shingle, Homogen	eous N	IO ASBESTOS DETECTED	20%	Cellulose Fiber
6-50	050A	(1) White, Shingle, Homogene	eous N	IO ASBESTOS DETECTED	20%	Cellulose Fiber

Analyst:	Ľ	A	Work Order:	1411218	Page: 4 of 4		
Client ID	Lab ID Sample Description (Layer) (Color, Texture, Etc.) Analyst's Comment			Asbestos Content (Percent and Type)	Non-asbestos Fibers (Percent and Type)		
17-51	051A	(1) Black, Felt, Homogeneous	S	NO ASBESTOS DETECTED	70% Cellulose Fiber		
7-52	052A	(1) Black, Felt, Homogeneous	S	NO ASBESTOS DETECTED	70% Cellulose Fiber		
7-53	053A	(1) Black, Felt, Homogeneous	S	NO ASBESTOS DETECTED	70% Cellulose Fiber		
8-54	054A	(1) Brown, Flooring, Homoger	neous	NO ASBESTOS DETECTED	35% Cellulose Fiber		
8-55	055A	(1) Brown, Flooring, Homoger	neous	NO ASBESTOS DETECTED	35% Cellulose Fiber		
8-56	056A	(1) Brown, Flooring, Homoger	neous	NO ASBESTOS DETECTED	35% Cellulose Fiber		
9-57	057A	(1) Black, Felt, Homogeneous	5 I	NO ASBESTOS DETECTED	45% Cellulose Fiber		
9-58	058A	(1) Black, Felt, Homogeneous	s 1	NO ASBESTOS DETECTED	45% Cellulose Fiber		
9-59	059A	(1) Black, Felt, Homogeneous	s 1	NO ASBESTOS DETECTED	45% Cellulose Fiber		
0-60	060A	(1) Green, Flooring, Homogen	neous	NO ASBESTOS DETECTED	45% Cellulose Fiber		
0-61	061A	(1) Green, Flooring, Homogen	neous N	NO ASBESTOS DETECTED	45% Cellulose Fiber		
0-62	062A	(1) Green, Flooring, Homogen	eous N	NO ASBESTOS DETECTED	45% Cellulose Fiber		

APPENDIX C

APPENDIX C

Building Size (sqft):

<u>223</u> <u>Henry</u> <u>R-92-018-10</u> FAS Route: Address: 203 South Street County: IDOT Job No: Address: City, State Zip Property Type: Construction Date: Lynn City, Illinois 61262 Single Family Residence <u>101 VBR</u> 2181001 542 Section: Parcel No: Circa 1907 1.360 SF IDOT Work Order No:

SITE INFORMATION:

	sbestos Containing	Materials
Survey Date By Whom:	<u>November 7, 2014</u> <u>PSI, Inc.</u> <u>Ciaran McGowan</u> 100-18958	Firm Inspector IDPH License No
Results		
Number of Ma	aterial Types Sampled:	20
Number of Sa	mples Collected:	<u>62</u>
Number of Ma	aterials Testing Positive:	1
Was Friable A	CM Found?	Yes
Were Roofing	Materials Sampled?	Yes
Are There Un Requirements	que State or Local	Yes
Laboratory U	tilized:	
Name: Address:	<u>PSI, Inc.</u> 850 Poplar Street Pittsburgh, PA 15220	
Building Acc	ess Limitations:	
None		

Page 1

ACM SURVEY RESULTS - Parcel No. 2181001 **Single Family Residence** 203 South Street Lynn City, Illinois 61262

The following homogeneous building material types were sampled as part of this survey and their results are summarized in the table below:

MTL #	MATERIAL DESCRIPTION	LOCATION	F/NF ¹	COND.2	% ACM ³	# SAMPLES	QUANTITY (ENG/MET)
01	White duct insulation	Basement	F	Poor	60%	3	100 LF 30.5 LM
02	Drywall/joint compound	Kitchen, south west wall and back hallway	NF	Good	ND/ND	3	1,000 SF 92.9 SM
03	Trowel on plaster	Various locations throughout	NF	Good	ND	5	1,700 SF 157.9 SM
04	Textured ceiling	Kitchen, bathroom and south west room	NF	Good	ND	3	350 SI 32.5 SN
05	Purple shingled siding	Exterior of building, below siding	NF	Good	ND	3	2,000 SI 185.8 SM
06	Black felt paper under shingle siding	Exterior of building, below siding	NF	Good	ND	3	2,000 SI 185.8 SN
07	Exterior window putty	Around porch windows	NF	Poor	ND	3	120 LI 36.6 LM
08	Black electrical wire	Attic and crawl space	NF	Good	ND	3	50 LI 152.4 LM
09	Black electrical wire wrap	Attic and crawl space	NF	Good	ND	3	500 L 152.4 LM
10	White shingles	Lower roof, south side garage	NF	Good	ND	3	600 SI 55.7 SM
11	Black felt paper	Lower roof, south side garage	NF	Good	ND	3	600 S
12	Green shingles	Upper roof, north side	NF	Good	ND	3	600 SI 55.7 SN
13	Black felt paper	Upper roof, north side	NF	Good	ND	3	600 SI 55.7 SN
14	Tan shingles	South side of north roof	NF	Good	ND	3	200 LI 61.0 LN
15	Black tar	Flashing, on porch roof	NF	Good	ND	3	25 LI 7.6 LM

F = Friable; NF = Nonfriable Cond. = Condition Of Materials ND = None Detected 2

Friability is further defined in section 4. Either good, fair or poor.

3.

Point Count Analysis

Page 2

ACM SURVEY RESULTS - Parcel No. 2181001 Single Family Residence 203 South Street Lynn City, Illinois 61262

The following homogeneous building material types were sampled as part of this survey and their results are summarized in the table below:

MTL #	MATERIAL DESCRIPTION	LOCATION	F/NF ¹	COND.2	% ACM ³	# SAMPLES	QUANTITY (ENG/MET)
16	Rolled layer, white shingle	Porch roof	NF	Good	ND	3	200 LF 61.0 LM
17	Black felt paper	Porch roof	NF	Good	ND	3	200 LF 61.0 LM
18	Brown flooring	West room	NF	Good	ND	3	180 SF 16.7 SM
19	Black felt paper	Below sample group 18	NF	Good	ND	3	180 SF 16.7 SM
20	Green flooring	East room	NF	Good	ND	3	180 SF 16.7 SM
IUTAL	QUANTITY OF ACM						100 LF

F = Friable; NF = Nonfriable Cond. = Condition Of Materials ND = None Detected 2

Friability is further defined in section 4. Either good, fair or poor.

3

Point Count Analysis

Page 3

APPENDIX D

APPENDIX D

SHIPPING MANIFEST Generator

	Generator			
1. Work Site Name and Mailing Address	Owner	's Name	Owner's	
			Telephone No.	
2. Operator's Name and Address			Operator's.	
			Telephone No	
3. Waste Disposal Site (WDS) Name			WDS	
Mailing Address, and Physical			Telephone No.	
Site Location				
4. Name and Address of Responsible Ag	ency			
5. Description of Materials				
6. Containers	No.	Туре		
7. Total Quantity	M ³	(Yd³)		
8. Special Handling Instructions and Add	itional Inform	ation		
name and are classified, packed, marl in proper condition for transport by hig and government regulations.				
Printed/Typed Name & Title	Sigi	nature	Month Day Year	
	Transporter			
10. Transporter 1 (Acknowledgement of	Receipt of Ma	aterials)		
Printed/Typed Name & Title		nature	Month Day Year	
Address and Telephone No.				
11. Transporter 2 (Acknowledgement of	Receipt of Ma	aterials)		
Printed/Typed Name & Title		nature	Month Day Year	
Address and Telephone No.				
	Disposal Site)		
12. Discrepancy Indication Space				
13. Waste Disposal Site Owner or Opera				
			y This Manifest	
Deints d/True of Norma 0, Title		As Noted in I		
Printed/Typed Name & Title	Sigi	nature	Month Day Yea	

APPENDIX D

	INCTRUCTIONS			
	INSTRUCTIONS			
Wa	aste Generator Section (Items 1-9)			
1.	Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.			
2.	If a demolition or renovation, enter the name and address of the Company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.			
3.	Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.			
4.	Provide the name and address of the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program.			
5.	Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is			
	 Friable asbestos material Nonfriable asbestos material 			
6.	Enter the number of containers used to transport the asbestos materials listed in Item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):			
	 DM - Metal drums, barrels DP - Plastic drums, barrels BA - 6 mil plastic bags or wrapping 			
7.	Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).			
8.	Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.			
9.	The authorized agent of the waste generator shall read and then sign and date this certification. The date is the date of receipt by transporter.			
1.1.1.1				

NOTE: The waste generator shall retain a copy of this form.

APPENDIX D

	INSTRUCTIONS
Trans	sporter Section (Items 10 & 11)
10. &	 Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport.
NOTE	E: The transporter shall retain a copy of this form.
Dispo	sal Site Section (Items 12 & 13)
	The authorized representative of the WDS shall note in this space any discrepancy between waste described on this mainfest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.
	The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in Item 12. The date is the date of signature and receipt of shipment.
NOTE	E: The WDS shall retain a completed copy of this form. The WDS shall also send a completed copy to the operator listed in Item 2.

LIGHTWEIGHT CELLULAR CONCRETE FILL

Effective: November 11, 2001

Revised: October 5, 2015

<u>General</u>: This work consists of providing lightweight cellular concrete fill (LCCF) at the locations(s) and according to the dimensions shown in the contract plans.

<u>Submittals</u>: Within 45 calendar days prior to proposed installation, the Contractor shall submit the following:

- (a) The name of the subcontractor providing and installing the light weight cellular fill. The Contractor shall present an organization chart including names, telephone numbers, current certifications and/ or titles, and roles and responsibilities of all those involved in the manufacturing and installation of the lightweight cellular fill.
- (b) Manufacturer's specifications, catalog cuts, and other product data needed to demonstrate compliance with specified requirements. These shall include reports and test results from laboratories.
- (c) The subcontractor installing the lightweight fill shall be certified in writing by the Manufacturer of the lightweight fill. The certified applicator shall be regularly engaged in the placement of lightweight fill of a similar nature including the completion of mass fills having a minimum of 13,000 cu yd (9,950 cu m) in the past five years.
- (d) A description of the proposed installation procedure. The procedure shall address the following.
 - (1) Proposed construction sequence and schedule.
 - (2) Location of the equipment and batching areas.
 - (3) Type of equipment and tools to be used.

Materials. Materials shall be according to the following.

Item	Article/Section
(a) Portland Cement	
(b) Fly Ash	
(c) Water	
(d) Fine Aggregate	
(e) Concrete Admixtures	
(f) Foaming Agent (Note 1)	

Note 1. The foaming agent shall be according to ASTM C 869, and shall be listed on the Department's Approved/Qualified Product List of Foaming Agents for Cellular Concrete. The manufacturer shall provide an infrared spectrophotometer trace no more than five years old. When the infrared spectrophotometer trace is more than seven years old, a new one shall be provided.

Equipment. Equipment shall be according to the following.

Item	Article/Section
(a) Concrete Mixers and Trucks	
(b) Batching and Weighing Equipment	
(c) Automatic and Semi-Automatic Batching Equipment	
(d) Water Supply Equipment	
(e) Mobile Portland Cement Concrete Plants	
(f) Foam Generator (Notes 1 & 3)	
(g) Mobile Site Batch Plant (Notes 2 & 3)	

Note 1. Foam generating equipment shall be calibrated daily to produce an accurate volume of foam.

Note 2. Mobile site batch plants shall be capable of mixing and pumping cellular concrete, and shall have a minimum 1 cu yd (0.76 cu m) capacity. Mobile site plants shall be calibrated before the start of the project, and then during the project as determined by the Engineer.

Note 3. Foam generators and mobile site batch plants shall be certified in writing by the manufacturer of the lightweight cellular concrete and approved by the Engineer.

Lightweight Cellular Concrete Classes. The four general classes of lightweight cellular concrete delineated by maximum as-cast density and minimum compressive strength are given in Table 1. If the class of lightweight cellular concrete is not specified in the contract, the class to use shall be as directed by the Engineer.

Table 1. CLASSES OF LIGHTWEIGHT CELLULAR CONCRETE					
Class	Maximum Lift Height	Maximum As-Cast Density	Stre	Compressive ength Psi	
			(kF	Pa)	
	ft	lb/cu ft	Da	ays	
	(m)	(kg/cu m)	(Not	(Note 1)	
			7	28	
I	4	30 ± 2	30	40	
	(1.2)	(481 ± 32)	(205)	(275)	
II	4	36 ± 2	60	80	
	(1.2)	(577 ± 32)	(415)	(550)	
III	2.5	42 ± 2	90	120	
	(0.76)	(673 ± 32)	(620)	(825)	
IV	2.5	50 ± 2	115	150	
	(0.76)	(801 ± 32)	(795)	(1035)	

Notes:

(1) When fly ash is used, the required 7-day and 28-day strengths may be reached at 14 and 56 days, respectively.

Other Lightweight Cellular Concrete Criteria. The lightweight cellular concrete shall be according to the following.

(a) Proportioning and Mix Design. For all Classes of lightweight cellular concrete, it shall be the Contractor's responsibility to determine the mix design material proportions and to proportion each batch. The Contractor shall provide the mix designs a minimum of 45 calendar days prior to production. The Engineer will verify the mix design submitted by the Contractor.

For a new mix design to be verified, the Engineer will require the Contractor to provide a trial batch at no cost to the Department. The trial batch shall be scheduled a minimum of 30 calendar days prior to anticipated use and shall be performed in the presence of the Engineer. A minimum of 1 cu yd (0.75 cu m) trial batch shall be produced and placed offsite. The trial batch shall be produced with the equipment, materials, and methods intended for construction. The trial batch will be evaluated and tested by the Contractor and Engineer via split samples for as-cast density and compressive strength according to the sampling and testing requirements specified herein. The lightweight cellular concrete will also be evaluated and tested by the Engineer according to Illinois Test Procedure 501, as applicable.

Verification of the mix design will include trial batch test results and other criteria as determined by the Engineer. The Contractor will be notified in writing of verification. Verification of a mix design shall in no manner be construed as acceptance of any mixture produced. Tests performed at the jobsite will determine if a mix design can meet specifications.

- (b) Admixtures. Admixture use shall be according to Article 1020.05(b).
- (c) Temperature. The air temperature at the time of placement and for 24 hours thereafter shall be a minimum of 35 °F (2 °C). The temperature of the lightweight cellular concrete at point of discharge shall be a minimum of 45 °F (7 °C) and a maximum of 95 °F (35 °C).

Curing. Curing may be required for applications with significant surface area exposed (least width dimension of minimum 80 ft (24 m)) to the elements if rapid drying conditions are expected during placement, as determined by the Engineer. When curing is required, each lift shall be cured with a method recommended by the manufacturer of the lightweight cellular concrete. If curing compound is used, it shall be compatible with other construction materials it may interact with, and shall not inhibit bond of subsequent lifts.

Quality Control Sampling and Testing by the Contractor. The Contractor shall sample and test the lightweight cellular concrete as follows:

(a) As-Cast Density. The first batch placed each day and every 2 hours thereafter shall be sampled and tested as described for "experimental density of the concrete after pumping" according to ASTM C 796, except the hose length shall be that used for jobsite placement. The as-cast density shall be the average of at least two tests.

If the average as-cast density is outside the specified tolerance from Table 1, the Contractor shall reject the batch or make an adjustment to the mix before placement. Adjustments to the mix shall be accomplished by either increasing or decreasing the foam only.

(b) Compressive Strength. First batch placed each day and every 200 cu yd (155 cu m) thereafter shall be sampled according to ASTM C 495, except that samples shall not be oven dried at any time before testing. The minimum number of batches sampled per day shall be two. Eight 3 in. x 6 in. (75 mm x 150 mm) cylindrical test specimens shall be molded from each sample.

A compressive strength test is defined as the average of four cylinder breaks. For each sample, tests shall be conducted at 7 and 28 days, except when the mix includes fly ash, in which case, the tests may be conducted at 14 and 56 days, respectively.

Quality Assurance Sampling and Testing by the Engineer. The Engineer will sample and test the lightweight cellular concrete for quality assurance on independent and split samples. An independent sample is a field sample obtained and tested by only one party. A split sample is one of two equal portions of a field sample, where two parties each receive one portion for testing. The Engineer may request the Contractor to obtain a split sample. Any failing strength test specimen shall be retained until permission is given by the Engineer for disposal. The results of all quality assurance tests by the Engineer will be made available to the Contractor. However, Contractor split sample test results shall be provided to the Engineer before Department test results are revealed. The Engineer's quality assurance independent sample and split sample testing for placement or acceptance will be as follows:

- (a) As-Cast Density. One independent or split sample test for the first batch placed each day and as determined by the Engineer thereafter.
- (b) Compressive Strength. One independent or split sample for the first batch placed each day and as determined by the Engineer thereafter.

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

Test Parameter	Acceptable Limits of Precision
Compressive Strength	5 psi (34.5 kPa)
Density	1 lb/cu ft (16 kg/cu m)

Action shall be taken when either the Engineer's or the Contractor's test results are not within specification limits for strength or density. Action may include, but is not limited to, the Contractor being required to replace or repair test equipment as determined by the Engineer.

Placed material that fails in compressive strength will be considered unacceptable.

Acceptance by the Engineer. Final acceptance will be based on the Standard Specifications and the following:

- (a) Validation of Contractor quality control test results using split samples. Any quality control or quality assurance test determined to be flawed may be declared invalid only when reviewed and approved by the Engineer. The Engineer will declare a test result invalid only if it is proven that improper sampling or testing occurred. The test result is to be recorded and the reason for declaring the test invalid will be provided by the Engineer.
- (b) Comparison of the Engineer's quality assurance test results with specification limits using samples independently obtained by the Engineer.

The Engineer may suspend mixture production, reject materials, or take other appropriate action if the Contractor does not control the quality of lightweight cellular concrete. The decision will be determined according to (a) or (b).

Installation. Prior to installation, the ground surface shall be cleared of organic top soils, debris, sharp objects, and trees. Tree stumps shall be either removed or cut to the level of the ground surface. All wheel tracks or ruts in excess of 3 in. (75 mm) in depth shall be graded smooth or otherwise filled with soil to provide a reasonable smooth surface.

If a geotechnical fabric for ground stabilization or geomembrane is specified in conjunction with the LCCF, it shall be furnished and installed as specified elsewhere in the Contract and shall be in place prior to placing the LCCF.

The lightweight cellular concrete fill shall be placed according to the approved installation procedures provided by the manufacturer.

There shall be no standing water in the area to be filled. If necessary, dewatering shall be continuous during the time the lightweight cellular concrete fill is constructed. Lightweight cellular concrete fill shall not be placed during or when periods of precipitation are expected unless placed in an enclosed, covered area and the ground water is diverted away from the LCCF.

If any items are to be encased in the fill, the items shall be set to the final location both horizontally and vertically prior to installation of the LCCF.

Mixing and placement of the LCCF shall be done as follows:

- (a) After mixing, the materials shall be promptly placed in the final location.
- (b) No mechanical vibration of the LCCF shall be permitted.
- (c) The material shall be placed to prevent segregation. Intermediate lifts shall be placed horizontal while only the top lift shall be sloped to grade. The final surface elevation of the lightweight cellular concrete fill shall be within ±1.5 inches (±38 mm) of the plan elevation.
- (d) Limit the area of placement to the volume that can be placed within 1 hour, up to the maximum lift height. Stagger placements such that the vertical joints are at least 10 ft (3 m) apart.
- (e) The cellular concrete shall be placed with a hose. The discharge hose length shall not exceed 800 ft (244 m) in length. Discharge from the hose shall not be allowed to flow more than 30 ft (9 m) from where it is deposited to its final position.
- (f) Heavy construction equipment or other unusual loading of the lightweight cellular concrete fill shall not be permitted.
- (g) Construction activities on any recently placed lift will not be permitted until at least 12 hours has elapsed and a minimum compressive strength of 8 psi (55 kPa) has been achieved. However, if any work on the recently placed LCCF resulting in cracking or indentations of more than an 0.125 inch (3 mm), the contractor shall discontinue construction, revise their wait time, mix strength or equipment used and submit to the Engineer for approval.
- (h) Sawing or ripping of the lightweight cellular concrete fill for utilities, drains or other conflicts will be by methods approved by the Engineer and lightweight cellular concrete fill Manufacturer.

<u>Method of Measurement</u>. Lightweight cellular fill shall be measure for payment in cubic feet (cubic meters) according to Article 202.07.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per cubic feet (cubic meter) for LIGHTWEIGHT CELLULAR CONCRETE FILL.

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.

TEMPORARY SOIL RETENTION SYSTEM

Effective: December 30, 2002

Revised : May 11, 2009

<u>Description.</u> This work shall consist of designing, furnishing, installing, adjusting for stage construction when required and subsequent removal of the temporary soil retention system according to the dimensions and details shown on the plans and in the approved design submittal.

<u>General.</u> The temporary soil retention system shall be designed by the Contractor as a minimum, to retain the exposed surface area specified in the plans or as directed by the Engineer.

The design calculations and details for the temporary soil retention system proposed by the Contractor shall be submitted to the Engineer for approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer. This approval will not relieve the Contractor of responsibility for the safety of the excavation. Approval shall be contingent upon acceptance by all involved utilities and/or railroads.

<u>Construction.</u> The Contractor shall verify locations of all underground utilities before installing any of the soil retention system components or commencing any excavation. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The soil retention system shall be installed according to the Contractor's approved design, or as directed by the Engineer, prior to commencing any related excavation. If unable to install the temporary soil retention system as specified in the approved design, the Contractor shall have the adequacy of the design re-evaluated. Any reevaluation shall be submitted to the Engineer for approval prior to commencing the excavation adjacent to the area in question. The Contractor shall not excavate below the maximum excavation line shown in the approved design without the prior permission of the Engineer. The temporary soil retention system shall remain in place until the Engineer determines it is no longer required.

The temporary soil retention system shall be removed and disposed of by the Contractor when directed by the Engineer. When allowed, the Contractor may elect to cut off a portion of the temporary soil retention system leaving the remainder in place. The remaining temporary soil retention system shall be removed to a depth which will not interfere with the new construction, and as a minimum, to a depth of 12 in. (300 mm) below the finished grade, or as directed by the Engineer. Removed system components shall become the property of the Contractor.

When an obstruction is encountered, the Contractor shall notify the Engineer and upon concurrence of the Engineer, the Contractor shall begin working to break up, push aside, or remove the obstruction. An obstruction shall be defined as any object (such as but not limited to, boulders, logs, old foundations etc.) where its presence was not obvious or specifically noted on the plans prior to bidding, that cannot be driven or installed through or around, with normal driving or installation procedures, but requires additional excavation or other procedures to remove or miss the obstruction.

<u>Method of Measurement</u>. The temporary soil retention system furnished and installed according to the Contractor's approved design or as directed by the Engineer will be measured for payment in place, in square feet (square meters). The area measured shall be the vertical exposed surface area envelope of the excavation supported by temporary soil retention system. Portions of the temporary soil retention system left in place for reuse in later stages of construction shall only be measured for payment once.

Any temporary soil retention system installed beyond those dimensions shown on the contract plans or the approved contractor's design without the written permission of the Engineer, shall not be measured for payment but shall be done at the contractor's own expense.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot (square meter) for TEMPORARY SOIL RETENTION SYSTEM.

Payment for any excavation, related solely to the installation and removal of the temporary soil retention system and/or its components, shall not be paid for separately but shall be included in the unit bid price for TEMPORARY SOIL RETENTION SYSTEM. Other excavation, performed in conjunction with this work, will not be included in this item but shall be paid for as specified elsewhere in this contract.

Obstruction mitigation shall be paid for according to Article 109.04 of the Standard Specifications.

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.

Item	Article/Section
(a) Fine Aggregate	
(b) Coarse Aggregates	

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.

WEEP HOLE DRAINS FOR ABUTMENTS, WINGWALLS, RETAINING WALLS AND CULVERTS

Effective: April 19, 2012

Revised: October 22, 2013

Delete the last paragraphs of Articles 205.05 and 502.10 and replace with the following.

"If a geocomposite wall drain according to Section 591 is not specified, a prefabricated geocomposite strip drain according to Section 1040.07 shall be placed at the back of each drain hole. The strip drain shall be 24 inches (600 mm) wide and 48 inches (1.220 m) tall. The strip drain shall be centered over the drain hole with the bottom located 12 inches (300 mm) below the bottom of the drain hole. All form boards or other obstructions shall be removed from the drain holes before placing any geocomposite strip drain."

Revise the last sentence of the first paragraph of Article 503.11 to read as follows.

"Drain holes shall be covered to prevent the leakage of backfill material according to Article 502.10."

Revise the title of Article 1040.07 to Geocomposite Wall Drains and Strip Drains.

BRIDGE DECK CONSTRUCTION

Effective: October 22, 2013

Revised: April 18, 2014

Revise the Second Paragraph of Article 503.06(b) to read as follows:

"When the Contractor uses cantilever forming brackets on exterior beams or girders, additional requirements shall be as follows."

Revise Article 503.06(b)(1) to read as follows:

"(1) Bracket Placement. The spacing of brackets shall be per the manufacturer's published design specifications for the size of the overhang and the construction loads anticipated. The resulting force of the leg brace of the cantilever bracket shall bear on the web within 6 inches (150 mm) of the bottom flange of the beam or girder."

Revise Article 503.06(b)(2) to read as follows:

"(2) Beam Ties. The top flange of exterior steel beams or girders supporting the cantilever forming brackets shall be tied to the bottom flange of the next interior beam. The top flange of exterior concrete beams supporting the cantilever forming brackets shall be tied to the top flange of the next interior beam. The ties shall be spaced at 4 ft (1.2 m) centers. Permanent cross frames on steel girders may be considered a tie. Ties shall be a minimum of 1/2 inch (13 mm) diameter threaded rod with an adjusting mechanism for drawing the tie taut. The ties shall utilize hanger brackets or clips which hook onto the flange of steel beams. No welding will be permitted to the structural steel or stud shear connectors, or to reinforcement bars of concrete beams, for the installation of the tie bar system. After installation of the ties and blocking, the tie shall be drawn taut until the tie does not vary from a straight line from beam to beam. The tie system shall be approved by the Engineer."

Revise Article 503.06(b)(3) to read as follows:

"(3) Beam Blocks. Suitable beam blocks of 4 in x 4 in (100 x 100 mm) timbers or metal structural shapes of equivalent strength or better, acceptable to the Engineer, shall be wedged between the webs of the two beams tied together, within 6 inches (150 mm) of the bottom flange at each location where they are tied. When it is not feasible to have the resulting force from the leg brace of the cantilever brackets transmitted to the web within 6 inches (150 mm) of the bottom flange, then additional blocking shall be placed at each bracket to transmit the resulting force to within 6 inches (150 mm) of the bottom flange, then additional blocking shall be placed at each bracket to transmit the resulting force to within 6 inches (150 mm) of the bottom flange of the next interior beam or girder."

Delete the last paragraph of Article 503.06(b).

Revise the third paragraph of Article 503.16 to read as follows:

"Fogging equipment shall be in operation unless the evaporation rate is less than 0.1 lb/sq ft/hour (0.5kg/sq m/hour) and the Engineer gives permission to stop. The evaporation rate shall be determined according to the following formula.

$$E = (T_c^{2.5} - rT_a^{2.5})(1 + 0.4V)x10^{-6} (English)$$

$$E = 5[(T_c + 18)^{2.5} - r(T_a + 18)^{2.5}](V + 4)x10^{-6} (Metric)$$

Where:

- $E = \text{Evaporation Rate, lb/ft}^2/\text{h (kg/sq m/h)}$
- T_c = Concrete Temperature, °F (°C)
- T_a = Air Temperature, °F (°C)
- r = Relative Humidity in percent/100
- V = Wind Velocity, mph (km/h)

The Contractor shall provide temperature, relative humidity, and wind speed measuring equipment. Fogging equipment shall be adequate to reach or cover the entire pour from behind the finishing machine or vibrating screed to the point of curing covering application, and shall be operated in a manner which shall not accumulate water on the deck until the curing covering has been placed."

Revise the third paragraph of Article 503.16(a)(1) to read as follows:

"At the Contractor's option, a vibrating screed may be used in lieu of a finishing machine for superstructures with a pour width less than or equal to 24 ft (7.3 m). After the concrete is placed and consolidated, it shall be struck off with a vibrating screed allowing for camber, if required. The vibrating screed shall be of a type approved by the Engineer. A slight excess of concrete shall be kept in front of the cutting edge at all times during the striking off operation. After screeding, the entire surface shall be finished with hand-operated longitudinal floats having blades not less than 10 ft (3 m) in length and 6 in. (150 mm) in width. Decks so finished need not be straightedge tested as specified in 503.16(a)(2)."

Delete the fifth paragraph of 503.16(a)(1).

Revise Article 503.16(a)(2) to read as follows:

"(2) Straightedge Testing and Surface Correction. After the finishing has been completed and while the concrete is still plastic, the surface shall be tested for trueness with a 10 ft (3 m) straightedge, or a hand-operated longitudinal float having blades not less than 10 ft (3 m) in length and 6 in. (150 mm) in width. The Contractor shall furnish and use an accurate 10 ft (3 m) straightedge or float which has a handle not less than 3 ft (1 m) longer than 1/2 the pour width. The straightedge or float shall be held in contact with the surface and passed gradually from one side of the superstructure to the other. Advance along the surface shall be in successive stages of not more than 1/2 the length of the straightedge or float. Any depressions found shall be immediately filled with freshly mixed concrete, struck off, consolidated, and refinished. High areas shall be cut down and refinished."

Replace the second sentence of the first paragraph of Article 1020.13(a)(5) with the following sentences:

"Cotton mats in poor condition will not be allowed. The cotton mats shall be placed in a manner which will not create indentations greater than 1/4 inch (6 mm) in the concrete surface. Minor marring of the surface is tolerable and is secondary to the importance of timely curing."

Revise Article 1020.14(b) to read as follows:

- "(b) Concrete in Structures. Concrete may be placed when the air temperature is above 40 °F (4 °C) and rising, and concrete placement shall stop when the falling temperature reaches 45 °F (7 °C) or below, unless otherwise approved by the Engineer.
 - (1) Bridge Deck Concrete. For concrete in bridge decks, slabs, and bridge approach slabs the Contractor shall schedule placing and finishing of the concrete during hours in which the ambient air temperature is forecast to be lower than 85 °F (30 °C). It shall be understood this may require scheduling the deck pour at night in order to utilize the temperature window available. The temperature of the concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 85 °F (30 °C).
 - (2) Non-Bridge Deck Concrete. Except as noted above, the temperature of the concrete immediately before placement shall be a minimum of 50 °F (10 °C) and a maximum of 90 °F (32 °C).

If concrete is pumped, the temperature restrictions above shall be considered at point of placement. When insulated forms are used according to Article 1020.13(d)(1), the maximum temperature of the concrete mixture immediately before placement shall be 80 °F (25 °C). When concrete is placed in contact with previously placed concrete, the temperature of the freshly mixed concrete may be increased by the Contractor to offset anticipated heat loss, but in no case shall the maximum concrete temperature be permitted to exceed the limits stated in this Article."

Revise Article 1103.13(a) to read as follows:

"(a) Bridge Deck. The finishing machine shall be equipped with: (1) a mechanical strike off device; (2) either a rotating cylinder(s) or a longitudinal oscillating screed which transversely finishes the surface of the concrete. The Contractor may attach other equipment to the finishing machine to enhance the final finish when approved by the Engineer. The finishing machine shall produce a deck surface of uniform texture, free from porous areas, and with the required surface smoothness.

The finishing machine shall be operated on rails or other supports that will not deflect under the applied loads. The maximum length of rail segments supported on top of beams and within the pour shall be 10 ft (3 m). The supports shall be adjustable for elevation and shall be completely in place to allow the finishing machine to be used for the full length of the area to be finished. The supports shall be approved by the Engineer before placing of the concrete is started."

Revise Article 1103.17(k) to read as follows;

"(k) Fogging Equipment. Fogging equipment shall be hand held fogging equipment for humidity control. The equipment shall be capable of atomizing water to produce a fog blanket by the use of pressure 2500 psi minimum (17.24 MPa) and an industrial fire hose fogging nozzle or equivalent. Fogging equipment attached to the finishing machine will not be permitted."

AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 2012

Revised: January 1, 2016

Add the following Section to the Standard Specifications:

"SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	
(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 gradations CS 01, CS 02, and RR 01 but shall not exceed 40 percent of the total product. The top size of the RAP shall be less than 4 in. (100 mm) and well graded.

Note 2. RAP having 100 percent passing the 1 1/2 in. (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradations CS 01, CS 02, or RR 01 are used in lower lifts.

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

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

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

303.05 Placing Aggregate. The maximum nominal lift thickness of aggregate gradations CA 02, CA 06, or CA 10 shall be 12 in. (300 mm). The maximum nominal lift thickness of aggregate gradations CS 01, CS 02, and RR 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 the contract specifies that a granular subbase is to be placed on the aggregate subgrade improvement, the 3 in. (75 mm) of capping aggregate shall be the same gradation and may be placed with the underlying aggregate subgrade improvement material.

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) or ton (metric ton) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified."

Add the following to Section 1004 of the Standard Specifications:

"**1004.06 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. In applications where greater than 24 in. (600 mm) of subgrade material is required, gravel may be used below the first 12 in (300 mm) of subgrade.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thickness less than or equal to 12 in. (300 mm) shall be CA 2, CA 6, CA 10, or CS 01.

The coarse aggregate gradation for total subgrade thickness more than 12 in. (300 mm) shall be CS 01, CS 02 or RR 01(see Article 1005.01(c)).

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

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

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

COARSE AGGREGATE QUALITY (BDE)

Effective: July 1, 2015

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

"(b) Quality. The coarse aggregate shall be according to the quality standards listed in the following table.

COARSE AGGREGATE QUALITY					
QUALITY TEST		CLASS			
QUALITITEOT	Α	В	С	D	
Na ₂ SO ₄ Soundness 5 Cycle, ITP 104 ^{1/} , % Loss max.	15	15	20	25 ^{2/}	
Los Angeles Abrasion, ITP 96 ^{11/} , % Loss max.	40 ^{3/}	40 4/	40 5/	45	
Minus No. 200 (75 µm) Sieve Material, ITP 11	1.0 ^{6/}		2.5 7/		
Deleterious Materials ^{10/}					
Shale, % max.	1.0	2.0	4.0 8/		
Clay Lumps, % max.	0.25	0.5	0.5 8/		
Coal & Lignite, % max.	0.25				
Soft & Unsound Fragments, % max.	4.0	6.0	8.0 ^{8/}		
Other Deleterious, % max.	4.0 9/	2.0	2.0 8/		
Total Deleterious, % max.	5.0	6.0	10.0 ^{8/}		
Oil-Stained Aggregate ^{10/} , % max	5.0				

- 1/ Does not apply to crushed concrete.
- 2/ For aggregate surface course and aggregate shoulders, the maximum percent loss shall be 30.
- 3/ For portland cement concrete, the maximum percent loss shall be 45.
- 4/ Does not apply to crushed slag or crushed steel slag.
- 5/ For hot-mix asphalt (HMA) binder mixtures, except when used as surface course, the maximum percent loss shall be 45.
- 6/ For crushed aggregate, if the material finer than the No. 200 (75 μm) sieve consists of the dust from fracture, essentially free from clay or silt, this percentage may be increased to 2.5.
- 7/ Does not apply to aggregates for HMA binder mixtures.

- 8/ Does not apply to Class A seal and cover coats.
- 9/ Includes deleterious chert. In gravel and crushed gravel aggregate, deleterious chert shall be the lightweight fraction separated in a 2.35 heavy media separation. In crushed stone aggregate, deleterious chert shall be the lightweight fraction separated in a 2.55 heavy media separation. Tests shall be run according to ITP 113.
- 10/ Test shall be run according to ITP 203.
- 11/ Does not apply to crushed slag.

All varieties of chert contained in gravel coarse aggregate for portland cement concrete, whether crushed or uncrushed, pure or impure, and irrespective of color, will be classed as chert and shall not be present in the total aggregate in excess of 25 percent by weight (mass).

Aggregates used in Class BS concrete (except when poured on subgrade), Class PS concrete, and Class PC concrete (bridge superstructure products only, excluding the approach slab) shall contain no more than two percent by weight (mass) of deleterious materials. Deleterious materials shall include substances whose disintegration is accompanied by an increase in volume which may cause spalling of the concrete."

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:

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."

CONCRETE MIX DESIGN – DEPARTMENT PROVIDED (BDE)

Effective: January 1, 2012

Revised: January 1, 2014

For the concrete mix design requirements in Article 1020.05(a) of the Supplemental Specifications and Recurring Special Provisions, the Contractor has the option to request the Engineer determine mix design material proportions for Class PV, PP, RR, BS, DS, SC, and SI concrete. A single mix design for each class of concrete will be provided. Acceptance by the Contractor to use the mix design developed by the Engineer shall not relieve the Contractor from meeting specification requirements.

CONTRACT CLAIMS (BDE)

Effective: April 1, 2014

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

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

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

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

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

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: January 2, 2016

<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.

<u>STATE OBLIGATION</u>. 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.

<u>OVERALL GOAL SET FOR THE DEPARTMENT</u>. 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.

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. 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 **5.00**% 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 to meet this goal of DBE participation 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.

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

http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprisecertification/il-ucp-directory/index. <u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on completed Department forms SBE 2025 and 2026.
 - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting.
 - (2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to <u>DOT.DBE.UP@illinois.gov</u> or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

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

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

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.

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

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

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

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
 - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with subsection (c)(6) of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period in order to cure the deficiency.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and A request may provide additional written documentation or argument delivered. 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.

<u>CALCULATING DBE PARTICIPATION</u>. 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 DBE regular dealer or DBE manufacturer.

<u>CONTRACT COMPLIANCE</u>. 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 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 be come the amended contract goal. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) <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 or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, 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) <u>TERMINATION AND REPLACEMENT PROCEDURES</u>. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE 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) <u>PAYMENT RECORDS</u>. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <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. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

EQUAL EMPLOYMENT OPPORTUNITY (BDE)

Effective: April 1, 2015

<u>FEDERAL AID CONTRACTS</u>. 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.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination ^{5/} :
		Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Combination ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete

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

Use	Mixture	Aggregates Allowed	
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Combination ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}	
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Combination ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	
HMA High ESAL	D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface	Allowed Alone or in Combination ^{5/} : Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	
		Other Combinations Allowed:	
		Up to 25% Limestone	With Dolomite
		50% Limestone	Any Mixture D aggregate other than Dolomite
		75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone
HMA High ESAL	E Surface IL-9.5 SMA Ndesign 80 Surface	Allowed Alone or in Combination 5/: Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete ^{3/} No Limestone. Other Combinations Allowed: Up to With	

Use	Mixture	Aggregates Allowed		
		50% Dolomite ^{2/}	Any Mixture E aggregate	
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	
		75% Crushed Gravel or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag	
HMA High ESAL	F Surface IL-9.5	Allowed Alone or in Combination ^{5/} :		
High ESAL	SMA Ndesign 80 Surface	Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.		
		Other Combinations Allowed:		
		Up to	With	
		50% Crushed Gravel, Crushed Concrete ^{3/} , or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	

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

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.

<u>Quality Control/Quality Assurance (QC/QA)</u>. 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	Unconfined Edge Joint Density
		edges)	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,	Ndesign < 90	92.5 – 97.4%	90.0%
IL-12.5			
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 - 96.0%	90.0%
IL-19.0, IL-19.0L,	Ndesign < 90	93.0 - 97.4%	90.0%
IL-25.0			
SMA	Ndesign = 50 & 80	93.5 - 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%"

HOT-MIX ASPHALT – MIXTURE DESIGN COMPOSITION AND VOLUMETRIC REQUIREMENTS (BDE)

Effective: November 1, 2013

Revised: November 1, 2014

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)	
IL-9.5, IL-9.5L	1 1/4 (32)	
SMA-12.5	2 (51)	
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."

Remove footnote 3/ from the tables and at the end of the tables in Article 1004.01(c) of the Standard Specifications.

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

"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 ^{1/}
	IL-9.5	CA 16 and/or CA 13
		CA 16
HMA Low ESAL	IL-19.0L	CA 11 ^{1/}
	IL-9.5L	CA 16
	Stabilized Subbase	
	or Shoulders	

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

1/ CA 16 or CA 13 may be blended with the gradations listed."

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

"High ESAL	IL-19.0 binder; IL-9.5 surface
Low ESAL	IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA) ^{1/} ; HMA Shoulders ^{2/}

1/ Uses 19.0L binder mix.

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

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

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

Item	Article/Section
(a) Coarse Aggregate	
(b) Fine Aggregate	
(c) RAP Material	
(d) Mineral Filler	
(e) Hydrated Lime	
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	
(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.

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.

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:

High ESAL, MIXTURE COMPOSITION (% PASSING) 1/								
Sieve	IL-19.	0 mm	SMA	12.5 ^{4/}	IL-9	5 mm	IL-4.	75 mm
Size	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)								
1 in. (25 mm)		100						
3/4 in. (19 mm)	90	100		100				
1/2 in. (12.5 mm)	75	89	90	99		100		100
3/8 in. (9.5 mm)			50	85	90	100		100
#4 (4.75 mm)	40	60	20	40	32	69	90	100
#8 (2.36 mm)	26	42	16	24 ^{5/}	32	52 ^{2/}	70	90
#16 (1.18 mm)	15	30			10	32	50	65
#50 (300 μm)	6	15			4	15	15	30
#100 (150 μm)	4	9			3	10	10	18
#200 (75 μm)	3	6	8.0	11.0 ^{3/}	4	6	7	9
Ratio Dust/Asphalt Binder		1.0				1.0		1.0 ^{3/}

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

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ The maximum percent passing the #635 (20 μ m) sieve shall be \leq 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 24 percent."

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

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

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

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

- 1/ Maximum Draindown for IL-4.75 shall be 0.3 percent
- 2/ VFA for IL-4.75 shall be 76-83 percent"

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

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

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

"(3) SMA Mixtures.

ESALs	Ndesign	Design	Voids in the	Voids Filled
(million)	_	Air Voids	Mineral	with Asphalt
		Target %	Aggregate	(VFA), %
		-	(VMA),	
			% min.	
≤ 10	50	4.0	16.0	75 – 80
> 10	80	4.0	17.0	75 – 80"

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

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

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

	Fraguanay of Tasta	Toot Mothod
	Frequency of Tests	Test Method See Manual of
"Parameter	High ESAL Mixture Low ESAL Mixture	Test Procedures 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	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:	
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. If the mixture is allowed to conto 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						
Deremeter	High ESAL Low ESAL		SMA		IL-4.75	
Parameter	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: 1/						
1/2 in. (12.5 mm)	±6%	±4%	±6%	±4%		
3/8 in. (9.5mm)			±4%	±3%		
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	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Content						
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
VMA	-0.7 % ^{2/}	-0.5 % ^{2/}	-0.7 % ^{2/}	-0.5 % ^{2/}	-0.7 % ^{2/}	-0.5 % ^{2/}

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

DENSITY CONTROL LIMITS			
Mixture Composition	Parameter	Individual Test	
IL-4.75	Ndesign = 50	93.0 - 97.4 % ^{1/}	
IL-9.5	Ndesign = 90	92.0 - 96.0 %	
IL-9.5,IL-9.5L	Ndesign < 90	92.5 - 97.4 %	
IL-19.0	Ndesign = 90	93.0 - 96.0 %	
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} - 97.4 %	
SMA	Ndesign = 50 & 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) ^{2/}	
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.

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

Effective: November 1, 2013

Revised: November 1, 2014

<u>Description</u>. This special provision provides 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. This special provision also provides the plant requirements for hydrated lime addition systems used in the production of High ESAL, IL-4.75, and SMA mixes.

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

AASHTO T 324Hamburg Wheel TestAASHTO T 283Tensile 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 (Illinois Modified AASHTO T 324) and the Tensile Strength Test (Illinois Modified 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 necessary changes to the mix and provide passing Hamburg Wheel and tensile strength test results from a private lab. The Department will verify the passing results.

All new and renewal mix designs shall meet the following requirements for verification testing.

(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.

PG Grade	Number of Passes
PG 58-xx (or lower)	5,000
PG 64-xx	7,500
PG 70-xx	15,000
PG 76-xx (or higher)	20,000

Illinois Modified AASHTO T 324 Requirements ^{1/}

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. (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 550 kPa (80 psi) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

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

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip 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.

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 Bin	der ± 0.3 %
Content	

The limitations between the JMF and AJMF are as follows.

* 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."

<u>System for Hydrated Lime Addition</u>. Revise the fourth sentence of the third paragraph of Article 1030.04(c) of the Standard Specifications to read:

"The method of application shall be according to Article 1102.01(a)(10)."

Replace the first three sentences of the second paragraph of Article 1102.01(a)(10) of the Standard Specifications to read:

"When hydrated lime is used as the anti-strip additive, a separate bin or tank and feeder system shall be provided to store and accurately proportion the lime onto the aggregate either as a slurry, as dry lime applied to damp aggregates, or as dry lime injected onto the hot aggregates prior to adding the liquid asphalt cement. If the hydrated lime is added either as a slurry or as dry lime on damp aggregates, the lime and aggregates shall be mixed by a power driven pugmill to provide a uniform coating of the lime prior to entering the dryer. If dry hydrated lime is added to the hot dry aggregates in a dryer-drum plant, the lime shall be added in such a manner that the lime will not become entrained into the air stream of the dryer-drum and that thorough dry mixing shall occur prior to the injection point of the liquid asphalt. When a batch plant is used, the hydrated lime shall be added to the mixture in the weigh hopper or as approved by the Engineer."

<u>Basis of Payment</u>. Replace the seventh paragraph of Article 406.14 of the Standard Specifications with the following:

"For 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.

If an anti-stripping additive is required for any other HMA mix, the cost of the additive will be paid for according to Article 109.04. The cost incurred in introducing the additive into 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."

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.

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

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

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

The bituminous material for the prime coat shall be placed one lane at a time. If a spray paver is not used, the primed lane shall remain closed until the prime coat is fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

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

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

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

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

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

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

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

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

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

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

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

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

Revise Article 407.02 of the Standard Specifications to read:

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

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.	Т 59	
Residue by Evaporation,	%	50 min.	Т 59	
Sieve Test,	%	0.3 max.	T 59	
Tests on Residue from Evaporation				
Penetration @25°C, 100g., 5 sec., dmm 20 max. T 49				
Softening Point,	°C	65 min.	T 53	
Solubility,	%	97.5 min.	T 44	
Orig. DSR @ 82°C,	kPa	1.00 min.	T 315"	

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

"Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, SS-1vh	
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	
(b) Galvanized Corrugated Steel Pipe Arch	
(c) Bituminous Coated Corrugated Steel Pipe	
(d) Bituminous Coated Corrugated Steel Pipe Arch	
(e) Reserved	
(f) Aluminized Steel Type 2 Corrugated Pipe	
(g) Aluminized Steel Type 2 Corrugated Pipe Arch	
(h) Precoated Galvanized Corrugated Steel Pipe	
(i) Precoated Galvanized Corrugated Steel Pipe Arch	
(j) Corrugated Aluminum Alloy Pipe	
(k) Corrugated Aluminum Alloy Pipe Arch	
(I) Extra Strength Clay Pipe	
(m) Concrete Sewer, Storm Drain, and Culvert Pipe	
(n) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	
(o) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	
(p) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	
(q) Polyvinyl Chloride (PVC) Pipe	
(r) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	
(s) Corrugated Polypropylene (CPP) pipe with smooth Interior	
(t) Corrugated Polyethylene (PE) Pipe with a Smooth Interior	
(u) Polyethylene (PE) Pipe with a Smooth Interior	
(v) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pi	•
(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	
(cc) Reinforcement Bars and Welded Wire Fabric	
(dd) Handling Hole Plugs	

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
	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
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
D	Corrugated Polypropylene (CPP) Pipe with Smooth Interior Rigid Pipes:
U	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
	Flexible Pipes:
	Galvanized Corrugated Steel Pipe
	Galvanized Corrugated Steel Pipe Arch
	Bituminous Coated Corrugated Steel Pipe
	Bituminous Coated Corrugated Steel Pipe Arch
	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch
	Precoated Galvanized Corrugated Steel Pipe Precoated Galvanized Corrugated Steel Pipe Arch
	Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe
	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:

			ole IA: Classes c				
	for the	e Respective [Diameters of Pip	e and Fill Heig	hts over the Top	o of the Pipe	
	Туре 1	Type 2	Туре 3	Туре 4	Туре 5	Туре 6	Туре 7
Nominal Diamete	Fill Height:	Fill Height: Greater	Fill Height: Greater than	Fill Height: Greater	Fill Height: Greater than	Fill Height: Greater than	Fill Height: Greater than
r	3' and less	than 3'	10'	than 15'	20'	25'	30'
in.	1' min	not	not	not	not	not	not
	cover	exceeding 10'	exceeding 15'	exceeding 20'	exceeding 25'	exceeding 30'	exceeding 35'
12	IV	II		IV	IV	V	V
15	IV	II		IV	IV	V	V
18	IV	II		IV	IV	V	V
21		II	III	IV	IV	V	V
24	111	II	III	IV	IV	V	V
30	IV	II		IV	IV	V	V
36	111	II	III	IV	IV	V	V
42	II	II	III	IV	IV	V	V
48		II		IV	IV	V	V
54	II	II	III	IV	IV	V	V
60	II	II		IV	IV	V	V
66				IV	IV	V	V
72	II	II	III	IV	V	V	V
78	II	II		IV	2020	2370	2730
84				IV	2020	2380	2740
90	II	II	111	1680	2030	2390	2750
96	II	111	111	1690	2040	2400	2750
102	II		III	1700	2050	2410	2760
108 Notos:	II		1360	1710	2060	2410	2770

Notes:

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

		for the R		es of Reinforced Concrete f Pipe and Fill Heights ov (Metric)			
	Type 1	Туре 2	Туре 3	Туре 4	Туре 5	Туре 6	
Nominal Diameter mm	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	
	1 m and less 0.3 m min cover	Greater than 1 m not exceeding 3 m	Greater than 3 m not exceeding 4.5 m	Greater than 4.5 m not exceeding 6 m	Greater than 6 m not exceeding 7.5 m	Greater than 7.5 m not exceeding 9 m	Gre e
300	IV	II	III	IV	IV	V	
375	IV	П	III	IV	IV	V	
450	IV	II	III	IV	IV	V	
525	III	II	Ш	IV	IV	V	$\begin{bmatrix} 1 \end{bmatrix}$
600	III	II	III	IV	IV	V	
750	IV	II	III	IV	IV	V	
900	III	II	III	IV	IV	V	
1050	Ш	II	III	IV	IV	V	
1200	II	II	III	IV	IV	V	
1350	Ш	II	III	IV	IV	V	
1500	Ш	II	III	IV	IV	V	
1650	Ш	II	III	IV	IV	V	
1800	Ш	II	III	IV	V	V	
1950	Ш	II	III	IV	100	110	
2100	Ш	II	III	IV	100	110	
2250	Ш	II	Ш	80	100	110	
2400	Ш	III	III	80	100	110	
2550	Ш	III	III	80	100	120	
2700	Ш	III	70	80	100	120	
Notes:							

Notes:

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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

		F	FOR THE	RESPE	CTIVE D	IAMETE	R OF PII							eel Pipe IPe for :		", 3"x1" AN	ND 5"x1" C	ORRUGA
	1	Гуре 1			Type 2			Туре 3			Type 4			Type 5			Type 6	
viameter	Fill	l Height:		F	ill Height	t:	F	ill Heigh	t:	F	ill Heigh	t:		Fill Heigh	t:		Fill Height	
Nominal Diameter in.*		and less nin. cove			eater than exceeding			ater thar			ater thar			reater thar t exceedin			eater than exceeding	
ž	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"
12	0.064			0.064			0.064			0.064			0.064			0.064		
15	0.064			0.064			0.064			0.064			0.064			0.064		
18	(0.079)			0.064			0.064			0.064			0.064			(0.079)		
21	(0.079)			0.064			0.064			0.064			(0.079)			(0.079)		
24	(0.079)			0.064			0.064			0.064			(0.079)			(0.079)		
1	(0.109E)			0.064			0.064		l	(0.079)			(0.079)			(0.109)		
	(0.109E)			0.064			(0.079)			(0.079)			(0.109)			0.109		
42	0.079			0.064			(0.079)			(0.079)			(0.109)			(0.109E)		
48		(0.109)	0.109	(0.109)	0.079	0.079	(0.109)	0.079	(0.109)	0.109	(0.109)		(0.138)	(0.109)	0.109	(0.138E)	0.109	0.109
54		(0.109)	0.109	(0.109) 0.109	0.079	0.079	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	0.109	(0.138)
60 66	0.109 (0.138)	0.109 0.109	0.109 0.109	0.109 0.109	0.079 0.079	(0.109) (0.109)	0.109 0.109	(0.109) (0.109)	0.109 0.109	0.109 0.109	(0.109) 0.109	0.109 0.109	(0.138) (0.138)	0.109 0.109	0.109	(0.138E) (0.138E)	(0.138) 0.138	(0.138) 0.138
72	0.138)	0.109	(0.138)	0.109	(0.109)	(0.109)	0.109	(0.109)	0.109	0.109	0.109	0.109	0.138)	(0.138)	(0.138) (0.138)	(0.138E) (0.168E)		0.138 0.138E
72	0.138	0.109	(0.138)	0.138	(0.109)	0.109)	0.138	0.109)	0.109	0.138	0.109	(0.138)	0.138	(0.138)	(0.138)	(0.168E) H0.168E	` '	0.138E
84			(0.130)	0.168	(0.103)	0.109	0.168	0.109	0.103	0.168	0.109	(0.138)	0.168	(0.138)	0.138	H0.168E	` '	0.138E
90		(0.138)	(0.138)	000	(0.109)	0.109	0.100	0.109	0.109	0.100		(0.138)	0.100	(0.138)	0.138		0.138E	(0.168E)
96		` '	(0.138)		(0.109)	0.109		0.109	0.109		` '	(0.138)		(0.138)	0.138		(0.168E)	(0.168E)
102		0.109Z	0.109Z		(0.109)	0.109		0.109	(0.138)		(0.138)	(0.138)		(0.138)	0.138		(0.168E)	(0.168E)
108		0.109Z	(0.138Z)		0.109	0.109		0.109	(0.138)		(0.138)	0.138		0.138	(0.168)		(0.168E)	(0.168E)
114		0.109Z	(0.138Z)		0.109	0.109		0.109	(0.138)		(0.138)	0.138		(0.168)	(0.168)		(0.168E)	0.168E
120		0.109Z	(0.138Z)		0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		(0.168)	(0.168)		H0.138E	H0.168E
126		0.138Z	0.138Z		0.138	0.138		0.138	0.138		0.138	(0.168)		(0.168)	(0.168)		H0.138E	H0.168E
132		0.138Z	0.138Z		0.138	0.138		0.138	0.138		(0.168)	(0.168)		0.168	0.168		H0.138E	H0.168E
138		0.138Z	0.138Z		0.138	0.138		0.138	0.138		(0.168)	(0.168)		(0.168E)	H0.168E		H0.168E	H0.168E
144 Not		0.168Z	0.168Z		0.168	0.168		0.168	0.168		0.168	0.168		H0.168E	H0.168E		H0.168E	H0.168E

Notes:
 * Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 42" according to Article 1006.01, 1 1/2" x 1/4" corrugations shall be used for diameters less than 12".
 Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is

utilized.

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

E Elongation according to Article 542.04(e) Z 1'-6" Minimum fill

integrad 68 x mm 300 1.6 375 1.6 450 (2.0 525 (2.0 600 (2.0 750 (2.77 900 (2.77	Type 1 Fill Heigh 1 m and le 0.3 m min. c 3 x 13 75 x 25 mm mm	ess cover		Type 2 Fill Height		T											
300 1.6 375 1.6 450 (2.0 525 (2.0 600 (2.0 750 (2.77 900 (2.77)	1 m and le 0.3 m min. c 3 x 13 75 x 25 mm mm	ess cover		Fill Heigh		1	Туре 3			Type 4			Туре 5			Туре 6	
300 1.6 375 1.6 450 (2.0 525 (2.0 600 (2.0 750 (2.77 900 (2.77)	0.3 m min. c x 13 75 x 25 mm mm	cover		5	t:		Fill Heigh	ıt:	ſ '	Fill Heigh	nt:	Γ '	Fill Heigh	nt:	Γ	Fill Heigh	lt:
300 1.6 375 1.6 450 (2.0 525 (2.0 600 (2.0 750 (2.77 900 (2.77)	mm mm	405 05		eater than exceeding			eater than exceeding			ater than exceeding			eater thar			ater than exceeding	
375 1.6 450 (2.0 525 (2.0 600 (2.0 750 (2.77 900 (2.77	63	125 x 25 mm	68 x 13 mm	75 x 25 mm	i 125 x 25 mm	5 68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 x 25 mm	68 x 13 mm	75 x 25 mm	125 r
450 (2.0 525 (2.0 600 (2.0 750 (2.77 900 (2.77)	.00	Γ'	1.63	ſ'		1.63	ſ '	I '	1.63	<u>ا ا</u>	<u>ا ا</u>	1.63	['		1.63		, i
525 (2.0 600 (2.0 750 (2.77 900 (2.77)	1.63	'	1.63	1 '	1	1.63	1 '	1 '	1.63	1 1	1 1	1.63			1.63		, 1
600 (2.0 750 (2.77 900 (2.77	2.01)	<u> '</u>	1.63	<u> </u>	<u> </u>	1.63	<u> </u>	L'	1.63	<u> </u>	L'	1.63			(2.01)		، ــــــــــــــــــــــــــــــــــــ
750 (2.77 900 (2.77	2.01)	Γ'	1.63	ſ '		1.63	ſ '	'	1.63	· ا	ı '	(2.01)	<u> </u>		(2.01)		, i
900 (2.77	2.01)	'	1.63	1 '	1	1.63	1 '	1 '	1.63	1 1	1 1	(2.01)			(2.01)		, 1
```	.77E)	<u>       '</u>	1.63	<u> </u>	<u> </u>	1.63	<u>                                     </u>	<u> </u>	(2.01)	<u> </u>	<u> </u>	(2.01)			(2.77)		' ــــــــــــــــــــــــــــــــــــ
1050 2.0	.77E)	Γ'	1.63	ſ '		(2.01)	Γ'	ſ '	(2.01)	Ē !	ī !	(2.77)	[ '		2.77		- , 1
1050 2.0	2.01	'	1.63	1 '	1	(2.01)	1 '	1 '	(2.01)	1 1	1 1	(2.77)			(2.77E)		, 1
1200 2.7	2.77 (2.77)	2.77	(2.77)	2.01	2.01	(2.77)	2.01	(2.77)	2.77	(2.77)	2.77	(3.51)	(2.77)	2.77	(3.51E)	2.77	2
1350 2.7	2.77 (2.77)	2.77	(2.77)	2.01	2.01	2.77	(2.77)	2.77	2.77	(2.77)	2.77	(3.51)	2.77	2.77	(3.51E)	2.77	(3
1500 2.7	2.77 2.77	2.77	2.77	2.01	(2.77)	2.77	(2.77)	2.77	2.77	(2.77)	2.77	(3.51)	2.77	2.77	(3.51E)	(3.51)	(3
1650 (3.5	3.51) 2.77	2.77	2.77	2.01	(2.77)	2.77	(2.77)	2.77	2.77	2.77	2.77	(3.51)	2.77	(3.51)	(3.51E)	3.51	3
1800 3.5	3.51 2.77	(3.51)	3.51	(2.77)	(2.77)	3.51	(2.77)	2.77	3.51	2.77	2.77	3.51	(3.51)	(3.51)	(4.27E)	(3.51E)	3.
1950 4.2	4.27 2.77	(3.51)	4.27	(2.77)	2.77	4.27	2.77	2.77	4.27	2.77	(3.51)	4.27	(3.51)	(3.51)	H 4.27E	(3.51E)	3.
2100 4.2	4.27 (3.51)	(3.51)	4.27	(2.77)	2.77	4.27	2.77	2.77	4.27	2.77	(3.51)	4.27	(3.51)	3.51	H 4.27E	(3.51E)	3.
2250	(3.51)	(3.51)	1 '	(2.77)	2.77	'	2.77	2.77	1 '	(3.51)	(3.51)	1 '	(3.51)	3.51		3.51E	(4.
2400	(3.51)	(3.51)	1 '	(2.77)	2.77	'	2.77	2.77	1 '	(3.51)	(3.51)	1 '	(3.51)	3.51		(4.27E)	(4.:
2550	2.77Z	2.77Z	1 '	(2.77)	2.77	'	2.77	(3.51)	1 '	(3.51)	(3.51)	1 '	(3.51)	3.51		(4.27E)	(4.
2700	2.77Z	(3.51Z)	<b>↓</b> '	2.77	2.77	<b></b> '	2.77	(3.51)	<b> </b> '	(3.51)	3.51	<b> '</b>	3.51	(4.27)	<b> </b>	(4.27E)	(4.
2850	2.77Z	(3.51Z)	1 '	2.77	2.77	'	2.77	(3.51)	1 '	(3.51)	3.51	1 '	(4.27)	(4.27)		(4.27E)	4.
3000	2.77Z	(3.51Z)	1 '	2.77	2.77	'	(3.51)	(3.51)	1 '	(3.51)	3.51	1 '	(4.27)	(4.27)		H 3.51E	
3150	3.51Z	3.51Z	<b>↓</b> '	3.51	3.51	<b></b> '	3.51	3.51	<b> </b> '	3.51	(4.27)	<b>↓</b> '	(4.27)	(4.27)		H 3.51E	
3300	3.51Z	3.51Z	1 '	3.51	3.51	'	3.51	3.51	1 '	(4.27)	(4.27)	1 '	4.27	4.27		H 3.51E	
3450	3.51Z	3.51Z	1 '	3.51	3.51	'	3.51	3.51	1 '	(4.27)	(4.27)	1 '	` '	H 4.27E		H 4.27E	
3600 Notes:	4.27Z	4.27Z	1 '	4.27	4.27		4.27	4.27	1 '	4.27	4.27	1 '	114075	H 4.27E			H4

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)

Ζ 450 mm Minimum Fill

	FOR 1	THE RESPI	ECTIVE DIAN		Ble IC: Thici Pipe and fil						2" AND 3"x1"	CORRUG
E	Туре	e 1	Туре	e 2	Туре	e 3	Туре	e 4	Тур	e 5	Ту	pe 6
amet	Fill Hei	ight:	Fill Hei	ight:	Fill Hei	ight:	Fill Hei	ight:	Fill He	eight:	Fill H	leight:
Nominal Diameter in.	3' and 1' min. c		Greater t not exceed		Greater th not exceed		Greater th not exceed		Greater t not excee			r than 25' eding 30'
Non	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"
12	(0.075)	, <u> </u>	0.060		0.060	,,	0.060		0.060		0.060	
15	(0.075)	!	0.060	1 '	0.060	1 '	0.060		0.060		0.060	
18	(0.075)	<u>اا</u>	0.060	۱ <u> </u>	0.060	۱ <u> </u>	0.060	'	0.060		(0.075)	'
21	H 0.060E	<u>ا</u>	0.060	· · · · ·	0.060	· · · · ·	0.060		(0.075)		H 0.060	
24	(0.105E)	1 1	0.060	1 '	0.060	1 '	(0.075)		(0.105)		(0.105)	
30	H 0.075E	H 0.060	0.075	H 0.060	0.075	H 0.060	(0.105)	H 0.060	(0.105)	H 0.060	H 0.075E	H 0.060
36	(0.135E)	H 0.060E	0.075	H 0.060	(0.105)	H 0.060	(0.105)	H 0.060	(0.135)	H 0.060	H 0.075E	H 0.060
42	0.105E	(0.075)	0.105	0.060	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105E	0.105
48	0.105E	(0.075)	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105	(0.105)	0.105E	(0.105E)
54	0.105E	(0.105)	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105	(0.105)	0.105E	(0.105E)
60	0.135E	(0.105)	0.135	0.060	0.135	(0.075)	0.135	(0.105)	0.135	(0.105)	0.135E	(0.135E)
66	0.164E	(0.105)	0.164	0.060	0.164	(0.075)	0.164	(0.105)	0.164	(0.135)	0.164E	(0.135E)
72	0.164E	(0.105)	0.164	0.060	0.164	(0.075)	0.164	(0.105)	0.164	(0.135)	H 0.164E	(0.135E)
78	1 '	(0.135)	1	0.075	1 '	(0.105)	1	(0.105)		(0.135)		(0.135E)
84	<u> </u>	(0.135)	<u> </u>	0.105	<u> </u>	0.105	<u> </u>	(0.135)		(0.135)		(0.164E)
90	ſ '	(0.135)	ſ	0.105	ſ '	0.105	ſ	(0.135)	Γ	(0.135)		(0.164E)
96	1 '	(0.135)	1	0.105	1 '	0.105	1	(0.135)		(0.135)		(0.164E)
102	1 '	0.135Z	1	0.135	1 '	0.135	1	0.135		(0.164)		(0.164E)
108	<b></b> '	0.135Z	<u> </u>	0.135	<u> </u> '	0.135	<b></b> '	0.135	<b>_</b>	(0.164)		(0.164E)
114	1 '	0.164Z	1	0.164	1 '	0.164	1	0.164		0.164		H 0.164E
120 Notes:	<u>                                     </u>	0.164Z	<u> </u>	0.164	<u> '</u>	0.164		0.164		0.164		H 0.164E

Notes: Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical

seam fabrication is utilized. A thickness preceded by an "H" indicates only helical seam fabrication is allowed. E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1'-6" Z 1"-6" Minimum fill

			FOR THE	RESPECT	E IC: THICK IVE DIAME DR 68 mm x	TER OF PI	PE AND FI	LL HEIGH	TS OVER TH	HE TOP OF	THE PIPE	Ξ	
ir	Тур	e 1	Тур	e 2	Тур	e 3	Тур	e 4	Тур	e 5	Тур	e 6	Туре
nete	Fill H	eight:	Fill H	eight:	Fill He	eight:	Fill H	eight:	Fill He	eight:	Fill He	eight:	Fill Heig
Nominal Diameter mm	1 m ar 0.3 m m		Greater not excee		Greater t not exceed			nan 4.5 m eding 6 m	Greater t		Greater th not excee		Greater than not exceedin
Nom	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm
300	(1.91)		1.52		1.52		1.52		1.52		1.52		1.52
375	(1.91)		1.52		1.52		1.52		1.52		1.52		(1.91)
450	(1.91)		1.52		1.52		1.52		1.52		(1.91)		H 1.52
525	H 1.52E		1.52		1.52		1.52		(1.91)		H 1.52		H 1.52E
600	(2.67E)		1.52		1.52		(1.91)		(2.67)		(2.67)		(2.67E)
750	H 1.91E	H 1.52	1.91	H 1.52	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	H 1.91E	H 1.52	H 1.91E
900	(3.43E)	H 1.52E	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	(3.43)	H 1.52	H 1.91E	H 1.52	H 1.91E
1050	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67E	2.67	2.67E
1200	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67	(2.67)	2.67E	(2.67E)	2.67E
1350	2.67E	(2.67)	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67	(2.67)	2.67E	(2.67E)	(3.43E)
1500	3.43E	(2.67)	3.43	1.52	3.43	(1.91)	3.43	(2.67)	3.43	(2.67)	3.43E	(3.43E)	(4.17E)
1650	4.17E	(2.67)	4.17	1.52	4.17	(1.91)	4.17	(2.67)	4.17	(3.43)	4.17E	(3.43E)	H 4.17E
1800	4.17E	(2.67)	4.17	1.52	4.17	(1.91)	4.17	(2.67)	4.17	(3.43)	H 4.17E	(3.43E)	H 4.17E
1950		(3.43)		1.91		(2.67)		(2.67)		(3.43)		(3.43E)	
2100		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)	
2250		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)	
2400		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)	
2550		3.43Z		3.43		3.43		3.43		(4.17)		(4.17E)	
2700		3.43Z	-	3.43		3.43	-	3.43		(4.17)		(4.17E)	┨────┤
2850 3000		4.17Z 4.17Z		4.17 4.17		4.17 4.17		4.17 4.17		4.17 4.17		H 4.17E H 4.17E	
Notes:		4.17Z		4.17		4.17		4.17		4.17		H 4.17E	

Notes:

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

A thickness preceded by an "H" indicates only helical seam fabrication is allowed. E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 450 mm. Z 450 mm M

450 mm Minimum fill

				Т			KNESS FO												IES
	Corru	nated	Corru	nated						Type 1				-	Type 2				
pun	Stee	el &	Stee	el &	Corru Ste	eel	Min.		F	ill Height	:			Fil	I Height:				
Equivalent Round Size in.	Pipe 2 2/3"	Arch	Pipe 3" x	Arch	Pipe 5" >		Cover		3	and less	6		Grea	iter than	3' not exe	ceeding	10'	Gre	eater tha
quiv	Span	Rise	Span	Rise	Span	Rise	Steel &		Steel		Alum	ninum		Steel		Alum	inum		Steel
Ш	(in.)*	(in.)	(in.)	(in.)	(in.)	(in.)	Aluminum	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	2 2/3" x 1/2"	3"x1"
15	17	13					1'-6"	0.064			0.060		0.064			0.060		0.064	
18	21	15					1'-6"	0.064			0.060		0.064			0.060		0.064	
21	24	18					1'-6"	0.064			(0.075)		0.064			0.060		0.064	
24	28	20					1'-6"	(0.079)			(0.105)		0.064			0.075		0.064	
30	35	24					1'-6"	(0.079)			(0.105)		0.064			0.075		(0.079)	
36	42	29					1'-6"	(0.079)			0.105		0.064			0.105		0.064	
42	49	33					1'-6"	0.109			0.105		(0.109)			0.105		(0.109)	
48	57	38	53	41	53	41	1'-6"	0.109	(0.109)	(0.109)	0.135	0.060	0.109	0.079	0.079	0.135	0.060	0.109	0.079
54	64	43	60	46	60	46	1'-6"	0.109	(0.109)	0.109	0.164	(0.075)	0.109	0.079	0.079	0.164	0.060	0.109	(0.109
60	71	47	66	51	66	51	1'-6"	0.138	(0.109)	0.109	0.164	(0.075)	0.138	0.079	(0.109)	0.164	0.060	0.138	(0.109
66	77	52	73	55	73	55	1'-6"	0.168	(0.109)	0.109		0.075	0.168	0.079	(0.109)		0.075	0.168	(0.109
72	83	57	81	59	81	59	1'-6"	0.168	(0.109)	0.109		0.105	0.168	0.079	(0.109)		0.105	0.168	(0.109
78			87	63	87	63	1'-6"		0.109	0.109		0.105		(0.109)	0.109		0.105		0.109
84			95	67	95	67	1'-6"		0.109	0.109		0.105		(0.109)	0.109		0.105		0.109
90			103	71	103	71	1'-6"		0.109	0.109		0.135		(0.109)	0.109		0.135		0.109
96			112	75	112	75	1'-6"		0.109	(0.138)		0.164		0.109	0.109		0.164		0.109
102			117	79	117	79	1'-6"		0.109	(0.138)		0.164		0.109	0.109		0.164		0.109
108			128	83	128	83	1'-6"		0.138	0.138				0.138	0.138				0.138
114			137	87	137	87	1'-6"		0.138	0.138				0.138	0.138				0.138
120			142	91	142	91	1'-6"		0.168	0.168				0.168	0.168				0.168

Notes: * Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 42" according to Article 1006.01. Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication

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.

This minimum bearing capacity will be determined by the Engineer in the field.

				Т			KNESS FO				ND SIZE (								ES	
	-		-							Type 1					Type 2					Туре
Equivalent Round Size (mm)	Corrug Ste & Alum Pipe 68 x 13	el ninum Arch	Corrug Ste & Alun Pipe 75 x 2	eel ninum Arch	Corru Ste Pipe 125 x 2	el	Min. Cover			Fill Heigh m and le			Grea		fill Heigh 1 m not e	t: exceeding	g 3 m	Grea	ter than 3	Fill He 3 m nc
uival	Span	Rise	Span	Rise	Span	Rise	Steel &		Steel		Alum	inum		Steel		Alum	ninum		Steel	
Eq	(mm)*	(mm)		(mm)	(mm)			68 x 13				75 x 25	68 x 13			68 x 13		68 x 13		125 >
								mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mr
375	430	330					0.5 m	1.63			1.52		1.63			1.52		1.63		
450	530	380					0.5 m	1.63			1.52		1.63			1.52		1.63		
525	610	460					0.5 m	1.63			(1.91)		1.63			1.52		1.63		
600	710	510					0.5 m	(2.01)			(2.67)		1.63			1.91		1.63		
750	870	630					0.5 m	(2.01)			(2.67)		1.63			1.91		(2.01)		
900	1060	740					0.5 m	(2.01)			2.67		1.63			2.67		1.63		
	1240	840					0.5 m	2.77	()	(	2.67		(2.77)			2.67		(2.77)		
	1440	970	1340	1050	1340	1050	0.5 m	2.77	(2.77)	(2.77)	3.43	1.52	2.77	2.01	2.01	3.43	1.52	2.77	2.01	(2.7
-	1620	1100	1520	1170	1520	1170	0.5 m	2.77	(2.77)	2.77	4.17	(1.91)	2.77	2.01	2.01	4.17	1.52	2.77	(2.77)	2.7
	1800	1200	1670	1300	1670	1300	0.5 m	3.51	(2.77)	2.77	4.17	(1.91)	3.51	2.01	(2.77)	4.17	1.52	3.51	(2.77)	2.7
	1950	1320	1850	1400	1850	1400	0.5 m	4.27	(2.77)	2.77		1.91	4.27	2.01	(2.77)		1.91	4.27	(2.77)	2.7
1950	2100	1450	2050 2200	1500 1620	2050 2200	1500 1620	0.5 m	4.27	(2.77)	2.77 2.77		2.67 2.67	4.27	2.01	(2.77)		2.67 2.67	4.27	(2.77)	2.7 2.7
1950 2100			2200 2400	1620	2200 2400	1620	0.5 m 0.5 m		2.77	2.77		2.67		(2.77) (2.77)	2.77		2.67		2.77	2.7
2100			2400 2600	1820	2400 2600	1820	0.5 m 0.5 m		2.77	2.77		3.43		(2.77)	2.77		3.43		2.77	2.7
2250			2840	1920	2840	1920	0.5 m		2.77	(3.51)		4.17		2.77	2.77		4.17		2.77	(3.5
2400 2550			2840 2970	2020	2840 2970	2020	0.5 m 0.5 m		2.77	(3.51)		4.17		2.77	2.77		4.17		2.77	(3.5
2550			2970 3240	2020	2970 3240	2020	0.5 m		3.51	3.51		4.17		3.51	3.51		4.17		3.51	3.5
2850			3470	2120	3470	2120	0.5 m		3.51	3.51				3.51	3.51				3.51	3.5
3000			3600	2320	3600	2320	0.5 m		4.27	4.27				4.27	4.27				4.27	4.2
Note			5000	2020	5000	2020	0.0 111		7.21	7.21				7.21	7.21				7.21	Z

Notes:

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to Article 1006.01.

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

The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 290 kN per square meter.

The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 192 kN per square meter.

This minimum bearing capacity will be determined by the Engineer in the field.

					CONCRETE ELLI ROUND SIZE O	-	-		-	-
	Reinf	orcod				Тур	be 1	Тур	be 2	
Equivalent Round Size (in.)	Cond	crete al pipe	-	orced crete pe (in.)	Minimum Cover		eight: nd less	Greater t	eight: han 3' not ling 10'	Grea e
	Span	Rise	Span	Rise	RCCP HE & A	HE	Arch	HE	Arch	H
15	23	14	18	11	1' -0"	HE-III	A-III	HE-III	A-III	HE
18	23	23 14 18			1' -0"	HE-III	A-III	HE-III	A-III	HE
21	30	23         14         2           30         19         2		15 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE
24	30	19	28 1/2	18	1' -0"	HE-III	A-III	HE-III	A-III	HE
27	34	22	36 1/4	22 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE
30	38	24	36 1/4	22 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE
36	45	29	43 3/4	26 5/8	1' -0"	HE-II	A-II	HE-III	A-III	HE
42	53	34	51 1/8	31 5/16	1' -0"	HE-I	A-II	HE-III	A-III	HE
48	60	38	58 1/2	36	1' -0"	HE-I	A-II	HE-III	A-III	146
54	68	43	65	40	1' -0"	HE-I	A-II	HE-III	A-III	146
60	76	48	73	45	1' -0"	HE-I	A-II	HE-III	A-III	146
66	83	53	88	54	1' -0"	HE-I	A-II	HE-III	A-III	14
72	91	58	88	54	1' -0"	HE-I	A-II	HE-III	A-III	14

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

	Т				D CONCRETE ELL NT ROUND SIZE O (Met	F PIPE AND				
						Тур	be 1	Тур	e 2	
Equivalent Round Size (mm)	Cor	nforced ncrete pipe (mm)	Con	orced crete pe (mm)	Minimum Cover		eight: nd less	Fill He Greater tha exceedi	an 1 m not	F Greate exce
	Span	Rise	Span	Rise	RCCP HE & A	HE	Arch	HE	Arch	HE
375	584	356	457	279	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV
450	584	356	559	343	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV
525	762	483	660	394	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV
600	762	483	724	457	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV
686	864	559	921	572	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV
750	965	610	921	572	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV
900	1143	737	1111	676	0.3 m	HE-II	A-II	HE-III	A-III	HE-IV
1050	1346	864	1299	795	0.3 m	HE-I	A-II	HE-III	A-III	HE-IV
1200	1524	965	1486	914	0.3 m	HE-I	A-II	HE-III	A-III	70
1350	1727	1092	1651	1016	0.3 m	HE-I	A-II	HE-III	A-III	70
1500	1930	1219	1854	1143	0.3 m	HE-I	A-II	HE-III	A-III	70
1676	2108	1346	2235	1372	0.3 m	HE-I	A-II	HE-III	A-III	70
1800	2311	1473	2235	1372	0.3 m	HE-I	A-II	HE-III	A-III	70

Notes:

Т

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

					FOR A	GIVEN	TAB PIPE DIAN				E PERMIT HT OVER		OP OF TI	HE PIPE			
Nominal Diameter		Fill Heig w	Type 1 jht: 3'a /ith 1'm		,		Fill Height:	Type 2 Greate xceedin		3',	F	ill Height: not e	Type 3 Greate exceeding		,		Tyr eight: Gi not exce
(in.)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC
10	X	X	X	X	NA	X	X	X	X	NA	X	X	X	X	NA	X	X
12	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X
15	X	X	NA	X	X	X	X	NA	X	X	X	X	NA	NA	X	X	X
18	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X
21	X	X	NA	NA	NA	X	X	NA	NA	NA	X	X	NA	NA	NA	X	X
24	X	X	X	X	X	X	X	X	X	X	X	X	NA	NA	NA	X	X
30	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	X	X	X
36	X	X	X	X	X	X	X	X	X	X	X	X	X	NA	NA	X	X
42	X	NA	X	X	NA	X	NA	X	NA	NA	X	NA	X	NA	NA	X	NA
48	X	NA	X	X	X	X	NA	X	NA	NA	X	NA	X	NA	NA	X	NA

Notes:

PVCPolyvinyl Chloride (PVC) pipe with a smooth interiorCPVCCorrugated Polyvinyl Chloride (CPVC) pipe with a smooth interiorPEPolyethylene (PE) pipe with a smooth interiorCPECorrugated Polyethylene (PE) pipe with a smooth interiorCPPCorrugated Polypropylene (CPP) pipe with a smooth interiorXThis material may be used for the given pipe diameter and fill heightNANot Available

NA Not Available

1																	
											PERMIT						
					FOR A	GIVEN	PIPE DIA	METER			11 OVER	THE TO	POFI	HE PIPE			
									(IVI6	etric)							
Nominal Diameter	Туре 1					Type 2				Туре 3							
	Fill Height: 1 m and less,					Fill Height: Greater than 1 m,				Fill Height: Greater than 3 m,				Fill Height:			
	with 0.3 m min. cover				not exceeding 3 m				not exceeding 4.5 m				m, not e				
(mm)								l									
(1111)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CP\
250	Х	Х	Х	Х	NA	Х	Х	Х	Х	NA	Х	Х	Х	Х	NA	Х	X
300	Х	Х	х	х	Х	Х	Х	Х	х	Х	х	Х	Х	NA	Х	Х	X
375	Х	Х	NA	Х	Х	Х	Х	NA	Х	Х	Х	Х	NA	NA	Х	Х	X
450	х	х	Х	х	Х	Х	Х	х	х	х	х	х	х	NA	х	х	X
525	Х	х	NA	NA	NA	х	х	NA	NA	NA	х	х	NA	NA	NA	х	X
600	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	NA	NA	NA	Х	Х
750	х	х	Х	х	Х	Х	Х	х	х	х	х	х	х	NA	х	х	X
900	Х	Х	х	х	х	Х	х	х	х	Х	х	х	х	NA	NA	Х	Х
1000	Х	NA	Х	Х	NA	Х	NA	Х	NA	NA	Х	NA	Х	NA	NA	Х	NA
1200	х	NA	х	х	Х	Х	NA	Х	NA	NA	Х	NA	х	NA	NA	х	NA
Notes:													•				•

 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 Polyethylene (CPP) 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

 Not
 Available

TABLE IIIB: PLASTIC PIPE PERMITTED												
		FOR A GIVEN PIPE D	IAMETER AND	FILL HEIGHT	OVER THE TOP OF	THE PIPE						
	Туре	5		Туре 6	Туре 7							
Fill Height:	Greater than	20', not exceeding 25'	Fill Height: G	reater than 25	Fill Height: Greater than 30', n							
PVC	CPVC		PVC	CPVC		CPVC						
Х	Х		Х	Х		Х						
Х	Х		Х	Х		Х						
Х	Х		Х	Х		Х						
Х	Х		Х	Х		Х						
Х	Х		Х	Х		Х						
Х	Х		Х	Х		Х						
Х	Х		Х	Х		Х						
Х	Х		Х	Х		Х						
Х	NA		Х	NA		NA						
Х	NA		Х	NA		NA						
	PVC X X X X X X X X X X X X X	Fill Height:       Greater than         PVC       CPVC         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       X         X       NA	FOR A GIVEN PIPE D       Type 5       Fill Height:     Greater than 20', not exceeding 25'       PVC     CPVC       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     X       X     NA	FOR A GIVEN PIPE DIAMETER AND       Type 5       Fill Height: Greater than 20', not exceeding 25'     Fill Height: G       PVC     CPVC     PVC       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X       X     X     X	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHTType 5Type 6Fill Height: Greater than 20', not exceeding 25'Fill Height: Greater than 25PVCCPVCPVCCPVCXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXNAXNA	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF         Type 5       Type 6         Fill Height: Greater than 20', not exceeding 25'       Fill Height: Greater than 25', not exceeding 30'         PVC       CPVC       PVC       CPVC         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X       X         X       X       X <td>FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE         Type 5       Type 6         Fill Height: Greater than 20', not exceeding 25'       Fill Height: Greater than 25', not exceeding 30'       CPVC         VC       CPVC       CPVC       CPVC       CPVC       CPVC         X       X       X       X       X       X       X         X       X       X       X       X       X       X         X       X       X       X       X       X       X         X       X       X       X       X       X       X         X       X       X       X       X       X       X       X</td>	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE         Type 5       Type 6         Fill Height: Greater than 20', not exceeding 25'       Fill Height: Greater than 25', not exceeding 30'       CPVC         VC       CPVC       CPVC       CPVC       CPVC       CPVC         X       X       X       X       X       X       X         X       X       X       X       X       X       X         X       X       X       X       X       X       X         X       X       X       X       X       X       X         X       X       X       X       X       X       X       X					

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

			FOR A GIVEN PIPE	Table IIIB: Pi Diameter An		PERMITTED HT OVER THE TOP OF	THE PIPE	
Nominal Diameter (mm)		Type 5	5		Туре 6	Туре		
	Fill Height: Gr	reater than 6 m	n, not exceeding 7.5 m	Fill Height: Gr	eater than 7.5	Fill Height: Greater than 9 m		
	PVC	CPVC		PVC	CPVC		CPVC	
250	Х	Х		Х	Х		Х	
300	Х	Х		Х	Х		Х	
375	Х	Х		Х	Х		Х	
450	Х	Х		Х	Х		Х	
525	Х	Х		Х	Х		Х	
600	Х	Х		Х	Х		Х	
750	Х	Х		Х	Х		Х	
900	Х	Х		Х	Х		Х	
1000	Х	NA		Х	NA		NA	
1200	Х	NA		Х	NA		NA	
Notes:								

Notes: PVC CPVC PE X NA

Polyvinyl Chloride (PVC) pipe with a smooth interior Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior Polyethylene (PE) pipe with a smooth interior This material may be used for the given pipe diameter and fill height 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."

### LRFD STORM SEWER BURIAL TABLES (BDE)

Effective: November 1, 2013

Revised: April 1, 2015

Revise Article 550.02 of the Standard Specifications to read as follows:

"Item Article Section
(a) Clay Sewer Pipe
(b) Extra Strength Clay Pipe
(c) Concrete Sewer, Storm Drain, and Culvert Pipe1042
(d) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
(e) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe (Note 1) 1042
(f) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe (Note 1)
(g) Polyvinyl Chloride (PVC) Pipe1040.03
(h) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
(i) Corrugated Polypropylene (CPP) Pipe with Smooth Interior
(j) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe
(k) Mastic Joint Sealer for Pipe1055
(I) External Sealing Band
(m) Fine Aggregate (Note 2)
(n) Coarse Aggregate (Note 3)
(o) Reinforcement Bars and Welded Wire Fabric
(p) Handling Hole Plugs
(q) Polyethylene (PE) Pipe with a Smooth Interior
(r) Corrugated Polyethylene (PE) Pipe with a Smooth Interior

Note 1. The class of elliptical and arch pipe used for various storm sewer sizes and heights of fill shall conform to the requirements for circular pipe.

Note 2. The fine aggregate shall be moist.

Note 3. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 550.03 of the Standard Specifications as follows:

"Class	Materials							
Α	Rigid Pipes:							
	Clay Sewer Pipe							
	Extra Strength Clay Pipe							
	Concrete Sewer, Storm Drain, and Culvert Pipe							
	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							
В	Rigid Pipes:							
	Clay Sewer Pipe							
	Extra Strength Clay Pipe							
	Concrete Sewer, Storm Drain, and Culvert Pipe							
	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:							
	Polyvinyl Chloride (PVC) Pipe							
	Corrugated Polyvinyl Chloride Pipe (PVC) with a Smooth Interior							
	Polyethylene (PE) Pipe with a Smooth Interior							
	Corrugated Polyethylene (PE) Pipe with a Smooth Interior							
	Corrugated Polypropylene (CPP) Pipe with a Smooth Interior"							

Replace the storm sewers tables in Article 550.03 of the Standard Specifications with the following:

			FOR				PERMIT		STRENG		JIRED DP OF THE	E PIPE		
				Туре	e 1							Туре	2	
Nominal Diameter in.					3' and less num cover							leight: Gre	eater than ding 10'	3'
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE
10	NA	3	Х	Х	Х	Х	Х	NA	NA	1	*Х	Х	Х	Х
12	IV	NA	Х	Х	Х	Х	Х	Х	Ш	1	*Х	Х	Х	Х
15	IV	NA	NA	Х	Х	NA	Х	Х	II	1	*Х	Х	Х	N/
18	IV	NA	NA	Х	Х	Х	Х	Х		2	Х	Х	Х	Х
21	111	NA	NA	Х	Х	NA	NA	NA	II	2	Х	Х	Х	N/
24	111	NA	NA	Х	Х	Х	Х	Х	II	2	Х	Х	Х	Х
27		NA	NA	NA	NA	NA	NA	NA		3	Х	NA	NA	N/
30	IV	NA	NA	Х	Х	Х	Х	Х	II	3	Х	Х	Х	Х
33		NA	NA	NA	NA	NA	NA	NA		NA	Х	NA	NA	N/
36	111	NA	NA	Х	Х	Х	Х	Х	II	NA	Х	Х	Х	Х
42	II	NA	Х	Х	NA	Х	Х	NA	II	NA	Х	Х	NA	Х
48	11	NA	Х	Х	NA	Х	Х	Х		NA	Х	Х	NA	Х
54	II	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA
60	П	NA	NA	NA	NA	NA	NA	Х	II	NA	NA	NA	NA	NA
66	11	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA
72	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA
78	П	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA
84		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	N
90		NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	N/
96		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	N/
102	П	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	N/
108	11	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	N/

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe RCCP

CSP Concrete Sewer, Storm drain, and Culvert Pipe

PVC

Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe CPVC

ESCP

Extra Strength Clay Pipe Polyethylene Pipe with a Smooth Interior ΡE

Corrugated Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene pipe with a Smooth Interior CPE

CPP

This material may be used for the given pipe diameter and fill height. Х

NA This material is Not Acceptable for the given pipe diameter and fill height.

May also use Standard Strength Clay Pipe

	STORM SEWERS (Metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE													
				Туре	e 1			· · · · ·	Type 2					
Nominal Diameter in.					m and less ninimum co				Fill Height: Greater than 1 m not exceeding 3 m					
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE
250	NA	3	Х	Х	Х	Х	Х	NA	NA	1	*Х	Х	Х	Х
300	IV	NA	Х	Х	Х	Х	Х	Х	11	1	*Х	Х	Х	Х
375	IV	NA	NA	Х	Х	NA	Х	Х	11	1	*Х	Х	Х	NA
450	IV	NA	NA	Х	Х	Х	Х	Х	II	2	Х	Х	Х	Х
525	III	NA	NA	Х	Х	NA	NA	NA	11	2	Х	Х	Х	NA
600		NA	NA	Х	Х	Х	Х	Х	11	2	Х	Х	Х	Х
675		NA	NA	NA	NA	NA	NA	NA		3	Х	NA	NA	NA
750	IV	NA	NA	Х	Х	Х	Х	Х	11	3	Х	Х	Х	Х
825	111	NA	NA	NA	NA	NA	NA	NA	11	NA	Х	NA	NA	NA
900		NA	NA	Х	Х	Х	Х	Х		NA	Х	Х	Х	Х
1050	П	NA	Х	Х	NA	Х	Х	NA	11	NA	Х	Х	NA	Х
1200	П	NA	Х	Х	NA	Х	Х	Х	11	NA	Х	Х	NA	Х
1350		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
1500	11	NA	NA	NA	NA	NA	NA	Х	11	NA	NA	NA	NA	NA
1650	П	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA
1800		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
1950	11	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA
2100	П	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA
2250		NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
2400	П	NA	NA	NA	NA	NA	NA	NA	111	NA	NA	NA	NA	NA
2550	П	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA
2700	П	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

RCCP CSP PVC Concrete Sewer, Storm drain, and Culvert Pipe

Polyvinyl Chloride Pipe

CPVC

ESCP

ΡE

CPE

CPP

Х

Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe Extra Strength Clay Pipe Polyethylene Pipe with a Smooth Interior Corrugated Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene pipe with a Smooth Interior This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. May also use Standard Strength Clay Pipe NA

						IAL PER		AND ST	RENGTH F					
	i		FOR A G			TERS AN	ND FILL H	IEIGHTS	OVER TH	IE TOP O	F THE PIF			
				Туре	3							Type 4		
Nominal Diameter in.				ght: Gre	ater than 1 ding 15'	10'			Fill Height: Greater than 15' not exceeding 20'					
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE
10	NA	2	Х	Х	Х	Х	Х	NA	NA	3	Х	Х	Х	Х
12	111	2	Х	Х	Х	Х	NA	Х	IV	NA	NA	Х	Х	X
15	111	3	Х	Х	Х	NA	NA	Х	IV	NA	NA	Х	Х	NA
18		NA	Х	Х	Х	Х	NA	Х	IV	NA	NA	Х	Х	Х
21	111	NA	NA	Х	Х	NA	NA	NA	IV	NA	NA	Х	Х	NA
24	111	NA	NA	Х	Х	Х	NA	NA	IV	NA	NA	Х	Х	Х
27		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA
30	111	NA	NA	Х	Х	Х	NA	Х	IV	NA	NA	Х	Х	Х
33	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA
36		NA	NA	Х	Х	Х	NA	NA	IV	NA	NA	Х	Х	Х
42	111	NA	NA	Х	NA	Х	NA	NA	IV	NA	NA	Х	NA	Х
48	111	NA	NA	Х	NA	Х	NA	NA	IV	NA	NA	Х	NA	Х
54		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA
60	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA
66	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA
72	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA
78	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA
84	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA
90	111	NA	NA	NA	NA	NA	NA	NA	1680	NA	NA	NA	NA	NA
96	111	NA	NA	NA	NA	NA	NA	NA	1690	NA	NA	NA	NA	NA
102	111	NA	NA	NA	NA	NA	NA	NA	1700	NA	NA	NA	NA	NA
108	1360	NA	NA	NA	NA	NA	NA	NA	1710	NA	NA	NA	NA	NA

RCCP CSP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

Concrete Sewer, Storm drain, and Culvert Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

Extra Strength Clay Pipe ESCP

ΡE

Polyethylene Pipe with a Smooth Interior Corrugated Polyethylene Pipe with a Smooth Interior CPE

CPP

Х

Corrugated Polypropylene pipe with a Smooth linterior This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. NA

May also use Standard Strength Clay Pipe

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This Note number represents the D-load to produce a 0.01 in crack.

								0 (m + tri -	<u>,                                    </u>	STORM SEWERS (metric)										
														I						
												-		I						
	FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE																			
'	1			Туре 3	3			'	1			Type 4		'						
Nominal			Fill He ⁱ	iaht: Gree	ater than 3 r	m		,		F	-ill Height:	Greater	than 4.5 m	ر <u> </u>						
Diameter	1			ot exceedin				P	1		0	exceeding		ļ						
in.					т		<b>2DE</b>					Ŭ	í I							
'	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE						
250	NA	2	Х	Х	Х	Х	Х	NA	NA	3	Х	Х	Х	Х						
300	111	2	Х	Х	Х	Х	NA	Х	IV	NA	NA	Х	Х	Х						
375	III	3	Х	Х	Х	NA	NA	Х	IV	NA	NA	Х	Х	NA						
450		NA	Х	Х	Х	Х	NA	Х	IV	NA	NA	Х	Х	Х						
525	111	NA	NA	Х	Х	NA	NA	NA	IV	NA	NA	Х	Х	NA						
600	III	NA	NA	Х	Х	Х	NA	NA	IV	NA	NA	Х	Х	Х						
675		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA						
750	III	NA	NA	Х	Х	Х	NA	Х	IV	NA	NA	Х	Х	Х						
825	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA						
900		NA	NA	Х	Х	Х	NA	NA	IV	NA	NA	Х	Х	Х						
1050	III	NA	NA	Х	NA	Х	NA	NA	IV	NA	NA	Х	NA	Х						
1200	111	NA	NA	Х	NA	Х	NA	NA	IV	NA	NA	Х	NA	Х						
1350		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA						
1500	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA						
1650	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA						
1800		NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA						
1950	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA						
2100	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA						
2250		NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA						
2400	III	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA						
2550	111	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA						
2700	70	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA						
RCCP Reinfo	orced Concre	ete Culver	ct. Storm D	rain and f	Sewer Pinc	<u></u>														

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe RCCI

CSP Concrete Sewer, Storm drain, and Culvert Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

ΡE Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior

CPP

Corrugated Polypropylene pipe with a Smooth Interior This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. Х

NA

May also use Standard Strength Clay Pipe

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This Note number represents the metric D-load to produce a 25.4 micro-meter crack.

STORM SEWERS         KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED         FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE         Nominal Diameter in.       Type 5       Type 6       Type 7         Fill Height: Greater than 20' not exceeding 25'       Fill Height: Greater than 25' not exceeding 30'       Fill Height: Greater than 3 not exceeding 35'         10       NA       X       NA       X         10       NA       X       NA       X       A         10       NA       X       NA       X       X       NA       X         10       NA       X       X       NA       X       X       NA       X         10       NA       X       V       X       X       NA       X       X       NA       X       X       X       X       X	
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE         Type 5       Type 6       Type 7         Nominal Diameter in.       Fill Height: Greater than 20' not exceeding 25'       Fill Height: Greater than 20' not exceeding 30'       Fill Height: Greater than 30'         RCCP       PVC       CPVC       CPVC         10       NA       X       X       NA       X       CPVC         10       NA       X       X       NA       X       X       NA       X       Set of the ight: Greater than 30'         RCCP       PVC       CPVC       CPVC         10       NA       X       X       X       X       X       X       X       X       X       X       X       X       X       X       X       X       X       X <th co<="" td=""></th>	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
Nominal Diameter in.Fill Height: Greater than 20' not exceeding 25'Fill Height: Greater than 25' not exceeding 30'Fill Height: Greater than 3 not exceeding 35'RCCPPVCCPVCRCCPPVCCPVCRCCP10NAXXNAXXNA12IVXXVXXV15IVXXVXXVX18IVXXVXXVX24IVXXVXXVX	
Diameter in.Init height. Greater than 20 not exceeding 25'Init height. Greater than 23 not exceeding 30'Init height. Greater than 33 not exceeding 35'10NAXXNAXNAX10NAXXNAXNAX12IVXXVXVX15IVXXVXVX18IVXXVXVX21IVXXVXVX24IVXXVXVX	
Init exceeding 23         Init exceeding 30         Init exceeding 30           RCCP         PVC         CPVC         RCCP         PVC         CPVC         RCCP         CPVC         CPVC         CPVC         CPVC         CPVC         CPVC         RCCP         VC         CPVC         RCCP         RCCP	
RCCP         PVC         CPVC         RCCP         PVC         CPVC         RCCP         CPVC           10         NA         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X         X	
10         NA         X         X         NA         X         X         NA         X         X         NA         X         X         V         X         X         V         X         X         V         X         X         V         X         X         V         X         X         V         X         X         V         X         X         V         X         X         Z         Z         Z         Z         Z         Z         Z         Z         Z         Z	
12         IV         X         X         V         X         X         V         X           15         IV         X         X         V         X         X         V         X           18         IV         X         X         V         X         X         V         X           21         IV         X         X         V         X         X         V         X           24         IV         X         X         V         X         X         V         X	
15         IV         X         X         V         X         X         V         X           18         IV         X         X         V         X         X         V         X           21         IV         X         X         V         X         X         V         X           24         IV         X         X         V         X         X         V         X	
18         IV         X         X         V         X         X         V         X           21         IV         X         X         V         X         X         V         X           24         IV         X         X         V         X         X         V         X	
21         IV         X         X         V         X         X         V         X           24         IV         X         X         V         X         X         V         X	
24 IV X X V X X V X	
27 IV NA NA V NA NA V NA	
30 IV X X V X X V X	
33 IV NA NA V NA NA V NA	
36 IV X X V X X V X	
42 IV X NA V X NA V NA	
48 IV X NA V X NA V NA	
54 IV NA NA V NA NA V NA	
60 IV NA NA V NA NA V NA	
66 IV NA NA V NA NA V NA	
72 V NA NA V NA NA V NA	
78 2020 NA NA 2370 NA NA 2730 NA	
84 2020 NA NA 2380 NA NA 2740 NA	
90 2030 NA NA 2390 NA NA 2750 NA	
96 2040 NA NA 2400 NA NA 2750 NA	
102 2050 NA NA 2410 NA NA 2760 NA	
108 2060 NA NA 2410 NA NA 2770 NA	

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

RCCP PVC CPVC Polyvinyl Chloride Pipe

Corrugated Polyvinyl Chloride Pipe Extra Strength Clay Pipe

ESCP

Х

This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. NA

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This Note number represents the D-load to produce a 0.01 in crack.

STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE										
FC	OR A GIVEN		METERS	AND FILL HE		ER THE TO	1			
		Type 5			Type 6		Тур	e 7		
Nominal Diameter in.	Fill Height: Greater than 20' not exceeding 25'			0	t: Greater	Fill Height: Greater than 30' not exceeding 35'				
	RCCP	PVC	CPVC	RCCP	PVC	CPVC	RCCP	CPVC		
250	NA	Х	Х	NA	Х	Х	NA	Х		
300	IV	Х	Х	V	Х	Х	V	Х		
375	IV	Х	Х	V	X X	Х	V	Х		
450	IV	Х	Х	V	Х	Х	V	Х		
525	IV	Х	Х	V	Х	Х	V	Х		
600	IV	Х	Х	V	Х	Х	V	Х		
675	IV	NA	NA	V	NA	NA	V	NA		
750	IV	Х	Х	V	Х	Х	V	Х		
825	IV	NA	NA	V	NA	NA	V	NA		
900	IV	Х	Х	V	Х	Х	V	Х		
1050	IV	Х	NA	V	Х	NA	V	NA		
1200	IV	Х	NA	V	Х	NA	V	NA		
1350	IV	NA	NA	V	NA	NA	V	NA		
1500	IV	NA	NA	V	NA	NA	V	NA		
1650	IV	NA	NA	V	NA	NA	V	NA		
1800	V	NA	NA	V	NA	NA	V	NA		
1950	100	NA	NA	110	NA	NA	130	NA		
2100	100	NA	NA	110	NA	NA	130	NA		
2250	100	NA	NA	110	NA	NA	130	NA		
2400	100	NA	NA	120	NA	NA	130	NA		
2550	100	NA	NA	120	NA	NA	130	NA		
2700	100	NA	NA	120	NA	NA	130	NA		

RCCP PVC Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe CPVC

ESCP

Extra Strength Clay Pipe This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. Х

NA

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This Note number represents the metric D-load to produce a 25.4 micro-meter crack.

Revise the sixth paragraph of Article 550.06 of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Revise the first and second paragraphs of Article 550.08 of the Standard Specifications to read:

***550.08 Deflection Testing for Storm Sewers.** All PVC, PE, and CPP storm sewers 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 storm sewers with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP storm sewers with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise the fifth paragraph of Article 550.08 to read as follows.

"The outside diameter of the mandrel shall be 95 percent of the base inside diameter. For all PVC pipe the base inside diameter shall be defined using ASTM D 3034 methodology. For all PE and CPP pipe, the base inside diameter shall be defined as the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

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."

### MECHANICAL SIDE TIE BAR INSERTER (BDE)

Effective: August 1, 2014

Revised: January 1, 2015

Add the following to Article 420.03 of the Standard Specifications:

Revise Article 420.05(b) of the Standard Specifications to read:

- "(b) Longitudinal Construction Joint. The tie bars shall be installed using one of the following methods.
  - (1) Preformed or Drilled Holes. The tie bars shall be installed with an approved nonshrink grout or chemical adhesive providing a minimum pull-out strength as follows.

Bar Size	Minimum Pull-Out Strength
No. 6 (No. 19)	11,000 lb (49 kN)
No. 8 (No. 25)	19,750 lb (88 kN)

Holes shall be blown clean and dry prior to placing the grout or adhesive. If compressed air is used, the pneumatic tool lubricator shall be bypassed and a filter installed on the discharge valve to keep water and oil out of the lines. The installation shall be with methods and tools conforming to the grout or adhesive manufacturer's recommendations.

The Contractor shall load test five percent of the first 500 tie bars installed. No further installation will be allowed until the initial five percent testing has been completed and approval to continue installation has been given by the Engineer. Testing will be required for 0.5 percent of the bars installed after the initial 500. For each bar that fails to pass the minimum requirements, two more bars selected by the Engineer shall be tested. Each bar that fails to meet the minimum load requirement shall be reinstalled and retested. The equipment and method used for testing shall meet the requirements of ASTM E 488. All tests shall be performed within 72 hours of installation. The tie bars shall be installed and approved before concrete is placed in the adjacent lane."

(2) Inserted. The tie bars shall be installed with the use of a mechanical side tie bar inserter. The inserter shall insert the tie bars with vibration while still within the extrusion process, after the concrete has been struck off and consolidated without deformation of the slab. The inserter shall remain stationary relative to the pavement when inserting tie bars, while the formless paver continues to move in the direction of paving.

A void greater than 1/8 in. (3 mm) at any location around the tie bar shall require immediate adjustment of the paving operation. A void greater than 1/2 in.(13 mm) shall be repaired with a nonshrink grout or chemical adhesive after the concrete has hardened. If at the end of the day of paving more than 20 percent of the tie bars show a void larger than 1/8 in. (3 mm) at any point around the bar, the use of the side tie bar inserter shall be discontinued.

(3) Formed in Place. The tie bar shall be formed in place as shown on the plans.

The sealant reservoir shall be formed either by sawing after the concrete has set according to Article 420.05(a) or by hand tools when the concrete is in a plastic state."

Add the following to Section 1103 of the Standard Specifications:

"**1103.18 Mechanical Side Bar Inserters.** The mechanical side tie bar inserter shall be selfcontained and supported on the formless paver with the ability to move independently from the formless paver. The insertion apparatus shall vibrate within a frequency of 2000 to 6000 vpm. A vibrating reed tachometer, hand type, shall be provided according to Article 1103.12."

### PAVEMENT PATCHING (BDE)

Effective: January 1, 2010

Revise the first sentence of the second paragraph of Article 701.17(e)(1) of the Standard Specifications to read:

"In addition to the traffic control and protection shown elsewhere in the contract for pavement, two devices shall be placed immediately in front of each open patch, open hole, and broken pavement where temporary concrete barriers are not used to separate traffic from the work area."

#### PAVEMENT STRIPING - SYMBOLS (BDE)

Effective: January 1, 2015

Revise the Symbol Table of Article 780.14 of the Supplemental Specifications to read:

Symbol	Large Size	Small Size	
	sq ft (sq m)	sq ft (sq m)	
Through Arrow	11.5 (1.07)	6.5 (0.60)	
Left or Right Arrow	15.6 (1.47)	8.8 (0.82)	
2 Arrow Combination Left (or Right) and Through	26.0 (2.42)	14.7 (1.37)	
3 Arrow Combination Left, Right, and Through	38.4 (3.56)	20.9 (1.94)	
Lane Drop Arrow	41.5 (3.86)		
Wrong Way Arrow	24.3 (2.26)		
Railroad "R" 6 ft (1.8 m)	3.6 (0.33)		
Railroad "X" 20 ft (6.1 m)	54.0 (5.02)		
International Symbol of Accessibility	3.1 (0.29)		
Bike Symbol	4.7 (0.44)		
Shared Lane Symbol	8.0 (0.74)	"	

#### **"SYMBOLS**

## 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 C	JRING AND PROTECTION OF	CONCRETE	CONSTRUCTION
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) ^{2/}	3	1020.13(c)
Driveway Median Barrier Curb Gutter Curb & Gutter Sidewalk Slope Wall Paved Ditch	1020.13(a)(1)(2)(3)(4)(5) ^{4/5/}	3	1020.13(c) ^{16/}
Catch Basin Manhole Inlet Valve Vault	1020.13(a)(1)(2)(3)(4)(5) ^{4/}	3	1020.13(c)
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) ^{2/}	3 ^{12/}	1020.13(c)
Bridge Deck Patching	1020.13(a)(3)(5)	3 or 7 ^{12/}	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) ^{19/}	7	1020.13(d)(1)(2) ^{17/}
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 ^{13/}	9/						
All Other Precast Items	1020.13(a)(3)(4)(5) ^{2/ 9/ 10/}	As Required ^{14/}	9/						
Precast, Prestressed Concrete ^{11/}									
All Items	1020.13(a)(3)(5) ^{9/10/}	Until Strand Tensioning is Released ^{15/}	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."

### RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012

Revise: January 2, 2015

Revise Section 1031 of the Standard Specifications to read:

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

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

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. 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 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and 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. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

(1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) 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 fractionated prior to testing by screening into a minimum of two size 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 shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100% of FRAP Shall Pass
IL-25.0	2 in. (50 mm)
IL-19.0	1 1/2 in. (40 mm)
IL-12.5	1 in. (25 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) 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 prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, HMA (High or Low ESAL), or "All Other" (as defined by Article 1030.04(a)(3)) mixtures. 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.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, 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 not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be 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.** RAP/FRAP and RAS testing shall be according to the following.

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.
  - (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) 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.

Each sample shall be split to obtain two equal 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 or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Illinois Department of Transportation Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling 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 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once  $a \le 1000$  ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled 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.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall perform a washed extraction and test for unacceptable materials on 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.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

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

(a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm}. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous /Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %
1/2 in. (12.5 mm)	±8%	± 15 %
No. 4 (4.75 mm)	±6 %	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 µm)	± 5 %	
No. 200 (75 µm)	± 2.0 %	± 4.0 %
Asphalt Binder	$\pm$ 0.4 % $^{1/}$	$\pm$ 0.5 %
G _{mm}	± 0.03	

1/ The tolerance for FRAP shall be  $\pm$  0.3 %.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation. 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)".

(b) Evaluation of RAS and RAS Blended with Manufactured Sand 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. Individual test results, when compared to the averages, 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)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

### 1031.05 Quality Designation of Aggregate in RAP/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. Coarse and fine FRAP 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.

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

- (a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.
  - (1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
  - (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
  - (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous RAP and FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
  - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
  - (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.
  - (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given N Design.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.

- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.
  - (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

HMA Mixtures ^{1/, 2/}	RAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10
105	10	10	10

### RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given N design.

HMA Mixtures	FRAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified ^{3/, 4/}
30	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10
105	40	30	10

#### FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N30, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.
- 4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 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) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix 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 RAP/FRAP and/or RAS shall be as follows.

(a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

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 RAP 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 the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

- (b) 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.
- (c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/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 RAP/FRAP/RAS 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 RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
    - h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
  - (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).
    - e. RAP/FRAP/RAS weight to the nearest pound (kilogram).

- f. Virgin asphalt binder weight to the nearest pound (kilogram).
- g. Residual asphalt binder in the RAP/FRAP/RAS 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 in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders Type B 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. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

#### **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."

### SIDEWALK, CORNER, OR CROSSWALK CLOSURE (BDE)

Effective: January 1, 2015

Revised: April 1, 2015

Revise the first sentence of Article 1106.02(m) of the Supplemental Specifications to read:

"The top and bottom panels shall have alternating white and orange stripes sloping 45 degrees on both sides."

### STEEL SLAG IN TRENCH BACKFILL (BDE)

Effective: January 1, 2016

Revise the second sentence of Article 1003.01(a)(8) of the Standard Specifications to read:

"Crushed steel slag shall be the nonmetallic product which is developed in a molten condition simultaneously with steel in an open hearth, basic oxygen, or electric arc furnace."

Revise Article 1003.04(a) of the Standard Specifications to read:

"(a) Description. The fine aggregate shall consist of sand, stone sand, chats, wet bottom boiler slag, slag sand, or granulated slag sand. Crushed concrete sand, construction and demolition debris sand, and steel slag sand produced from an electric arc furnace may be used in lieu of the above for trench backfill."

### TRACKING THE USE OF PESTICIDES (BDE)

Effective: August 1, 2012

Add the following paragraph after the first paragraph of Article 107.23 of the Standard Specifications:

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

#### TRAFFIC BARRIER TERMINALS TYPE 6 OR 6B (BDE)

Effective: January 1, 2015

Add the following to the Article 631.02 of the Standard Specifications:

### 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.

### FUEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 1, 2009

Revised: July 1, 2015

<u>Description</u>. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel prices when optioned by the Contractor. The bidder shall indicate 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 fuel cost adjustments for all categories of work. Failure to indicate "Yes" for any category of work will make that category of work exempt from fuel cost adjustment.

<u>General</u>. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and extra work paid for by agreed unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Extra work paid for at a lump sum price or by force account will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

(a) Categories of Work.

(1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.

- (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.
- (b) Fuel Usage Factors.

English Units		
Category	Factor	Units
A - Earthwork	0.34	gal / cu yd
B – Subbase and Aggregate Base courses	0.62	gal / ton
C – HMA Bases, Pavements and Shoulders	1.05	gal / ton
D – PCC Bases, Pavements and Shoulders	2.53	gal / cu yd
E – Structures	8.00	gal / \$1000
Metric Units Category A - Earthwork B – Subbase and Aggregate Base courses C – HMA Bases, Pavements and Shoulders D – PCC Bases, Pavements and Shoulders E – Structures	Factor 1.68 2.58 4.37 12.52 30.28	Units liters / cu m liters / metric ton liters / metric ton liters / cu m liters / \$1000

(c) Quantity Conversion Factors.

Category	Conversion	Factor
В	sq yd to ton sq m to metric ton	0.057 ton / sq yd / in depth 0.00243 metric ton / sq m / mm depth
С	sq yd to ton sq m to metric ton	0.056 ton / sq yd / in depth 0.00239 m ton / sq m / mm depth
D	sq yd to cu yd sq m to cu m	0.028 cu yd / sq yd / in depth 0.001 cu m / sq m / mm depth

<u>Method of Adjustment</u>. Fuel cost adjustments will be computed as follows.

 $CA = (FPI_P - FPI_L) \times FUF \times Q$ 

- Where: CA = Cost Adjustment, \$
  - FPI_P = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)
  - FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/gal (\$/liter)
  - FUF = Fuel Usage Factor in the pay item(s) being adjusted
  - Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

<u>Basis of Payment</u>. Fuel cost adjustments may be positive or negative but will only be made when there is a difference between the  $FPI_L$  and  $FPI_P$  in excess of five percent, as calculated by:

Percent Difference = { $(FPI_L - FPI_P) \div FPI_L$ } × 100

Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

**Return With Bid** 

# ILLINOIS DEPARTMENT OF TRANSPORTATION

#### OPTION FOR FUEL 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 fuel cost adjustments in all categories. Failure to indicate "Yes" for any category of work at the time of bid will make that category of work exempt from fuel 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 part of the contract plans for the following categories of work?

Signature			Date:
Category E	Structures	Yes	
Category D	PCC Bases, Pavements and Shoulders	Yes	
Category C	HMA Bases, Pavements and Shoulders	Yes	
Category B	Subbases and Aggregate Base Courses	Yes	
Category A	Earthwork.	Yes	

### STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 2, 2004

Revised: July 1, 2015

<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 have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

<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.

<u>Method of Adjustment</u>. 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:  $MPI_M =$  The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).
  - $MPI_{L}$  = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the  $MPI_M$  will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

<u>Basis of Payment</u>. 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

Attachment	
Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
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

### 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 part of the contract plans for the following items of work?

Signature:	Date:	
Frames and Grates	Yes	
Metal Railings (excluding wire fence)	Yes	
Steel Traffic Signal and Light Poles, Towers and Mast Arms	Yes	
Guardrail	Yes	
Dowel Bars, Tie Bars and Mesh Reinforcement	Yes	
Reinforcing Steel	Yes	
Structural Steel	Yes	
Metal Piling	Yes	

## STORM WATER POLLUTION PROTECTION PLAN



Storm Water Pollution Prevention Plan

Route	FAS 223 Route IL 81	Marked Rte.	IL -81	
Section	101 VBR	Project No.	P-92-023-10	
County	Henry	Contract No.	_64F84	

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.

Paul Loete	taul A- Kotten
Print Name	Signature
Deputy Director, Region 2 Engineer	8-6-15
Title	Date
Illinois Department of Transportation	
Agency	-

#### I. Site Description:

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

This project consists of the proposed improvements between US 150 and I74 on IL 81 in Lynn Center.

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

The generally improvement consists of removal & replacement of the bridge, sidewalk, guardrail, storm sewer & driveways.

C. Provide the estimated duration of this project:

9 Months

D. The total area of the construction site is estimated to be <u>1.24</u> acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is .99 acres.

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

The weighted average runoff coefficient for this project is 0.41.

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

Bridge SN 037-1079	
51A silt loam, 0 to 2 percent slopes	Kw and Kf = 0.37
86 B Osco silt loam, 2 to 5 percent slopes	Kw and Kf = 0.37
86C2 Osco silt loam, 5 to 10 percent slopes, eroded	Kw and Kf = 0.49

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

No wet lands will be impacted.

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

The profile of the existing road is being raised by two feet, so the front slopes, ditch bottoms and back slopes.

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 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 purpose of land disturbing activities on this project is the removal and replacement of the existing bridge with a 2 foot raise in the vertical profile. All locations will be graded within the proposed Right-of-Way along both sides of the roadway on west side of bridge reconstruct ditches to for change in profile and east of bridge new curb and gutter will be used with storm sewer.

- 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:

**BNSF** Railway

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

N/A

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:

Receiving water is a ditch that will eventaly flow into the Edwards 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.

In areas that the water leaves the construction area will be protected with perimeter erosion barrier. Theperimeter erosion barrier will be placed before any construction begins.

- O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:
  - Floodplain
  - Wetland Riparian
  - Threatened and Endangered Species
  - Historic Preservation
  - 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
  - Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
  - Applicable Federal, Tribal, State or Local Programs
  - □ Other
  - 1. 303(d) Listed receiving waters (fill out this section if checked above):
    - a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

N/A

b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

N/A

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

N/A

 Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body: Page 2 of 8
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#### N/A

- 2. TMDL (fill out this section if checked above)
  - The name(s) of the listed water body: a

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

If a specific numeric waste load allocation has been established that would apply to the project's C. discharges, provide a description of the necessary steps to meet that allocation:

- P. The following pollutants of concern will be associated with this construction project:
  - Soil Sediment  $\boxtimes$
  - $\boxtimes$ Concrete
  - $\boxtimes$ Concrete Truck Waste
  - $\boxtimes$ **Concrete Curing Compounds**
  - $\boxtimes$ Solid Waste Debris
  - Paints
  - $\boxtimes$ Solvents

  - Fertilizers / Pesticides

- Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
- Antifreeze / Coolants  $\boxtimes$ 
  - Waste water from cleaning construction equipment
- Other (specify)

#### Controls: П.

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:

- 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;
  - Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment 3. removal and maximize storm water infiltration, unless infeasible;
  - 4 Minimize soil compaction and, unless infeasible, preserve topsoil.
- B. Stabilization Practices: Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated immediately where construction activities have temporarily or permanently ceased, but in no case more than one (1) day after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.
  - Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
  - On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a 2 temporary stabilization method can be used.

The following stabilization practices will be used for this project:

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$\boxtimes$	Preservation of Mature Vegetation		Erosion Control Blanket / Mulching
	Vegetated Buffer Strips	$\boxtimes$	Sodding
	Protection of Trees		Geotextiles
$\boxtimes$	Temporary Erosion Control Seeding		Other (specify)
	Temporary Turf (Seeding, Class 7)		Other (specify)
	Temporary Mulching		Other (specify)
	Permanent Seeding		Other (specify)

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

1. Temporary Erosion Control Seeding - This item will be applied to all bare earth areas every seven days to minimize the amount of exposed surface areas.

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

All areas disturbed by construction will be stabilized with sodd immediately following the finished grading.

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:

$\boxtimes$	Perimeter Erosion Barrier		Rock Outlet Protection	
$\boxtimes$	Temporary Ditch Check	$\boxtimes$	Riprap	
$\boxtimes$	Storm Drain Inlet Protection		Gabions	
	Sediment Trap		Slope Mattress	
	Temporary Pipe Slope Drain		Retaining Walls	
	Temporary Sediment Basin		Slope Walls	
	Temporary Stream Crossing		Concrete Revetment Mats	
	Stabilized Construction Exits		Level Spreaders	
	Turf Reinforcement Mats	$\boxtimes$	Other (specify) Fitler Fabric	
	Permanent Check Dams		Other (specify)	
	Permanent Sediment Basin		Other (specify)	
	Aggregate Ditch		Other (specify)	
	Paved Ditch		Other (specify)	

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

1. Perimeter Erosion Barrier - Silt fences will be placed along the construction limits in an effort to contain silt and runoff from leaving the site.

2. Temporary Ditch Check - Ditch checks will be placed in swales where runoff velocity is high. All structual practices are shown on the erosion control plan sheets.

3. Storm Drain Inlet Protection - Inlet and pipe protection will be provided for all inlets in grass.

4. Temporary erosion control systems shall be left in place with proper maintenance until sodding has been placed.

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

1. Riprap and Filter Fabic - Stone riprap with filter fabric will be used as protection at the downstream end of the structure locations and as inlet/outlet protection to pervent scouring and prevent downstream erosion. All structural practices are shown on the plan sheet.

2. Once the sodd has been placed all temporary items shall be removed and cleaned up.

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### D. Treatment Chemicals

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

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

- E. Permanent 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.

2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of permanent storm water management controls:

Storm sewer flows must be maintained by the contractor at all times. Nornal flow shall be allowed to pass at the rate it enters the jobsite.

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:

All management plans practices, controls, and other provisions provided in this plan are in accordance with "IDOT Standard Specifications for Road and Bridge Construction".

- G. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
  - 1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:

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- · 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.

1. Seeding - All erodible bare earth areas will be temporarily seeded on a weekly basis to minimize the amount of erodible surface within the contract limits.

2. Perimeter Erosion Barrier – Sediment will be removed if the integrity of the fencing is in jeopardy and any fencing knocked down will be repaired immediately.

3. Mulching/Erosion Control Blanket/Turf Reinforcment Mat – Any areas which fail will be repaired immediately. Printed 2/27/2015 Page 6 of 8 BDE 2342 (Rev. 3/20/14) 4. Ditch Checks – Sediment will be removed if the integrity of the ditch check is in jeopardy. Any ditch checks which fail will be repaired or replaced immediately.

5. Inlet and Pipe Protection – Sediment will be removed if the integrity of the pipe protection is in jeopardy. Any pipe protection which fails will be repaired or replaced immediately.

All maintenance of erosion control systems will be the responsibility of the Contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected periodically. Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of each 0.5 inch or greater rainfall, or an equivalent snowfall.

#### 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: <u>epa.swnoncomp@illinois.gov</u>, 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.

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#### **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	FAS 223	Marked Rte.	IL 81
Section	101 VBR	Project No.	P-92-023-10
County	Henry	Contract No.	64F84

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

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

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

Contractor

Sub-Contractor

Print Name

Title

Name of Firm

Street Address

Signature

Date Telephone

City/State/ZIP

Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP:

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### **RAILROAD SETTLEMENT AGREEMENT**

ROUTE FAS 223 (IL 81) DOT/AAR: 065 636R at M.P. 26.22 Section: 101 VBR Job No.: C-92-179-12 Contract No.64F84 Agreement No.: RR 2-12-179 County: Henry

THIS AGREEMENT made and entered into by and between the STATE OF ILLINOIS, acting by and through its Department of Transportation, hereinafter referred to as the "STATE", and, THE BNSF RAILWAY COMPANY, hereinafter referred to as the "COMPANY", and collectively referred to as the "PARTIES" and individually referred to as "PARTY".

### WITNESSETH:

WHEREAS, Illinois 81 as presently located and constructed in the southeast quarter of Section 10, Township 15N, Range 1E of the 4th Principal Meridian of Henry County, Illinois, crosses the track(s) of the COMPANY by means of a single highway overpass structure, DOT/AAR No. 065 636R, hereinafter referred to as the "STRUCTURE"; and

WHEREAS, the STRUCTURE was originally constructed by the CHICAGO BURLINGTON & QUINCY RAILROAD COMPANY, predecessor to the current COMPANY in 1916 and subsequently reconstructed by the Illinois Department of Transportation in 1971. Both parties agree said STRUCTURE is in a deteriorated condition and in need of replacement; and

WHEREAS, the STATE and COMPANY on June 25, 2012 executed a SETTLEMENT AGREEMENT, which among other items, delineated the cost and respective responsibilities after the new STRUCTURE is built to replace the existing STRUCTURE, and said SETTLEMENT AGREEMENT is attached hereto as Exhibit A; and

WHEREAS, the STRUCTURE is currently maintained by the STATE; and

WHEREAS, the STATE has prepared this AGREEMENT to include work that the COMPANY will incur as a result of the demolition and replacement of the STRUCTURE, including engineering, administrative and construction activities, hereinafter referred to as the "PROJECT"; and

WHEREAS, the STATE will seek the necessary approval from the Illinois Commerce Commission in accordance with ILCS 5/18c-7401 and 92 Illinois Administrative Code 1535; and

WHEREAS, the proposed PROJECT requires the services of COMPANY flaggers(s); and

NOW, THEREFORE, in consideration of the premises and of the mutual covenants hereinafter contained, the parties hereto agree as follows:

<u>SECTION 1</u>. The detailed plans, specifications and special provisions for the PROJECT shall be prepared by or for the STATE; and all such plans, specifications and special provisions, affecting the interests of the COMPANY, shall be subject to the reasonable approval by the COMPANY's authorized representative. The STATE's contractor shall not commence any work on the COMPANY's right-of-way until such approval is obtained in writing from the COMPANY's representative.

<u>SECTION 2</u>. No changes shall be made on any approved plans, specifications or special provisions by either PARTY hereto without the consent in writing of the other PARTY.

<u>SECTION 3.</u> The parties hereto shall construct or cause to be constructed, in substantial accordance with the approved plans, specifications and special provisions, the following items of work:

- (I). <u>WORK BY THE STATE</u>. The STATE shall furnish or cause to be furnished, all the labor, materials and work equipment required to perform and complete:
  - (a). The preliminary engineering required for preparation of plans, specifications and special provisions as set forth in Section 1.
  - (b). The demolition and replacement of the existing STRUCTURE as indicated in the plans attached hereto as Exhibit B.
  - (c). Construction engineering and inspection as set forth in Section 7.
  - (d). Incidental work necessary to complete the items hereinabove specified

The STATE'S work shall be awarded to a competent and experienced contractor who has adequate equipment, organization and finances, and the COMPANY shall be notified of the contractor(s) receiving such award for all work affecting the COMPANY's interest.

- (II). <u>WORK BY THE COMPANY</u>. The COMPANY shall furnish or cause to be furnished, in accordance with the SETTLEMENT AGREEMENT (Exhibit A) and with the stipulations as contained in the Federal-Aid Policy Guide, Chapter I, Subchapter B, Part 140, Subpart I, (23 CFR 140I) and supplements, all the labor, materials and work equipment required to perform and complete:
  - (a). Preliminary and construction engineering and inspection as set forth in Section 7.
  - (b). Review and approval of the STATE's project plans.
  - (c). Construction engineering and inspection services as set forth above.
  - (d). The furnishing of flaggers as required for protection of railroad traffic in conjunction with the work to be performed by the STATE or its contractors as set forth in Section 5. (It is estimated that one (1) flagger will be required for approximately ninety (90) days).
  - (e). Incidental work necessary to complete the items hereinabove specified. The estimated cost of COMPANY's work set forth above is \$194,732 as shown on the detailed estimate(s) attached hereto and marked as Exhibit D.

Per the Alternative Federal-State procedure in 23 CFR § 646.220, the STATE will certify that the work at the job site is complete, acceptable and in accordance with the terms of this AGREEMENT. A representative of the STATE shall be present at the job site during construction to inspect the work and to assure that all work and materials meet the requirements as set forth in the STATE's "Standard Specifications for Road and Bridge Construction" adopted January 1, 2012 and the "Supplemental Specifications and Recurring Special Provisions" in effect on the date of the invitation for bids. The COMPANY shall give the STATE a seventy two (72) hour notice in advance of commencement of the work set forth in this AGREEMENT.

SECTION 4. The STATE shall require its contractor(s) to perform his/her (their) work in accordance with the "Standard Specifications for Road and Bridge Construction" adopted January 1, 2012, and the "Supplemental Specifications and Recurring Special Provisions" in effect on the date of invitation for bids. A single Railroad Protective Liability Insurance policy, naming the COMPANY, shall be carried in limits of \$5,000,000 combined single limit per occurrence for bodily injury liability and property damage liability with an aggregate limit of \$10,000,000 over the life of the policy as set forth in Federal-Aid Policy Guide, Chapter I, Subchapter G, Part 646, Subpart A (23 CFR 646A).

SECTION 5. The COMPANY agrees to make all reasonable efforts to furnish the services of a certified railroad flagger or flaggers. The flagger or flaggers shall either be contracted or COMPANY-employed. The COMPANY further agrees that should a railroad emergency or other extraordinary situation occur and the COMPANY is unable to provide a flagger or flaggers when needed by the STATE's contractor, the COMPANY may provide other means of protecting its facilities which will be approved by both parties prior to implementation. Nothing contained herein shall preclude or limit the COMPANY's right to require or provide a railroad flagger when in the COMPANY's sole judgment such railroad flagger is necessary. Said railroad flagger or alternate means shall be provided by the COMPANY and the costs for such services shall be split as set forth below in Section 14 and the SETTLEMENT AGREEMENT. The total estimated cost for flagging services for this improvement is reflected in the COMPANY's estimate attached hereto.

All flagging invoices shall be submitted by the COMPANY to the STATE as set forth in Sections 13 and 14.

The flagging invoices should include sufficient identification numbers such as STATE's Job Number, Section Number, Contract Number and project location, so that the STATE is able to apply the invoices to the appropriate account.

The STATE shall require the contractor(s) to notify the COMPANY at least thirty (30) calendar days in advance of work requiring flagging services. For the purposes of this AGREEMENT, a calendar day is defined as any day shown on the calendar.

SECTION 6. Subsequent to the award of any contract, and before any work is started on this PROJECT, a pre-construction conference shall be held between the representatives of the STATE, the COMPANY, and the interested contractor(s), at a time and place as designated by the STATE'S representative, for the purpose of coordinating the work to be performed by the several PARTIES, and at which time a schedule of operations will be adopted.

<u>SECTION 7.</u> Each PARTY will provide the necessary preliminary and construction engineering, inspection, administrative and construction costs for carrying out its own work as herein set forth, and the costs for such services shall be split as set forth below in Section 14 and the SETTLEMENT AGREEMENT.

<u>SECTION 8</u>. The temporary minimum clearances, with reference to the COMPANY's track, of any necessary falsework, bracings or forms as required for the construction of the highway overpass structure, shall be not less than:

Vertical – the existing vertical clearances above the top of rails but no less than 21.5' above top of high rail; and

Lateral - 9' from centerline of the nearest track.

<u>SECTION 9</u>. The STATE shall require its contractor(s), before entering upon the COMPANY's right-of-way for performance of any construction work, or work preparatory thereto, to secure a fully executed, standard form right-of-entry agreement from COMPANY prior to entry onto COMPANY's right-of-way for the occupancy and use of the COMPANY's right-of-way outside the limits of the STATE's easements and to comply with all COMPANY recommendations relative to the requirements for right-of-entry agreements, required insurance and general safety regulations to the extent that such requirements do not conflict with applicable State laws or Illinois Administrative Code.

<u>SECTION 10</u>. The safety and continuity of operation of the traffic of the COMPANY shall be at all times protected and safeguarded, and the STATE shall require its employees and contractor(s) to perform the work accordingly. Whenever the work may affect the safety of trains, the method of doing such work shall first be submitted to the COMPANY's authorized representative for his approval without which it shall not be commenced or performed; such

approval must not be unreasonably withheld. The approval of the COMPANY's authorized representative shall not be considered as a release from responsibility, or liability for any damage which the COMPANY may suffer, or for which it may be held liable by the acts of the contractor(s), or those of their subcontractor(s), or their employees.

SECTION 11. The STATE shall require its contractor(s), upon the completion of the work of such contractor(s), to remove from within the limits of the COMPANY's right-of-way all machinery, equipment, surplus materials, falsework, rubbish or temporary buildings of such contractor(s), and to leave the right-of-way upon which the said contractor(s) carried on operations in a neat condition, reasonably satisfactory to the authorized representative of the COMPANY.

<u>SECTION 12.</u> When the construction of this project is completed, the STATE shall own, have jurisdiction of and maintain at its expense, or by agreement with others provide for the maintenance of, the STRUCTURE, the approaches, highway drainage and all other highway facilities.

In order to fulfill its maintenance obligation, the STATE shall have access to the STRUCTURE at all times, for the performance of construction, reconstruction, inspections, repair and maintenance.

The COMPANY shall be notified by the STATE whenever such activities may affect the COMPANY's operations. All construction, reconstruction, inspections, repair or maintenance work shall be performed in accordance with the applicable STATE's "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special Provisions" in effect on the date the work is performed.

In accordance with existing maintenance policies, the STATE will not cause snow, ice or other materials to be plowed over the sides of the highway overpass structure.

If it is determined by both PARTIES hereto, that because of the ejection of objects from the structure onto the COMPANY's property, that a fencing system will be an effective deterrent, then the STATE will design, install and maintain a protective fencing system on the highway overpass structure along that portion of the structure that spans an area twenty-five feet (25')

west of the centerline of BNSF's most westerly track and twenty-five feet (25') east of BNSF's most easterly track located within the limits of construction as set forth in this Agreement. The actual costs for this fencing system will be paid as follows: the COMPANY will pay 80% of such costs and the STATE will pay 20% of such costs.

The COMPANY shall maintain at its expense, its tracks, ballast, subballast, signals, power lines, and any other railroad facilities. In the event of railroad derailment, accidents or collisions caused by the negligence of the COMPANY, and resulting in damage to the STRUCTURE, the STATE shall repair or replace said STRUCTURE in compliance with the applicable STATE's design standards and specifications, "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special Provisions" in effect on the date the work is performed, and the COMPANY agrees to reimburse the STATE for the actual cost of such repairs or replacement caused by the COMPANY's actions or negligence all in accordance with State law in effect at the time of the railroad derailment, accident or collision.

The COMPANY further agrees to comply with all applicable provisions of federal, state and local law. The COMPANY further agrees not to erect, nor grant permission to others to erect, any advertising signs that would be visible from the highway pavement on the COMPANY's property within the limits of the highway right-of-way lines extended across the COMPANY's property.

SECTION 13. The COMPANY shall keep an accurate and detailed account of the actual cost and expense as incurred by it, or for its account, in the performance of the work it herein agrees to perform.

The COMPANY shall maintain, for a minimum of three (3) years from the date final payment has been received by the COMPANY, adequate books, records, and supporting documents to verify the amounts, recipients, and uses of all disbursements of funds passing in conjunction with this AGREEMENT; and all books, records, and supporting documents related to this AGREEMENT shall be available for review and audit by the Auditor General and other STATE auditors; and the COMPANY agrees to cooperate fully with any audit conducted by the Auditor General and other STATE auditors and to provide full access to all relevant materials. Failure to maintain the books, records, and supporting documents required by this section shall

establish a presumption in favor of the STATE for the recovery of any funds paid by the STATE under this AGREEMENT for which adequate books, records, and supporting documentation are not available to support their purported disbursement.

SECTION 14. The cost share for this PROJECT shall be as defined in the SETTLEMENT AGREEMENT. The PROJECT costs will be the total of the costs to the STATE to build the PROJECT as shown in the plans and in accordance with the special provisions, such as engineering, administration, and construction costs; plus the costs to the COMPANY to build the PROJECT, such as flagging and other incidental railroad items made necessary because of this bridge replacement. The COMPANY agrees to pay eighty per cent (80%) of the PROJECT costs, and the STATE agrees to pay twenty per cent (20%) of the PROJECT costs. The PROJECT costs should not exceed \$4,946,904. If this amount is exceeded, the PARTIES will meet to determine each PARTY's share of the overrun.

The STATE is estimating the engineering, administration, and construction cost to build the PROJECT as shown in the plans and in accordance with the special provisions is \$4,752,172. This includes cost of construction (estimated at \$3,927,415), engineering (15% of construction costs), and administration (6% of construction costs).

The COMPANY is estimating that the construction cost for engineering, inspection, and other incidental railroad items is \$194,732. The COMPANY will bear the cost of one hundred percent of its work until project completion.

As part of the SETTLEMENT AGREEMENT, the COMPANY agrees to provide the STATE with ninety per cent (90%) of its share of the STATE's total PROJECT less twenty percent (20%) of the value of the COMPANY's work upon award of the PROJECT by the STATE. This payment is to be \$3,382,617.

Upon completion of the PROJECT, meaning final inspection and acceptance by both PARTIES, the COMPANY shall pay the STATE the remaining balance of its share of the STATE's PROJECT cost, documented by both PARTIES as required by the SETTLEMENT AGREEMENT. The COMPANY shall keep an accurate and detailed account of the actual cost and expense as incurred by them, or for their account, in the performance of the work it

herein agree to perform. The STATE shall keep an accurate and detailed account of the actual construction cost and will provide the COMPANY a copy of this account.

SECTION 15. The PROJECT herein contemplated shall be subject to all applicable federal laws, rules, regulations, orders and approvals pertaining to this AGREEMENT, plans, estimates, specifications, award of contract, acceptance of work and procedure in general. The STATE will reimburse the COMPANY as hereinbefore provided, for only such items of work and expense, and in such amounts and forms as are proper and eligible for payment, including all preliminary engineering costs that were accrued prior to the execution of this AGREEMENT.

SECTION 16. It is the policy of the U.S. Department of Transportation that disadvantaged business enterprises, as defined in 49 C.F.R. §26, shall have the maximum opportunity to participate in the performance of agreements financed in whole or in part with federal funds. Consequently, the disadvantaged business enterprise requirement of 49 C.F.R. §26 apply to this AGREEMENT. The COMPANY agrees to take all necessary and reasonable steps to ensure that disadvantaged business enterprises, as defined in 49 C.F.R. §26 have the maximum opportunity to participate in the performance of this AGREEMENT. The COMPANY agrees to take all necessary and reasonable steps to ensure that disadvantaged business enterprises, as defined in 49 C.F.R. §26 have the maximum opportunity to participate in the performance of this AGREEMENT. The COMPANY, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this AGREEMENT. The COMPANY shall carry out applicable requirements of 49 C.F.R. § 26 in the award and administration of federally-assisted contracts. Failure by the COMPANY to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy deemed appropriate.

Pursuant to 820 ILCS 130/1 et seq., as currently enacted, in the event any work is performed by other than COMPANY forces, the provisions of "an act regulating wages of laborers, mechanics and other workers employed in public works by the state, county, city or any public body or any political subdivision or by anyone under contract for public works" shall apply. Pursuant to 820 ILCS 130/4, COMPANY is hereby notified "the prevailing rate of wages are revised by the Department of Labor and are available on the Department's official website."

SECTION 17. In the event that delays or difficulties arise in securing federal approval, or in acquiring rights of way, or in settling damages or damage claims, or for any other cause which in the opinion of the STATE render it impracticable to proceed with the construction of the

PROJECT, then at any time before a construction contract is executed or actual construction is started, the STATE may serve formal notice of cancellation upon the COMPANY and this AGREEMENT shall thereupon become null and void.

SECTION 18. At the time this AGREEMENT was executed, there were funds available for the PROJECT; however, obligations assumed by the STATE under this AGREEMENT shall cease immediately, without penalty or payment beyond that which the COMPANY has already accumulated, should the Illinois General Assembly or the Federal Highway Administration fail to appropriate or otherwise make available funds for the PROJECT.

<u>SECTION 19</u>. By separate document(s), arrangements will be made for the STATE to acquire from the COMPANY any temporary or permanent property rights that are held by the COMPANY necessary to construct the PROJECT improvements as herein proposed.

<u>SECTION 20.</u> The COMPANY is hereby requested by the STATE, to perform preliminary engineering for the PROJECT, and authorized to accrue project preliminary engineering costs beginning on July 9, 2015.

SECTION 21. This AGREEMENT shall be binding upon the parties hereto, their successors or assigns.

<u>SECTION 22.</u> This AGREEMENT shall be construed and interpreted according to the laws of the State of Illinois.

IN WITNESS WHEREOF, the parties hereto have caused this AGREEMENT to be executed in duplicate counterparts, each of which shall be considered as an original, by their duly authorized officials as of the dates below indicated.

Executed by the COMPANY, this _____ day of DECCMBGR, 2015. By Sticksdum (Signature) Witness: Can Management (Signature) Print Name: STEVE ANDERSON Print Name: CALVINNUTT

By Ardun (Signature)

THE BNSF RAILWAY COMPANY

Title: <u>VP ENGINEERING</u> Date: <u>///30/15</u>

STATE OF ILLINOIS, acting by and through its Department of Transportation

TINB By:

Omer M. Osman, P.E. **Director of Highways** 

Date: 12/09/20/5

11

The COMPANY certifies that:

- 1. The number shown on this form is the COMPANY's correct taxpayer identification number (or the COMPANY is waiting for a number to be issued to them), and
- 2. The COMPANY is not subject to backup withholding because: (a) the COMPANY is exempt from backup withholding, or (b) the COMPANY has not been notified by the Internal Revenue Service (IRS) that the COMPANY is subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified the COMPANY that the COMPANY is no longer subject to back-up withholding, and
- The COMPANY's person with signatory authority for this AGREEMENT is a U.S. person (including a U.S. resident alien).

#### **Taxpayer Identification Number:**

41-6034000

**Employer Identification Number** 

(If you are an individual, enter your name and SSN as it appears on your Social Security Card. If completing this certification for a sole proprietorship, enter the owner's name followed by the name of the business and the owners SSN or EIN. For all other entities enter the name of the entity as used to apply for the entity EIN and the EIN.)

#### Legal Status

	Individual Sole Proprietor Partnership/Legal Corporation Tax-exempt Corporation providing or billing medical and/or health care services		Government Nonresident Alien Estate or Trust Pharmacy (Non Corp.) Pharmacy/Funeral home /Cemetery
<u>×</u>	Corporation NOT providing or billing medical and/or health care services Other	_	Limited Liability Company (select applicable tax classification) D = Disregarded entity C = Corporation P = Partnership

#### SETTLEMENT AGREEMENT

This Settlement Agreement (the "Agreement") is made and entered into this 25 day of June, 2012, by and between BNSF Railway Company ("BNSF") and the State of Illinois, Department of Transportation ("IDOT").

### WITNESSETH:

WHEREAS, BNSF is a railroad which operates over its railroad tracks in the State of Illinois, including certain tracks on what is known as the Barstow subdivision, which run, in part, in a north/south direction in Henry County, IL;

WHEREAS, IDOT is a subdivision of the State of Illinois, and is the road authority for a certain state highway, Illinois Route 81, which runs, in part, in an east/west direction in Henry County, Illinois;

WHEREAS, there exists a bridge or grade separation structure (hereinafter "the bridge") that currently carries Illinois Route 81 over BNSF's tracks located in or near Lynn Center, Henry County, Illinois, which is inventoried as USDOT# 065 636R or IDOT #037-0126, and located at railroad milepost 26.22 on the Barstow subdivision;

WHEREAS, the parties have disputed ownership, maintenance and replacement responsibility for the bridge and wish to resolve that conflict;

WHEREAS, the bridge was built in 1970 pursuant to an agreement between IDOT and BNSF's predecessor in interest, the Chicago, Burlington & Quincy Railroad (CB&O);

WHEREAS, the bridge is in need of replacement due to its deteriorating condition;

Exhibit "A"

WHEREAS, based upon a dispute as to the responsibilities of the parties for replacement of the bridge, IDOT has filed a verified petition before the Illinois Commerce Commission under Case No. T10-0027, requesting that the Illinois Commerce Commission order replacement of the bridge, and for a determination that BNSF should pay for the costs of the replacement of the bridge;

WHEREAS, BNSF has filed a verified answer to the petition, denying that it is responsible for paying the costs of replacing or reconstructing the bridge;

WHEREAS, it is contemplated in this Agreement that the bridge should be replaced with a Load and Resistance Factor Design (LRFD) PPC Deck Beam bridge with a five inch concrete wearing surface in accordance with IDOT's "Standard Specifications for Road and Bridge Construction" and supplements thereto and current federal and state statutes, standards and practices; and,

WHEREAS, the parties wish to resolve amicably all of their disputes and claims, without any admission of liability by any party.

NOW, THEREFORE, in mutual consideration of the foregoing and of the following representations and undertakings, the parties agree as follows:

1. The recitals and prefatory paragraphs above are incorporated in full into this Agreement.

2. The terms of this Agreement are potentially subject to the approval by the Illinois Commerce Commission. However, this Agreement shall not be made an exhibit in the file of the Illinois Commerce Commission or any court file unless necessary to enforce the terms hereof.

3. BNSF agrees to pay eighty per cent (80%) of the actual costs associated with the demolition and replacement of the bridge and IDOT agrees to pay twenty per cent (20%) of the

actual costs associated with the demolition and replacement of the bridge (the "Project"). BNSF also agrees to pay eighty per cent (80%) of the administrative and engineering costs associated with the Project. It is understood and agreed that the administrative costs are estimated to be approximately six per cent (6%) of the total construction cost of the Project and that the engineering costs are estimated to be approximately fifteen per cent (15%) of the total construction cost of the Project.

4. IDOT agrees to perform all work necessary in replacing the bridge with a LRFD PPC Deck Beam bridge with a five inch concrete wearing surface with all construction work to be performed in accordance with IDOT's current "Standard Specifications for Road and Bridge Construction" and supplements thereto.

5. The work related to the Project shall be subject to all appropriate federal and state laws, rules, regulations, orders and approvals pertaining to all agreements, plans, estimates, specifications, awards of contract, acceptance of work and procedure in general related to the Project.

6. BNSF agrees that, prior to commencement of the Project, BNSF will provide IDOT with a revised permanent easement for the purpose of highway right of way, construction, reconstruction, maintenance, repair and use of a new bridge, in, on, upon, over and across the real property owned by BNSF, the property to be more fully described after construction plans are completed.

7. BNSF agrees that prior to letting the Project, the parties will execute a Construction Agreement regarding the terms of the Project, which will provide, among other things, the cost estimates for the Project and the terms of payment.

8. BNSF agrees that after IDOT has awarded the contract for the Project, it will provide IDOT with 90% of its 80% share of the Project cost which includes construction, engineering and administrative costs.

9. Upon completion of the Project, BNSF agrees to provide IDOT with its remaining 10% of its proportional share of the actual costs incurred by IDOT related to the Project upon presentment of proof of payment by IDOT, either through invoices or other documents demonstrating actual work. All documents, including invoices, should be sent to BNSF's office addressed to:

Benjamin J. Steinkamp Manager Public Projects BNSF Railway Company 80 44th Avenue NE Minneapolis, MN 55421

10. Upon completion of the Project, IDOT agrees to accept sole ownership of the new bridge, and to accept all future maintenance, rehabilitation, and replacement responsibilities at IDOT's sole cost and expense. The parties therefore agree to execute any and all additional documents necessary to effectuate the intent and purposes of this Agreement including, but not limited to, overpass agreements and any and all documents necessary to vest title or ownership of the replacement bridge structure in IDOT and allow IDOT to maintain it, including a bill of sale for the bridge structure.

11. The terms and conditions of the Agreement dated December 1, 1969 by and between IDOT and CB&Q, BNSF's predecessor, will continue in full force and effect until completion of the Project, when such agreement will terminate; a copy of the 1969 Agreement is attached

hereto as Exhibit A. The Project shall be considered to be complete upon final written acceptance by IDOT of the work performed on the Project in accordance with Article 109.08 of IDOT's "Standard Specifications for Road and Bridge Construction" and supplements thereto.

12. This Agreement contains the entire understanding and Agreement between the parties hereto with respect to the matters referred to herein. No other representations, covenants, undertakings or other prior or contemporaneous agreements, oral or written, respecting such matters, which are not specifically incorporated herein, shall be deemed in any way to exist or bind any of the parties hereto. Each party hereto acknowledges that it has not executed this Agreement in reliance on any such other promise, representation or warranty.

13. This Agreement shall not be modified by either party by oral representation made before or after the execution of this Agreement. All modifications must be in writing and signed by the party to be charged therewith.

14. The validity, effect and construction of this Agreement shall be governed by the substantive law of the State of Illinois without reference to its choice of law rules.

15. Each party expressly agrees and acknowledges that the parties are each relying upon the foregoing written covenants and representations in entering into and executing this Agreement.

16. This Agreement and any ambiguities or uncertainties herein or therein, shall be equally and fairly interpreted and construed without reference to the identity of the Party or Parties preparing this document, on the express understanding and agreement that the Parties participated equally in the negotiation and preparation of this Agreement, or have had equal opportunity to do so.

17. If, for any reason, the parties do not fulfill their obligations as contained in this

Agreement, the respective parties hereto may, in addition to other available legal remedies, bring a legal action to enforce the provisions of this Agreement. This Agreement shall be interpreted in accordance with the laws of the State of Illinois.

 This Agreement may be signed in multiple counterparts, each of which shall be treated as an original.

19. Within 90 days after the execution of this Agreement, IDOT agrees to voluntarily dismiss the Petition pending before the Illinois Commerce Commission, without prejudice and with the right to reinstate the Petition if the terms of the Agreement are not met.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the date first above written.

BNSF RAILWAY COMPANY

By: UP Ea Its:0 anner

STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION

Ву: _____

. .

Its:

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Agreement, the respective parties hereto may, in addition to other available legal remedies, bring a legal action to enforce the provisions of this Agreement. This Agreement shall be interpreted in accordance with the laws of the State of Illinois.

 This Agreement may be signed in multiple counterparts, each of which shall be treated as an original.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed on the date first above written.

BNSF RAILWAY COMPANY

By: _

. . .

Its:____

STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION

By: 7h Solunder fac Its: Chief Comse

#11226967_v3

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	By order of the 1970.	Commission this 2	2nd day of April,	
	4			
		(SIGNED) DAVI	D H. ARMSTRONG	4
			Chairman	· · ·
	(SEAL)		•	
	BLM/eaw			
			,	
				19. i - 19. 19. i - 19.
	n k ke	×L Lu	Exhibit ``A'' of. settlement agreen	nent .

a Agreeners made and entered into by and between the STATE OF TLLINOIS, acting by and through its Department of Public Works and Buildings; herdinafter referred to as the "STATE", Party of the First Part, and the CHICAGO, BURLINGTON & QUINCY RAILROAD COMPANY, hereinafter referred to as the "COMPANY", Party of the. Second Part; 1-1-WITHESSETH THAT, WHEREAS, State Bond Issue Route 81 as presently laid out and constructed, extends over the COMPANY'S single main line track, and a subsidiary track by means of a highway overpass structure at a location in the unincorporated community of Lynn Center, Herry County, Illindis; and WHEREAS, the highway overpass structure was constructed in 1916 and thereafter maintained by the COMPANY; and WHERE AS Sin the interest of public safety and convenience, the parties hereto propose to replace the highway overpass structure and to reconstruct the approaches thereto in a manner substantially as shown on the prints of the drawings marked "Exhibits 1 and 2; attached hereto and made a part hereof; and WHEREAS, this replacement project shall be financed without the use of Federal funds; and WHEREAS, the approval of the Illinois Commerce Commission is required for the replacement of the structure as herein proposed. NOW, THEREFORE, in consideration of the premises and of the mutual covenants and agreements hereinafter contained, the parties hereto agree as follows: SECTION 1. The COMPANY sgrees to permit the STATE to construct an orange and the structure over and soross its track and Fight of way as involved without compensation other, than the pernos of this contract by the STATE.

SECTION 2. The STATE shall secure or cause to be secured, without expense to the COMPARY, all the rights of way required for or incident to the construction of the new highway overpass. Structure and the reconstructed approaches thereto, excepting that provided for in Section 1 hereof.

EECTION 3. The preliminary and detailed plans, specifications and special provisions for the new highway overpass structure and the reconstructed approaches shall be prepared by or for the STATE at its expense, and all such plans, specifications and special provisions, affecting the interests of the COMPARY, shall be subject to approval by the COMPARY'S Chief Engineer, or his authorized representative.

SECTION 4. The plans and estimates of cost for changes in Wire lines and appurtenances on the COMPANY'S right of way as necessitated by the proposed improvement, shall be prepared by for for the COMPANY at the expense of the STATE, and all such plans and estimates shall be subject to approval by an authorized representative of the STATE.

SPECIFICE 5. No changes shall be made on any approved plans, specifications or special provisions by either party hereto with-

SECTION 6. The parties hereto shall construct or cause to be constructed, in substantial accordance with the approved plans, specifications and special provisions, the following items of work, (1). MORK BY THE STATE. The STATE shall furnish or cause to

be furnished, at its expense, all the labor, materials

(a). The construction of the new highway overpass bridge shruthurs in a manner as shown on the stabhed Exhibits 1 and 2.

(b). The reconstruction of the approaches to the highway overpass structure, including the installation of any necessary drainage structures thereunder.

Incidental work necessary to complete the items hereinabove specified. The STATE'S work shall be awarded to a competent and experienced contractor (or contractors) who has (have) adequate equipment, organization and finances. All such awards, affecting the COMPARY'S interest; shall be subject to approval by an a thorized representative of the company. (II). MORE SY THE COMPANY. The COMPANY shall furnish or cause to be furnished, at the expense of the STATE and in compliance with the Bureau of Public Roads' Policy and Procedure Memorandum 30-3, issued October 15, 1966, even though no Federal funds will actually be used, all the labor, materials and work equipment required to perform and complete, (a). All temporary and permanent alterations or relocations of communication and signal lines, Bignals and apportenances on its right of way as may be necessitated by the construction of the highway overpass bridge structure. (b) ... Incidental work necessary to complete the item hereinabove specified. The estimated cost of COMPANY'S work set forth above is \$ 2, 834.00 the shown on the detailed estimate attached hereto and made a part hereof. The print strached hereto, and ande a part hereof, as prepared ; by the COMPANY shows the construction stages of the work performed a change of the I for sholling to COMPARY'S right of way, namely, (a) as before construction starts, (b) as to be temporarily . constructed during the period of construction, and to he located or constructed permanently. The COMPANY shall potify the STATE'S District Engineer home before starting its work.

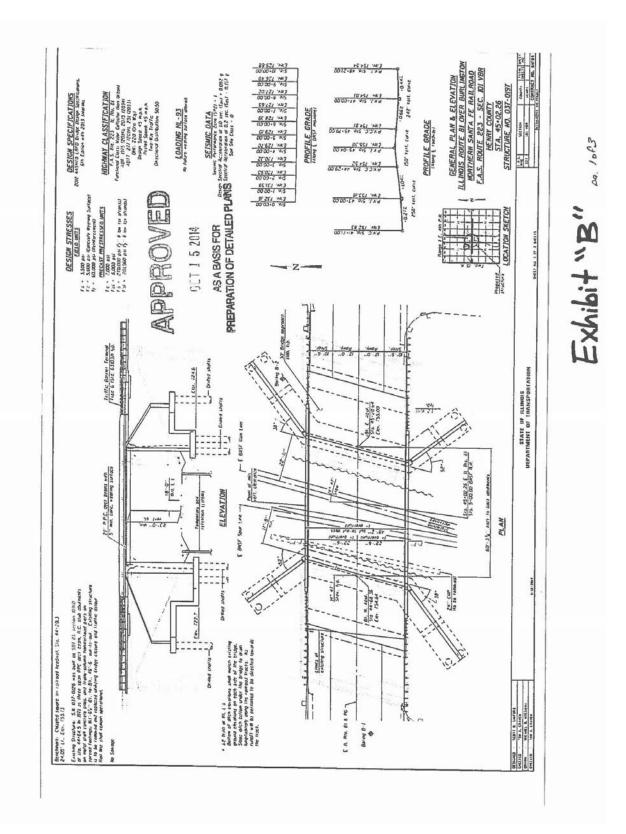
Subsequent to the sward of any contract (or conacts); and before any wait is started on this project, a conference shall be held between the representatives of the STATE, the COMPANY, and the interested contractor (or contractors), at a time and place as designated by the STATE B representative, for the purpose of conditisting the work to be performed by the several parties, and S ..... at which time & schedule of operations will be adopted. ASCITUS 8: Part party will provide at its amonse the necessary constitution engineering and inspection for barrying out its work as sheln set forth, and the cost for such services shall be borns by . the SDARS, The costs as incurred by the COMPANY for inspecting the work performed by the SDARS as may affect its properties and facilities, on the sefery and continuity of train operations, shall be found for the grant. SECTION 9. The paperary minimum clearances, with reference to the COMPANY'S track, of any necessary falsework; bracings, forms or other detructions as required for the highway overpass structure, shall be not less than, Vertical 7 20 fast & inches above top of high rail; and Lateral - 8 feet 6 inches from centerline of near track. secret 10. The start shall require its contractor (or contractors) to perform his (or their) work in accordance with the ANTINE STATE AND IN CASE AND LOOK I STATE to the two to be the August 1, 1966, and the "Supplemental Specifications," in effect on the dits of invitation for hide table failmed Protective Lisbility insumary folicy shall be of a form that complies with the STANDARD PROVIDENCE FOR GROADLY INCOMENTARY PORTIONS; dated June 10, 1958, revised May 1, 1965, June 30, 1967, and September 29, 1967, attached sereto and made a part hapeof,

ERCTIONILL. The COMPARY agrees to indemnify the STATE against and save it harmless from loss and damage to property, and injury to or death of any person or persons, and from court costs and attorneys ses and expenses incident thereto, arising out of the work to be performed hersunder by the COMPARY, and caused by the negligence of the COMPANY, for any contractor for the COMPANY, or their respective officers, agents or employees .... BECTION-12. The STATE shall require its contractor (or contractors), before entering upon the COMPANY'S right of way for performance of any construction work, or work preparatory thereto, to secure permission from the authorized representative of the COMPANY for the occupancy and use of the COMPANY'S right of way outside the limits of the highway overpass structure, and to confer with him relative to the requirements for railroad clearances, operation and general safety regulations. Section 13. The safety and continuity of operation of the traffic of the COMPANY shall be at all times protected and safeguarded; and the STATE shall require its contractor (or contractors) to perform the work accordingly. Whenever the work may affect the 'safety of trains, the method of doing such work shall first be submitted to the COMPANY'S suthorized representative for his approval without which it shall not be commenced or prosecuted. The approval of the COMPANY'S authorized representative shall not be considered, as a release from responsibility, or liability for any damage which the COMPANY may suffer, or for which it may be held liable by the acts of the contractor, or those of his subon the of this of their sployees. SECTION 14. The STATE shall require its contractor (or contractors), upon the completion (of the work of such contractor (or Contractors), to remove from within the limits of the COMPANY'S right of way all machinery, equipment, surplus materials, falsework, rubbish; or temporary buildings of such contractor (or contractors), 1 444 - 4 - 1 18

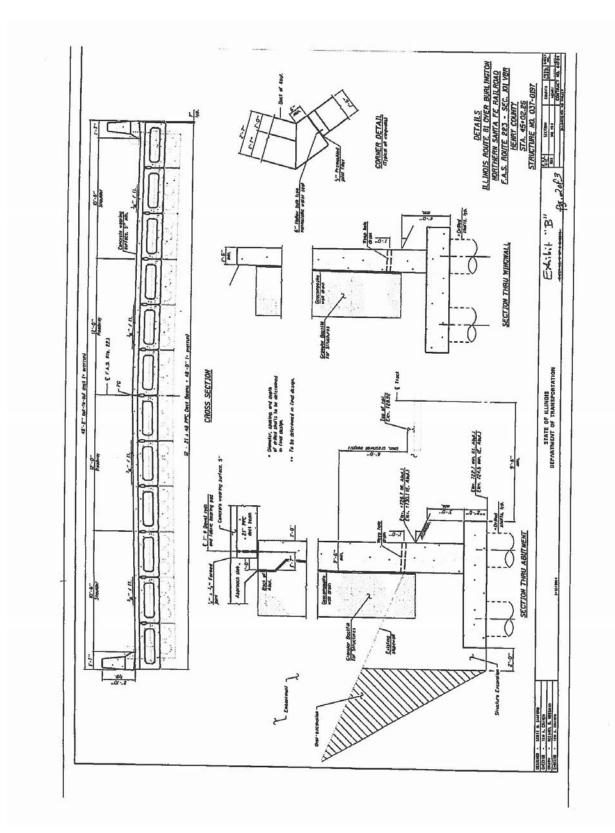
and to leave the right of way upon which the said contractors carried on operations in a nest condition, satisfactory to the COMPANY'S authorised representative. FECTION 15. When the construction of this grade separation improvement is completed, the STATE shall maintain at its own cost and expense, or by agreement with others provide for the maintenance of, the highway approaches and all highway facilities on the highway approaches and the COMPANY shall maintain at its 5. 8 expense, or by agreement with others provide for the maintenance of the entire new highway overpass structure. In the event of railway derailments, accidents or collisions growing out of negligence by the COMPAST, and resulting in damage to the highway overpass structure, the STATE shall make the repairs necessary to restore the said structure substantially to its former condition, and the COMPANY agrees to reimburse the STATE for the actual cost of such repairs. The COMPANY further agrees not to erect, nor grant permission to others to erect, any advertising signs on COMPANY'S property within the limits of the highway right of way lines extended across COMPANY'S property. SECTION 16. The COMPANY shall keep an accurate and detailed account of the actual cost and expenses as incurred by it, or for its account, in the performance of the work it herein agrees to perform. The COMPANY, for performance of its work as outlined in Section 6 (III) hereof, may bill the ETATE monthly (in sets of ten) for the costs and expenses it has incurred. These progressive invoices may be rendered on the basis of an estimated percentage of the work completed. the contract, and the completion of its work, shall render to the STATE a detailed statement (in sets of ten) of the actual cost and expense as induired by it of for its account. After the STATE'S representatives have checked the progressive invoices and the final statement, and they have agreed with the COMPANY'S representatives that the costs are reasonable and proper, insofar as they are able to ascertain, the STATE shall promptly reimburse the COMPANY for ninety-five (95) percent of the amount as agreed upon. and the second second 1

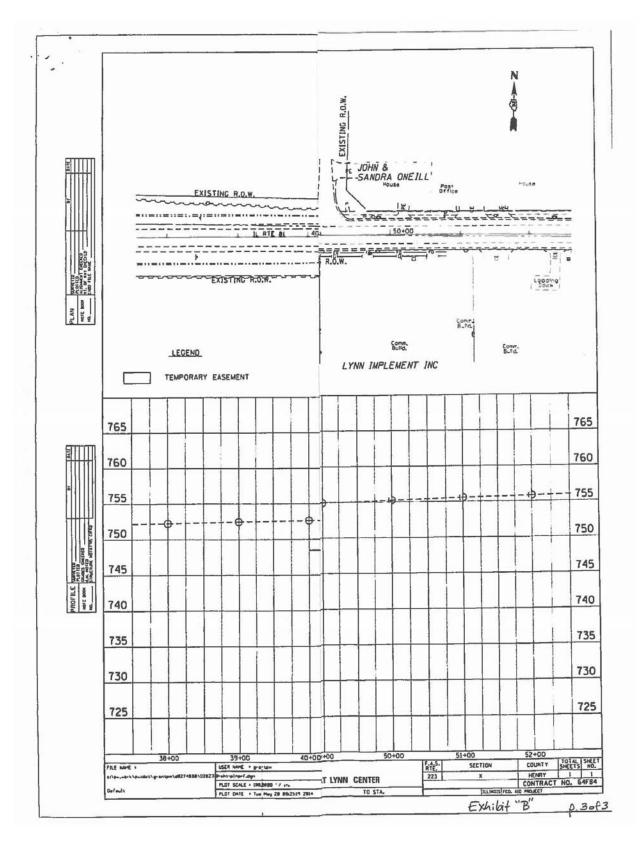
After the State representatives have audited the expenses as incurred by the COMPARY, including such, items of expense as may have been suspended from any previous payment, the STATE shall promptly reimburse the COMPANY for the retained percentages and suspended items of expense, less the deduction of any item (or items) of expense, found by the State representatives as not being eligible for reimbursement. If the total of the item (or items) of expense as may be found by the State representatives as not being eligible for relabursement, exceeds the retained percentage plus any items of expense which may have been suspended, then the COMPANY shall promptly reinhurse the STATE for the overpayment. SECTION 17. In the event that delays or difficulties arise in securing necessary approvals or in acquiring rights of way, or in settling damages or damage claims, or for any other cause which in the opinion of the STATE render it impracticable to proceed with this project, then at any time before a construction contract is executed or actual construction is started, pursuant to proper approval or authority, the STATE may serve formal notice of cancellation upon the COMPARY and this agreement shall thereupon become null and void. SECTION 16. This agreement shall become effective only after its approval by the Illinois Commarce Commission. SECTION 192 . This agreement shall be binding upon the parties hereto, their successors or assigns. 189 Ja 24 . the tel the standard of the stand of the stand of the Storm and Stores

8 acuted by Twee 5.0 8 L' N? ASSELL dates low indicated. proper officers thereunto CHICAGO, BURLINGTON & OUINCY RAILROAD COMPANY, STATE OF ILLIBOIS, acting by and through its Depar of Public Morks and Buil each of which shall be Caused these presents



196





## AUTHORITY FOR EXPENDITURE

LOCATION : L	YNN	LINE SEGMENT :	6	AFE NUMBER :	
PLANITEM NUMBER : 2	06731000	MILEPOST :	26.22	RFA NUMBER : 5927615	
PROPERTY OF : E	INSF RAILWAY COMPANY	DIVISION :	СН	CPAR NUMBER : CB960015	
OPERATED BY : E	INSF RAILWAY COMPANY	SUBDIVISION :	BARSTOW	BUDGET YEAR : 2015	
JOINT FACILITY : 1	DOT	TRACK TYPE :	S	BUDGET CLASS : 6	
% BILLABLE (+/+): 1	00.0	TAX STATE :	IL	REPORTING OFFICE : 722	
		SPONSOR :	VP ENGINEERING	CENTER/ROLLUP: 28992	

PURPOSE, JUSTIFICATION AND DESCRIPTION

PIP CHE DIV BARSTOW SUB LS 6 MP 26 22 - 100% BILLABLE TO IDOT - INSPECTOR/COORDINATOR SERVICES PROVIDED FOR STATE HWY 81 OVERPASS (DOT#065636R) RECONSTRUCTION PROJECT. 100% BILLABLE TO IDOT. PRIMARY FUNDING SOURCE IS STATE

PLAN ITEM	LINE SEG	BEG MP	END MP	TRK NBR	BEGIN STATION	END STATION	PROJECT TYPE	BUD YEAR
206731000	6	26.22	26.22	5	LYNN	LYNN	INSPECTOR / COORDINATOR	2015

	CASH CAPITAL	NONCASH CAPITAL	OPERATING EXP	REMOVAL COSTS	BILLABLE	TOTALS
LABOR COSTS	0	0	0	0	0	0
MATERIAL COSTS	0	0	0	0	0	0
OTHER COSTS	0	00	0	0	83,325	83,325
TOTALS	_0	0	0	0	83,325	83,325

SYSTEM MAINTENANCE AND PLANNING ESTIMATE REF. NUMBER: 5927615 COSTING DATE: 04/09/2015 PRINTED ON: 04/09/2015 ESTIMATED BY: Elkins PRINTED BY: Elkins

Exhibit "D" p. 10f4

	***** MAINTAIN PROPRIETARY	CONFIDENTIALITY	•		
	BNSF RAILWAY FHPM ESTIM/ IDOT	ATE FOR			
LOCATION LYNN	DETAILS	OF ESTIMATE	PLAN ITEM :	206731000	VERSION :
PURPOSE, JUSTIFICATION AND DESCRIPTION					
PIP CHE DIV BARSTOW	SUB LS 6 MP 26.22 - 100% BILLABLE T	O IDOT			
INSPECTOR/COORDINA' BILLABLE TO IDOT. REQUESTOR CHRIS VAN PRIMARY FUNDING SOL		E HWY 81 OVERPASS (DOT	#065636R) RE	CONSTRUCTION PRO	DJECT. 100%
DESCRIPTION	1	QUANTITY U	/M	COST	TOTAL
LABOR					
	TOTAL LABOR COST			0	
MATERIAL					
					2
т	DTAL MATERIAL COST			0	
********					
OTHER					
	DINATOR	1.0 L	s	75,000	
INSPECTOR COOR			-	75,000	75,0
	TAL OTHER ITEMS COST			10,000	
тот	FAL OTHER ITEMS COST PROJECT SUBTOTAL				75,0
TO	PROJECT SUBTOTAL CONTINGENCIES				7,5
TO	PROJECT SUBTOTAL				
To Bi	PROJECT SUBTOTAL CONTINGENCIES ILL PREPARATION FEE JROSS PROJECT COST				7,5
TO Bi	PROJECT SUBTOTAL CONTINGENCIES SILL PREPARATION FEE				7,5 8

Exhibit "D" p. 2 of 4

## AUTHORITY FOR EXPENDITURE

LOCATION :	LYNN	LINE SEGMENT: 6	AFE NUMBER :	
PLANITEM NUMBER :	206731001	MILEPOST: 26.22	RFA NUMBER :	5927715
PROPERTY OF :	BNSF RAILWAY COMPANY	DIVISION : CH	CPAR NUMBER :	CB960015
OPERATED BY :	BNSF RAILWAY COMPANY	SUBDIVISION : BARSTOW	BUDGET YEAR :	2015
JOINT FACILITY :	IDOT	TRACK TYPE : S	BUDGET CLASS :	6
% BILLABLE (+/-) :	100.0	TAX STATE : IL	<b>REPORTING OFFICE :</b>	722
		SPONSOR : VP ENGINEERING	CENTER/ROLLUP :	28992

PURPOSE, JUSTIFICATION AND DESCRIPTION

PIP CHE DIV BARSTOW SUB LS 6 MP 26 22 - 100% BILLABLE TO IDOT. FLAGGING SERVICES PROVIDED FOR STATE HWY 81 OVERPASS (DOT#065636R) RECONSTRUCTION PROJECT. 90 DAYS OF FLAGGING. 100% BILLABLE TO IDOT. PRIMARY FUNDING SOURCE IS STATE

PLAN ITEM	LINE SEG	BEG MP	END MP	TRK NBR	BEGIN STATION	END STATION	PROJECT TYPE	BUD YEAR
206731001	6	26.22	26.22	S	LYNN	LYNN	FLAGGING	2015

	CASH CAPITAL	NONCASH CAPITAL	OPERATING EXP	REMOVAL COSTS	BILLABLE	TOTALS
LABOR COSTS	0	0	0	0	100,276	100,276
MATERIAL COSTS	0	0	0	0	0	0
OTHER COSTS	0	0	0	0	11.131	11,131
TOTALS	0	0	0	0	111,407	111,407

SYSTEM MAINTENANCE AND PLANNING	
ESTIMATE REF. NUMBER:	5927715
COSTING DATE:	04/09/2015

PRINTED ON: 04/09/2015 ESTIMATED BY: Elkins PRINTED BY: Elkins

Exhibit "D" p. 30f4

	***** MAINTAIN PROPRIETA	RY CONFIDENTIALITY ***	••		
	BNSF RAILWA FHPM ESTI ID4	MATE FOR			
LOCATION LYNN	DETAI	LS OF ESTIMATE	PLAN ITEM :	206731001	VERSION :
URPOSE, JUSTIFICATION AND DESCRIPTION	1			19 - 19 B	
PIP CHE DIV BARSTOW	SUB LS 6 MP 26.22 - 100% BILLABLE	TO IDOT			
FLAGGING SERVICES P 100% BILLABLE TO IDO REQUESTOR CHRIS VA PRIMARY FUNDING SO	NDEVEN 04/06/2015	RPASS (DOT#065636R) RECO	NSTRUCTION PR	OJECT. 90 DAYS OI	F FLAGGING.
DESCRIPTION		QUANTITY I	37M	COST	TOTAL
LABOR					
FLAGGING - OTH		1080.0 2	411	32,307	
	SOCIATED COSTS			21,312	
DA OVERHEA EQUIPMENT				32,197	
INSURANCE				9,036 5,424	
	TOTAL LABOR COST			100,276	100,27
**********					
MATERIAL					
*********					
1	OTAL MATERIAL COST			0	(
OTHER					
тс	TAL OTHER ITEMS COST			0	(
	PROJECT SUBTOTAL				100,276
	CONTINGENCIES				10,027
E	ILL PREPARATION FEE				1,104
	GROSS PROJECT COST				111,407
	ESS COST PAID BY BNSF				(
	OTAL BILLABLE COST				111,407

Exhibit "D" p. 4 of 4

## REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

## ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

## I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

## **II. NONDISCRIMINATION**

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

**1. Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or 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 single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

## 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

 $\ensuremath{\text{(ii)}}$  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 federallyassisted 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 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 b. 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 from the site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the 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 (<u>https://www.epls.gov/</u>), 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.

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## 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) 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 (<u>https://www.epls.gov/</u>), 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.

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## 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.

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# XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 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.