### If you plan to submit a bid directly to the Department of Transportation

### **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 that 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.

### **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 124INT) 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.

### 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.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) 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 that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial.

**ABOUT AUTHORIZATION TO BID:** Firms that have not received an authorization form within a reasonable time of complete and correct original document submittal should contact the department as to status. This is critical in the week before the letting. These documents must be received three days before the letting date. 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 contractor'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 will be placed with the contract number. 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 server e-mails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at <a href="http://www.dot.il.gov/desenv/delett.html">http://www.dot.il.gov/desenv/delett.html</a> before submitting final bid information.

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

Addenda Questions may be directed to the Contracts Office at (217)782-7806 or D&Econtracts@dot.il.gov

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

WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

- 1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
- 2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

**ABOUT SUBMITTING BIDS**: It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

### WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
Prequalification and/or Authorization to Bid	217/782-3413
Preparation and submittal of bids	217/782-7806
Mailing of plans and proposals	217/782-7806

### ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

Planholders should verify that they have received and incorporated any addendum and/or revision prior to submitting their bid. Failure by the bidder to include and addendum or revision could result in a bid being rejected as irregular.

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NEED NOT RETURN THE ENTIRE PROPOSAI (See instructions inside front cover)

**BIDDERS** 

Proposal Submitted By
Name
Address
City

### Letting March 5, 2010

### 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. (SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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



Springfield, Illinois 62764

Contract No. 76C55 ST CLAIR County Section 82-1-1HB District 8 Construction Funds Route FAI 70

PLEASE MARK THE APPROPRIATE BOX BELOW:
☐ A <u>Bid</u> <u>Bond</u> is included.
☐ A <u>Cashier's</u> <u>Check</u> or a <u>Certified</u> <u>Check</u> is included.

Prepared by

S

Checked by

(Printed by authority of the State of Illinois)

### **INSTRUCTIONS**

**ABOUT IDOT PROPOSALS**: All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond required for Prime Contractors to submit a bid after written **Authorization to Bid** has been issued by IDOT's Central Bureau of Construction.

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. To request authorization, a potential bidder <u>must complete and submit Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).</u>

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Authorization to Bid or Not for Bid" form, 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 a Authorization to Bid or Not for Bid Report, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial. If a contractor has requested to bid but has not received a Authorization to Bid or Not for Bid Report, they should contact the Central Bureau of Construction in advance of the letting date.

WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

- 1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
- 2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

**ABOUT SUBMITTING BIDS**: It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

### WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

Questions Regarding	Call
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Prequalification and/or Authorization to Bid 217/782-3413 Preparation and submittal of bids 217/782-7806



**PROPOSAL** 

Proposal of  Taxpayer Identification Number (Mandatory)	
Town account dow (CC and Company)	
Town as an Island CC and Complete and Manual and A	
Laybayar idahiticatian Nilimbar /Niahaatary)	— а

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

Contract No. 76C55 ST CLAIR County Section 82-1-1HB Route FAI 70 District 8 Construction Funds

TO THE DEPARTMENT OF TRANSPORTATION

Removal of the existing structure and replacement with a 2-span, 1 @ 133'-0", 1 @ 163'-0" bridge carrying Exchange Avenue over I-55, pavement reconstruction, ramp modifications, retaining wall construction and other work all on I-55/I-70 in East St. Louis (SN 082-0378).

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 shall govern performance and payments.

- 3. ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER. The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, 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 proposal he/she waives all right to plead any misunderstanding regarding the same.
- 4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned 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, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
- 5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

<u>.</u>	Amount (	of Bid	Proposal <u>Guaranty</u>	<u>Ar</u>	nount c	Propo <u>f Bid</u> <u>Guara</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 proposals shall be made payable to the Treasurer, State of Illinois, when the state is awarding authority; the county treasurer, when a county is the awarding authority; or the city, village, or town treasurer, when a city, village, or town is the awarding authority.

If a combination bid is submitted,	the proposal guara	nties which accomp	any the individual	proposals m	naking up the o	combination v	will be consi	dered as
also covering the combination bid.								

The amount of the proposal guaranty check is \_\_\_\_\_\_\_\$( ). If this proposal is accepted and the undersigned shall fail to execute a contract bond as required herein, it is hereby agreed that the amount of the proposal guaranty shall 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 shall become void or the proposal guaranty check shall 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 proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual proposal. If the guaranty check is placed in another proposal, state below where it may be found.

The proposa	I guaranty che	ck will be found i	n the proposal for:	Item	

Section No.

County

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

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6. **COMBINATION BIDS.** The undersigned 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 proposal 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 E	Combination Bid			
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 shall 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. **CERTIFICATE OF AUTHORITY.** The undersigned bidder, if a business organized under the laws of another State, assures the Department that it will furnish a copy of its certificate of authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish the certificate within the time provided for execution of an awarded contract may be cause for cancellation of the award and forfeiture of the proposal guaranty to the State.

State Job # - C-98-064-09
PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

Code - 163 - - District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
XX000598	COMB SEW REM 12	FOOT	1,049.000				
XX004913	REMOV FOC FR CONDUIT	FOOT	1,600.000				
XX005909	MAN TA 4D W/FT-T1F&L	EACH	1.000				
X0301576	COAXIAL CABLE IN CON	FOOT	220.000				
X0320870	BRACED EXCAVATION	CU YD	220.000				
X0321631	REMOVE LUMINAIRE	EACH	12.000				
X0322125	STORM SEW WM REQ 24	FOOT	64.000				
X0322400	PILE EXTRACTION	EACH	168.000				
X0322925	ELCBL C TRACER 14 1C	FOOT	2,507.000				
X0323830	DRAINAGE SCUPPR DS-11	EACH	4.000				
X0323988	TEMP SOIL RETEN SYSTM	SQ FT	1,641.000				
X0324181	DISCON SN LTG/RM WIRE	EACH	1.000				
X0325076	WIDE AREA NETWORK	L SUM	1.000				
X0325077		EACH	12.000				
X0325271		FOOT	220.000				

State Job # - C-98-064-09
PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

Code - 163 - - District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
X0325462	MEDIA CONVERTER	EACH	3.000				
X0325751	DRIVE SOLDIER PILES	FOOT	1,351.000				
X0326804	COMB SEW REM 42	FOOT	972.000				
X0326805	FOUNDATION REMOVAL	SQ FT	3,639.000				
X0326806	WASHOUT BASIN	L SUM	1.000				
X0326807	CONC BAR WALL SPL	FOOT	126.000				
X0326808	INTERST WKEND CLSR SP	L SUM	1.000				
X0326809	COAX TO ETHER MED CON	EACH	2.000				
X0326810	WIRELESS COMMUNCT DEV	EACH	4.000				
X0326811	ABANDON CONDUIT PLACE	EACH	5.000				
X0326812	CAT 5 ETHERNET CABLE	FOOT	320.000				
X0326813		FOOT	120.000				
X0326829	CH LK GATE 10X30 DBLS	EACH	1.000				
X0326830		EACH	1.000				
	CH LK CNT SL GT 10X30	EACH	1.000				

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PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

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Code - 163 - -

Section Number - 82-1-1HB

District -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X0326832	OIL SEPARATOR SYS	L SUM	1.000				
X0329863	INTERCEPT EX CONDUIT	EACH	2.000				
X0342600	MAN TA 5D T1FCL R-PLT	EACH	1.000				
X5080600	MECHANICAL SPLICERS	EACH	239.000				
X8100065	CON T 4 PVC TY C	FOOT	1,644.000				
X8100126	CON T 2 PVC TY C	FOOT	60.000				
X8710075	FO CAB C 72 SM FO	FOOT	2,570.000				
Z0007601	BLDG REMOV NO 1	L SUM	1.000				
Z0007602	BLDG REMOV NO 2	L SUM	1.000				
Z0007603	BLDG REMOV NO 3	L SUM	1.000				
Z0007604	BLDG REMOV NO 4	L SUM	1.000				
Z0007605	BLDG REMOV NO 5	L SUM	1.000				
Z0007606	BLDG REMOV NO 6	L SUM	1.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0017100	DOWEL BARS	EACH	40.000				

State Job # - C-98-064-09
PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

Code - 163 - - District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
Z0018800	DRAINAGE SYSTEM	L SUM	1.000				
Z0022800	FENCE REMOVAL	FOOT	1,183.000				
Z0030260	IMP ATTN TEMP FRN TL3	EACH	9.000				
Z0030330	IMP ATTN REL FRD TL3	EACH	2.000				
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0049801	R&D FRIABL ASB BLD 1	L SUM	1.000				
Z0049802	R&D FRIABL ASB BLD 2	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				
Z0049903	R&D NON-FR ASB BLD 3	L SUM	1.000				
Z0049905	R&D NON-FR ASB BLD 5	L SUM	1.000				
Z0075300	TIE BARS	EACH	134.000				
20100110	TREE REMOV 6-15	UNIT	50.000				
20100210		UNIT	26.000				
20100500		ACRE	4.510				

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Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
20200100	EARTH EXCAVATION	CU YD	55,271.000				
20200410	EARTH EXCAVATION SPL	CU YD	478.300				
20700400	POROUS GRAN EMB SPEC	CU YD	707.000				
20800150	TRENCH BACKFILL	CU YD	8,844.000				
21001000	GEOTECH FAB F/GR STAB	SQ YD	1,838.000				
25000210	SEEDING CL 2A	ACRE	8.320				
25000300	SEEDING CL 3	ACRE	1.310				
25000400	NITROGEN FERT NUTR	POUND	751.000				
25000500	PHOSPHORUS FERT NUTR	POUND	751.000				
25000600	POTASSIUM FERT NUTR	POUND	751.000				
25000700	AGR GROUND LIMESTONE	TON	16.160				
25002300	TEMPORARY SEEDING	ACRE	41.250				
25100105		ACRE	0.240				
25100120		TON	16.160				
25100630		SQ YD	1,235.000				

State Job # - C-98-064-09
PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

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Project Number	Route	
	FAI 70	

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
25100900	TURF REINF MAT	SQ YD	104.000				
28000305	TEMP DITCH CHECKS	FOOT	200.000				
28000400	PERIMETER EROS BAR	FOOT	10,264.000				
28000500	INLET & PIPE PROTECT	EACH	30.000				
28000720	MULCH METHOD 2	ACRE	41.250				
35100900	AGG BASE CSE A 10	SQ YD	10,491.000				
35101100	AGG BASE CSE A 12	SQ YD	13,111.000				
40600200	BIT MATLS PR CT	TON	2.250				
40603090	HMA BC IL-19.0 N90	TON	806.000				
40603345	HMA SC "D" N90	TON	403.000				
42000311	PCC PVT 8 1/2 JOINTD	SQ YD	5,947.000				
42000511	PCC PVT 10 1/2 JOINTD	SQ YD	3,487.000				
42001300		SQ YD	16,803.000				
	PC CONC SIDEWALK 4	SQ FT	4,606.000				
	PC CONC SIDEWALK SPL	SQ FT	709.000				

State Job # - C-98-064-09
PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

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Code - 163 - -

Section Number - 82-1-1HB

District -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
42400800	DETECTABLE WARNINGS	SQ FT	120.000				
44000100	PAVEMENT REM	SQ YD	16,568.000				
44000200	DRIVE PAVEMENT REM	SQ YD	206.000				
44000300	CURB REM	FOOT	650.000				
44000500	COMB CURB GUTTER REM	FOOT	5,020.000				
44000600	SIDEWALK REM	SQ FT	10,278.000				
44001980	CONC BARRIER REMOV	FOOT	190.000				
44003100	MEDIAN REMOVAL	SQ FT	1,217.000				
44004250	PAVED SHLD REMOVAL	SQ YD	2,440.000				
44200680	CL A PATCH T4	SQ YD	182.000				
44213200	SAW CUTS	FOOT	208.000				
48100100	AGGREGATE SHLDS A	TON	566.000				
48203029	HMA SHOULDERS 8	SQ YD	600.000				
48203037	HMA SHOULDERS 10	SQ YD	5,236.000				
48300500	PCC SHOULDERS 10	SQ YD	1,286.000				

State Job # - C-98-064-09
PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

Code - 163 - - District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
50100300	REM EXIST STRUCT N1	EACH	1.000				
50100400	REM EXIST STRUCT N2	EACH	1.000				
50100500	REM EXIST STRUCT N3	EACH	1.000				
50100600	REM EXIST STRUCT N4	EACH	1.000				
50101700	REM EXIST SUP-STR N1	EACH	1.000				
50157300	PROTECTIVE SHIELD	SQ YD	1,243.000				
50200100	STRUCTURE EXCAVATION	CU YD	3,379.000				
50300225	CONC STRUCT	CU YD	1,101.100				
50300255	CONC SUP-STR	CU YD	695.700				
50300260	BR DECK GROOVING	SQ YD	927.000				
50300285	FORM LINER TEX SURF	SQ FT	4,678.000				
50300300	PROTECTIVE COAT	SQ YD	1,981.000				
50500105	F & E STRUCT STEEL	L SUM	1.000				
50500505	STUD SHEAR CONNECTORS	EACH	4,859.000				
50700209	UNTREATED TIMBER LAG	SQ FT	1,792.000				

State Job # - C-98-064-09 PPS NBR - 8-90000-0300

County Name - ST CLAIR- - Code - 163 - -

Code - 163 - District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
50800205	REINF BARS, EPOXY CTD	POUND	293,980.000				
50800515	BAR SPLICERS	EACH	94.000				
50900805	PEDESTRIAN RAIL	FOOT	155.000				
50901730	BRIDGE FENCE RAILING	FOOT	360.000				
50901735	BR FEN RAIL (SDWALK)	FOOT	360.000				
51200958	FUR M S PILE 14X0.250	FOOT	11,080.000				
51202210	FUR SOLDIER PILES HP	FOOT	1,351.000				
51202305	DRIVING PILES	FOOT	11,080.000				
51203200	TEST PILE MET SHELLS	EACH	3.000				
51500100	NAME PLATES	EACH	1.000				
52000110	PREF JT STRIP SEAL	FOOT	92.000				
52100020	ELAST BEARING ASSY T2	EACH	12.000				
52100530	ANCHOR BOLTS 1 1/4	EACH	24.000				
52100540		EACH	12.000				
	P CUL CL A 1 12	FOOT	60.000				

State Job # - C-98-064-09
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ST CLAIR- -163 - -

Code - 163 - District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
542A0223	P CUL CL A 1 18	FOOT	30.000				
542A0229	P CUL CL A 1 24	FOOT	14.000				
542A1057	P CUL CL A 2 12	FOOT	60.000				
542A1063	P CUL CL A 2 18	FOOT	40.000				
542A1069	P CUL CL A 2 24	FOOT	170.000				
542A4009	P CUL CL A 6 24	FOOT	54.000				
54213657	PRC FLAR END SEC 12	EACH	3.000				
54213663	PRC FLAR END SEC 18	EACH	4.000				
54213669	PRC FLAR END SEC 24	EACH	6.000				
54246205	INLET BOX 542526	EACH	1.000				
54247130	GRATING-C FL END S 24	EACH	3.000				
550A0340	STORM SEW CL A 2 12	FOOT	1,073.000				
550A0360	STORM SEW CL A 2 15	FOOT	8.000				
550A0410	STORM SEW CL A 2 24	FOOT	105.000				
550A0640	STORM SEW CL A 3 12	FOOT	28.000				

State Job # - C-98-064-09
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County Name - ST CLAIR- - Code - 163 - -

District - 8 - -

Project Number	Route
	FAI 70

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
550A0710	STORM SEW CL A 3 24	FOOT	284.000				
550A0960	STORM SEW CL A 4 15	FOOT	143.000				
550A1010	STORM SEW CL A 4 24	FOOT	322.000				
550A1260	STORM SEW CL A 5 18	FOOT	22.000				
550A1280	STORM SEW CL A 5 24	FOOT	54.000				
550A2520	SS RG CL A 2 12	FOOT	188.000				
550A2610	SS RG CL A 2 42	FOOT	446.000				
550A2810	SS RG CL A 3 42	FOOT	266.000				
550A3010	SS RG CL A 4 42	FOOT	206.000				
55100300	STORM SEWER REM 8	FOOT	42.000				
55100500	STORM SEWER REM 12	FOOT	336.000				
55101200	STORM SEWER REM 24	FOOT	89.000				
58700300	CONCRETE SEALER	SQ FT	7,681.000				
59100100	GEOCOMPOSITE WALL DR	SQ YD	596.000				
60100060	CONC HDWL FOR P DRAIN	EACH	1.000				

State Job # - C-98-064-09 PPS NBR - 8-90000-0300

8-90000-0300 Project Number ST CLAIR- -

Route FAI 70

Code - 163 - - District - 8 - -

County Name -

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
60107600	PIPE UNDERDRAINS 4	FOOT	2,219.000				
60107700	PIPE UNDERDRAINS 6	FOOT	40.000				
60109580	P UNDR FOR STRUCT 4	FOOT	436.000				
60200805	CB TA 4 DIA T8G	EACH	1.000				
60201340	CB TA 4 DIA T24F&G	EACH	9.000				
60206905	CB TC T1F OL	EACH	1.000				
60207005	CB TC T1F CL	EACH	4.000				
60218400	MAN TA 4 DIA T1F CL	EACH	4.000				
60220210	MAN TA 4 DIA SALV F&G	EACH	2.000				
60221100	MAN TA 5 DIA T1F CL	EACH	20.000				
60223800	MAN TA 6 DIA T1F CL	EACH	1.000				
	INLETS TB T3F&G	EACH	5.000				
	INLETS TB T24F&G	EACH	15.000				
	CB RECON NEW T1F CL	EACH	1.000				
60255500	MAN ADJUST	EACH	1.000				

State Job # - C-98-064-09
PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

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Code - 163 - District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
60257900	MAN RECONST	EACH	1.000				
60258200	MAN RECON NEW T1F CL	EACH	4.000				
60500040	REMOV MANHOLES	EACH	8.000				
60500050	REMOV CATCH BAS	EACH	3.000				
60500060	REMOV INLETS	EACH	3.000				
60605000	COMB CC&G TB6.24	FOOT	2,571.000				
63000001	SPBGR TY A 6FT POSTS	FOOT	937.500				
63100045	TRAF BAR TERM T2	EACH	1.000				
63100085	TRAF BAR TERM T6	EACH	1.000				
63100089	TRAF BAR TERM T6B	EACH	1.000				
63100167	TR BAR TRM T1 SPL TAN	EACH	2.000				
63200310	GUARDRAIL REMOV	FOOT	1,248.000				
63500105	DELINEATORS	EACH	6.000				
63500120	DELINEATOR REMOVAL	EACH	18.000				
63700255	CONC BAR 2F 32HT	FOOT	209.000				

State Job # - C-98-064-09 PPS NBR - 8-90000-0300

ST CLAIR- -

 Code 163 - 

 District 8 - 

 Section Number 82-1-1HB

County Name -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
63700805	CONC BAR TRANS	FOOT	20.000				
63700900	CONC BARRIER BASE	FOOT	229.000				
63801000	CONC GLARE SCREEN	FOOT	229.000				
66500105	WOV W FENCE 4	FOOT	828.000				
66900200	NON SPL WASTE DISPOSL	CU YD	22,718.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	3.000				
67000400	ENGR FIELD OFFICE A	CAL MO	20.000				
67000600	ENGR FIELD LAB	CAL MO	20.000				
67100100	MOBILIZATION	L SUM	1.000				
70101700	TRAF CONT & PROT	L SUM	1.000				
70103815	TR CONT SURVEILLANCE	CAL DA	450.000				
70106800	CHANGEABLE MESSAGE SN	CAL MO	20.000				
70300220	TEMP PVT MK LINE 4	FOOT	23,904.000				
70300260	TEMP PVT MK LINE 12	FOOT	64.000				

State Job # - C-98-064-09 PPS NBR - 8-90000-0300

8-90000-0300 Project Number
ST CLAIR- -

Route FAI 70

Code - 163 - District - 8 - Section Number - 82-1-1HB

County Name -

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
70301000	WORK ZONE PAVT MK REM	SQ FT	13,280.000				
70400100	TEMP CONC BARRIER	FOOT	4,806.000				
70400200	REL TEMP CONC BARRIER	FOOT	500.000				
72000100	SIGN PANEL T1	SQ FT	296.000				
72400100	REMOV SIN PAN ASSY TA	EACH	17.000				
72400200	REMOV SIN PAN ASSY TB	EACH	10.000				
72400330	REMOV SIGN PANEL T3	SQ FT	119.000				
72400710	RELOC SIGN PANEL T1	SQ FT	6.000				
72800100	TELES STL SIN SUPPORT	FOOT	281.000				
72900100	METAL POST TY A	FOOT	28.000				
73000100	WOOD SIN SUPPORT	FOOT	92.000				
73700100	REM GR-MT SIN SUPPORT	EACH	1.000				
73700200	REM CONC FDN-GR MT	EACH	1.000				
78008300	POLYUREA PM T2 LTR-SY	SQ FT	85.000				
78008310	POLYUREA PM T2 LN 4	FOOT	15,362.000				

State Job # - C-98-064-09
PPS NBR - 8-90000-0300
County Name - ST CLAIR- -

Code - 163 - -

District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78008340	POLYUREA PM T2 LN 8	FOOT	602.000				
78008350	POLYUREA PM T2 LN 12	FOOT	761.000				
78008370	POLYUREA PM T2 LN 24	FOOT	228.000				
78100100	RAISED REFL PAVT MKR	EACH	58.000				
78100105	RAISED REF PVT MKR BR	EACH	8.000				
78200410	GUARDRAIL MKR TYPE A	EACH	16.000				
78200500	BARRIER WALL MARKERS	EACH	128.000				
78201000	TERMINAL MARKER - DA	EACH	2.000				
78300100	PAVT MARKING REMOVAL	SQ FT	15,857.000				
78300200	RAISED REF PVT MK REM	EACH	28.000				
80300100	LOCATE UNDERGR CABLE	FOOT	330.000				
81000800	CON T 3 GALVS	FOOT	30.000				
81021370	CON P 4 PVC	FOOT	140.000				
81100220	CON AT ST 3/4 PVC GS	FOOT	400.000				
81100500	CON AT ST 1 1/2 GALVS	FOOT	80.000				

C-98-064-09

PPS NBR - 8-90000-0300

County Name - ST CLAIR- - Code - 163 - -

Code - 163 - District - 8 - -

State Job # -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
81100805	CON AT ST 3 PVC GALVS	FOOT	20.000				
81300210	JUN BX SS AS 6X4X4	EACH	8.000				
81300550	JUN BX SS AS 12X12X6	EACH	1.000				
81306200	DRILL EX JUNCTION BOX	EACH	2.000				
81400100	HANDHOLE	EACH	5.000				
81400200	HD HANDHOLE	EACH	4.000				
81603030	UD 2#4 #6G XLPUSE 1	FOOT	950.000				
81702450	EC C XLP USE 3-1C 10	FOOT	500.000				
81800230	A CBL 2-1C6 MESS WIRE	FOOT	1,100.000				
81900200	TR & BKFIL F ELECT WK	FOOT	2,715.000				
82102250		EACH	5.000				
82107300	UNDERPAS LUM 150W HPS	EACH	8.000				
83017600		EACH	5.000	•••••			
	LT P WD 50 CL 4	EACH	8.000				
83600300		FOOT	33.000				

State Job # - C-98-064-09

PPS NBR - 8-90000-0300

County Name - ST CLAIR- -

Code - 163 - - District - 8 - -

Project Number	Route
	FAI 70

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	II	Total Price
87100110	FO CAB C 62.5/125 6F	FOOT	512.000				
87900200	DRILL EX HANDHOLE	EACH	1.000				

CONTRACT NUMBER	76C55	
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 Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, 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. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has 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 termination of the contract and the suspension or debarment of the bidder.

### **II. ASSURANCES**

**A.** 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. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

### B. Felons

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any state agency 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.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-10.

### C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

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 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 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 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.

2. 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 and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

### D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

- (a) 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.
- 2. 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.

### E. Inducements

1. The Illinois Procurement Code provides:

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 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 or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

2. 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.

### F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, associate procurement officers, State purchasing officers, 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.

2. 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.

### G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, 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 chief procurement officer.

2. 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 is submitted.

### H. Confidentiality

1. The Illinois Procurement Code provides:

Section 50-45. Confidentiality. Any chief procurement officer, State purchasing officer, 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.

2. 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.

### I. Insider Information

1. The Illinois Procurement Act provides:

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.

2. 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.

### **III. CERTIFICATIONS**

**A.** 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. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

### B. Bribery

1. The Illinois Procurement Code provides:

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 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, 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 1961.
- (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 shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The bidder certifies that it is not barred from being awarded a contract under Section 50.5.

### C. Educational Loan

- 1. Section 3 of the Educational Loan Default Act provides:
- § 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.
- 2. 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.

### D. Bid-Rigging/Bid Rotating

1. Section 33E-11 of the Criminal Code of 1961 provides:

§ 33E-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. The State and units of local government shall provide the appropriate forms for such certification.

(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.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 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 permanently barred 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.

2. 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.

### E. International Anti-Boycott

- 1. Section 5 of the International Anti-Boycott Certification Act provides:
- § 5. State contracts. 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.
- 2. The bidder makes the certification set forth in Section 5 of the Act.

### F. Drug Free Workplace

- 1. 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.
- 2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.
- (c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.
- (d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.
- (e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.
- (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

### G. Debt Delinquency

### 1. The Illinois Procurement Code provides:

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

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency 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 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 contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

### H. Sarbanes-Oxley Act of 2002

### 1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor 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 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

### I. Addenda

The contractor or bidder certifies that all relevant addenda have been incorporated in to this contract. Failure to do so may cause the bid to be declared unacceptable.

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

The contractor certifies in accordance with 30 ILCS 500/50-12 that the bidder or contractor is not barred from being awarded a contract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency 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 contractor acknowledges that the contracting agency may declare the contract void if this certification is false.

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

In accordance with the provisions of Section 30-22 (6) of the Illinois Procurement 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.

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision 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. Executive Order Number 1 (2007) Regarding Lobbying on Government Procurements

The bidder hereby warrants and certifies that they have complied and will comply with the requirements set forth in this Order. The requirements of this warrant and certification are a material part of the contract, and the contractor shall require this warrant and certification provision to be included in all approved subcontracts.

### M. Disclosure of Business Operations in Iran

Section 50-36 of the Illinois Procurement Code, 30ILCS 500/50-36 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 shall cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid, offer, or proposal 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 the attached document.

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

Sections 20-160 and 50-37 of the Illinois Procurement Code regulate political contributions from business entities and any affiliated entities or affiliated persons bidding on or contracting with the state. Generally under Section 50-37, any business entity, and any affiliated entity or affiliated person of the business entity, whose current year contracts with all state agencies exceed an awarded value of \$50,000, are prohibited from making any contributions to any political committees established to promote the candidacy of the officeholder responsible for the awarding of the contracts or any other declared candidate for that office for the duration of the term of office of the incumbent officeholder or a period 2 years after the termination of the contract, whichever is longer. Any business entity and affiliated entities or affiliated persons whose state contracts in the current year do not exceed an awarded value of \$50,000, but whose aggregate pending bids and proposals on state contracts exceed \$50,000, either alone or in combination with contracts not exceeding \$50,000, are prohibited from making any political contributions to any political committee established to promote the candidacy of the officeholder responsible for awarding the pending contract during the period beginning on the date the invitation for bids or request for proposals 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 Illinois Procurement Code, and that it makes the following certification:

The undersigned business entity 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. A copy of the certificate of registration shall be submitted with the bid. The bidder is cautioned that the Department will not award a contract without submission of the certificate of registration.

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 Illinois Procurement Code. This provision does not apply to Federal-aid contracts.

### TO BE RETURNED WITH BID

### **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 Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, 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 Illinois Procurement Code provides that all bids of more than \$10,000 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.

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 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person 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 person 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 person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

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. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid or incorporated by reference.** 

### C. Disclosure Form Instructions

### Form A: For bidders that have previously submitted the information requested in Form A

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may check the following certification statement indicating that the information previously submitted by the bidder is, as of the date of submission, current and accurate. Before checking this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder checks the Certification, the Bidder should proceed to Form B instructions.

### **CERTIFICATION STATEMENT**

I have determined that the Form A disclosure information previously submitted is current and accurate, and all forms are hereby incorporated by reference in this bid. Any necessary additional forms or amendments to previously submitted forms are attached to this bid.							
(Bidding Company)							
Signature of Authorized Representative	Date						

### Form A: For bidders who have NOT previously submitted the information requested in Form A

D.

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 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$106,447.20? YES NO
3.	Does anyone in your organization receive more than \$106,447.20 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not 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 \$106,447.20? YES NO
	(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)
the bide	" answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or ding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is zed to execute contracts for your organization. <b>Photocopied or stamped signatures are not acceptable</b> . The person signing can be, but of have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.
	nswer 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 in that is authorized to execute contracts for your company.
bidding	3: Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the entity. Note: Checking the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be ted, checked, and dated or the bidder may be considered nonresponsive and the bid will not be accepted.
ongoing	dder shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other g procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:
agency attache and are	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 pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an d sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital oment Board must be included. Bidders who submit Affidavits of Availability are suggested to use Option II.
"See At agency	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 fidavit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois pending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the t of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.
<u>Bidder</u>	s Submitting More Than One Bid
	s submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms rence.
	The bid submitted for letting item contains the Form A disclosures or Certification Statement and the Form B disclosures. The following letting items incorporate the said forms by reference:

### **RETURN WITH BID/OFFER**

### 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)
(30 ILCS 500). Vendors desiring to enter and potential conflict of interest information the publicly available contract file. This ended contracts. A publicly traded contact of the requirements set for	rinto a contract with the Ston as specified in this Disc Form A must be complete ompany may submit a rth in Form A. See Disclo	
DISCL	OSURE OF FINANCIAL	<u> INFORMATION</u>
terms of ownership or distributive incom \$106,447.20 (60% of the Governor's sal separate Disclosure Form A for each	e share in excess of 5%, o ary as of 7/1/07). (Make coindividual meeting these	elow has an interest in the BIDDER (or its parent) in or an interest which has a value of more than opies of this form as necessary and attach a requirements)
FOR INDIVIDUAL (type or print infor	mation)	
NAME:		
ADDRESS		
Type of ownership/distributable in	ncome share:	
stock sole proprietor: % or \$ value of ownership/distributal		ship other: (explain on separate sheet):
		r "No" to indicate which, if any, of the following ny question is "Yes", please attach additional pages
(a) State employment, currently or	in the previous 3 years, inc	cluding contractual employment of services.  YesNo
If your answer is yes, please an	swer each of the following	
<ol> <li>Are you currently an off Highway Authority?</li> </ol>	icer or employee of either t	the Capitol Development Board or the Illinois Toll YesNo
2. Are you currently appo	inted to or employed by a	any agency of the State of Illinois? If you are

agency for which you are employed and your annual salary.

currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$106,447.20, (60% of the Governor's salary as of 7/1/07) provide the name the State

### **RETURN WITH BID/OFFER**

3.	If you are currently appointed to or employed by any agency of the S salary exceeds \$106,447.20, (60% of the Governor's salary as of 7 (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of the salary of the Governor	7/1/07) are you entitled to receive n, partnership, association or
4.	If you are currently appointed to or employed by any agency of the S salary exceeds \$106,447.20, (60% of the Governor's salary as of 7 or minor children entitled to receive (i) more than 15 % in the aggrincome of your firm, partnership, association or corporation, or (ii) a the salary of the Governor?	7/1/07) are you and your spouse regate of the total distributable
	oyment of spouse, father, mother, son, or daughter, including contractious 2 years.	
If your ans	wer is yes, please answer each of the following questions.	YesNo
1.	Is your spouse or any minor children currently an officer or employee Board or the Illinois Toll Highway Authority?	e of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appagency of the State of Illinois, and his/her annual salary exceed Governor's salary as of 7/1/07) provide the name of your spouse a of the State agency for which he/she is employed and his/her annual	pointed to or employed by any ds \$106,447.20, (60 % of the ind/or minor children, the name
3.	If your spouse or any minor children is/are currently appointed to or State of Illinois, and his/her annual salary exceeds \$106,447.20, (60 as of 7/1/07) are you entitled to receive (i) more then 71/2% of the tofirm, partnership, association or corporation, or (ii) an amount in Governor?	0% of the salary of the Governor otal distributable income of your
4.	If your spouse or any minor children are currently appointed to or e State of Illinois, and his/her annual salary exceeds \$106,447.20, (60 7/1/07) are you and your spouse or minor children entitled to rec aggregate of the total distributable income of your firm, partnership (ii) an amount in excess of 2 times the salary of the Governor?	% of the Governor's salary as of eive (i) more than 15 % in the
		YesNo
` unit of	ve status; the holding of elective office of the State of Illinois, the gove local government authorized by the Constitution of the State of Illinoi currently or in the previous 3 years.	
	onship to anyone holding elective office currently or in the previous 2 gradual terms.	years; spouse, father, mother, YesNo
Ameri of the	ntive office; the holding of any appointive government office of the Staca, or any unit of local government authorized by the Constitution of t State of Illinois, which office entitles the holder to compensation in exacharge of that office currently or in the previous 3 years.	he State of Illinois or the statutes
` '	onship to anyone holding appointive office currently or in the previous daughter.	2 years; spouse, father, mother, YesNo
(g) Emplo	syment, currently or in the previous 3 years, as or by any registered lo	bbyist of the State government. YesNo

# **RETURN WITH BID/OFFER**

(h)	Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter.  YesNo					
(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.  YesNo					
(j)	Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.					
	Yes No					
	APPLICABLE STATEMENT					
Th	is Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page.					
С	Completed by:					
	Signature of Individual or Authorized Representative Date					
	NOT APPLICABLE STATEMENT					
	ave determined that no individuals associated with this organization meet the criteria that would quire the completion of this Form A.					
Th	This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.					
	Signature of Authorized Representative Date					

# **RETURN WITH BID/OFFER**

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name					
Legal Address					
City, State, Zip					
Telephone Number	1	Email Address	Fax	Number (if available	:)
Disclosure of the information LCS 500). This information oids in excess of \$10,000, ar	shall become part	of the publicly availab			
DISCLOSURE	OF OTHER CON	TRACTS AND PROC	UREMENT REL	ATED INFORM	<u>ATION</u>
1. Identifying Other Contropending contracts (including Illinois agency: Yes_ If "No" is checked, the bid	g leases), bids, pro No	oposals, or other ongoi	ng procurement	relationship wit	h any other State of
2. If "Yes" is checked. Ide descriptive information such FORM INSTRUCTIONS:					
	THE FOLLOW	WING STATEMENT M	UST BE CHECK	KED	
	- (	Signature of Authorized Rep	resentative		Date

#### **RETURN WITH BID**

# **SPECIAL NOTICE TO CONTRACTORS**

The following requirements of the Illinois Department of Human Rights' Rules and Regulations 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 Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.

# **RETURN WITH BID**



Contract No. 76C55 ST CLAIR County Section 82-1-1HB Route FAI 70 District 8 Construction Funds

PART I. IDENTIFIC	CATION								Distri	ici o	OOM	ti detio		unus	•			
Dept. Human Right	ts #						_ Dur	ation o	f Proje	ect:								
Name of Bidder: _																		
PART II. WORKFO A. The undersigned which this contract wo projection including a	d bidder h	as analyz e perform	ed mir ed, an	d for th d fema	ne locati	ions fro	m whic	h the b	idder re	cruits	employe	ees, and h	erel	oy subm e allocat	its the foll ted to this TABLE	owir con B	ng workfo tract:	orce
		TOTA	AL Wo	rkforce	Projec	tion for	Contra	ıct						C	CURRENT TO BE			S
				MIN	ORITY I	EMPLO	YEES			TRA	AINEES				TO CO	TNC	RACT	
JOB CATEGORIES		OTAL OYEES	BL/	ACK F	HISP.	ANIC F	MIN		APPI TIC		TRA	HE JOB INEES		EMPL	OTAL OYEES			OYEES
OFFICIALS (MANAGERS)	IVI	F	IVI	Г	M	Г	M	F	M	Г	М	F		М	F		M	F
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
		BLE C	.!!.	- 1 0			•		7			FOR	DE	PARTM	IENT US	SE C	DNLY	
EMPLOYEES IN	_	TAL OYEES	BL	ACK	HISF	ANIC	MII	THER NOR.				-						
TRAINING	M	F	M	F	М	F	М	F	-									
APPRENTICES									1									
ON THE JOB TRAINEES																		

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

\* Other minorities are defined as Asians (A) or Native Americans (N).

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

Contract No. 76C55 ST CLAIR County Section 82-1-1HB Route FAI 70 District 8 Construction Funds

# PART II. WORKFORCE PROJECTION - continued

В.		the undersigned bidder is awarded this contract.	rould be employed in the
	The u	ndersigned bidder projects that: (number) ted from the area in which the contract project is located; and/or (number) new hires would be recruited from the area in	new hires would be
	office	or base of operation is located.	ii willon the bluder 3 pililopar
C.		led in "Total Employees" under Table A is a projection of numbers of persons to signed bidder as well as a projection of numbers of persons to be employed by	
		ndersigned bidder estimates that (number)ectly employed by the prime contractor and that (number) byed by subcontractors.	persons will be
PART	III. AFF	IRMATIVE ACTION PLAN	
A.	utiliza in any comm (geare utiliza	ndersigned bidder understands and agrees that in the event the foregoing minition projection included under <b>PART II</b> is determined to be an underutilization of job category, and in the event that the undersigned bidder is awarded this contencement of work, develop and submit a written Affirmative Action Plan included to the completion stages of the contract) whereby deficiencies in minority artion are corrected. Such Affirmative Action Plan will be subject to approval by epartment of Human Rights.	of minority persons or women ntract, he/she will, prior to ling a specific timetable nd/or female employee
B.	submi	ndersigned bidder understands and agrees that the minority and female emploited herein, and the goals and timetable included under an Affirmative Action Fipart of the contract specifications.	
Comp	any	·	
Addre	ss		
Γ		NOTICE REGARDING SIGNATURE	
		der's signature on the Proposal Signature Sheet will constitute the signing of this form obe completed if revisions are required.	. The following signature block
	Signatu	re: Title:	Date:
Instruct	ions:	All tables must include subcontractor personnel in addition to prime contractor personnel.	
Table A	, <del>-</del>	Include both the number of employees that would be hired to perform the contract work and (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainshould include all employees including all minorities, apprentices and on-the-job trainees to be expected.	nees. The "Total Employees" column
Table B	<b>.</b> -	Include all employees currently employed that will be allocated to the contract work including an currently employed.	y apprentices and on-the-job trainees
Table C	; -	Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.	
			BC-1256 (Rev. 12/11/07)

# **RETURN WITH BID**

Contract No. 76C55 ST CLAIR County Section 82-1-1HB Route FAI 70 District 8 Construction Funds

# PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)		
	Firm Name	
(IF A CO-PARTNERSHIP)		
,		
		Name and Address of All Members of the Firm:
-		
-		
	Corporate Name	
	Бу	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
(IF A CORPORATION)	<b>.</b>	
(IF A JOINT VENTURE, USE THIS SECTION	Attest	Signature
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
	Corporate Name	
	Ву	Signature of Authorized Representative
		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
(IF A JOINT VENTURE)	Attest	
		Signature
	Business Address	
If more than two parties are in the joint venture	e inlease attach an ac	Iditional signature sheet

# **Return with Bid**



# Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

			Item No.
			Letting Date
KNOW ALL MEN BY THESE PRES	ENTS, That We		
as PRINCIPAL, and			
,	-		as SURETY, are
specified in Article 102.09 of the "St	andard Specifications for R be paid unto said STATE	load and Bridge Constru	um of 5 percent of the total bid price, or for the amount action" in effect on the date of invitation for bids, whichever ayment of which we bind ourselves, our heirs, executors,
	gh the Department of Trar		ne PRINCIPAL has submitted a bid proposal to the rovement designated by the Transportation Bulletin Item
and as specified in the bidding and after award by the Department, the including evidence of the required performance of such contract and f failure of the PRINCIPAL to make th to the Department the difference no	contract documents, submit PRINCIPAL shall enter into insurance coverages and for the prompt payment of the required DBE submission at to exceed the penalty here to with another party to perf	it a DBE Utilization Plan to a contract in accordar providing such bond as labor and material furning or to enter into such contreof between the amoun	CIPAL; and if the PRINCIPAL shall, within the time that is accepted and approved by the Department; and if, noe with the terms of the bidding and contract documents a specified with good and sufficient surety for the faithful ished in the prosecution thereof; or if, in the event of the ntract and to give the specified bond, the PRINCIPAL pays at specified in the bid proposal and such larger amount for by said bid proposal, then this obligation shall be null and
paragraph, then Surety shall pay the	e penal sum to the Departm the Department may bring	ent within fifteen (15) day an action to collect the a	with any requirement as set forth in the preceding ys of written demand therefor. If Surety does not make full amount owed. Surety is liable to the Department for all its a whole or in part.
In TESTIMONY WHEREOF, t	the said PRINCIPAL and the	e said SURETY have ca	used this instrument to be signed by
their respective officers this	day of		A.D.,
PRINCIPAL		SURETY	(
(Company Na	ame)		(Company Name)
D	,	D	
By(Signatu	re & Title)	By:	(Signature of Attorney-in-Fact)
	Notary Cert	ification for Principal and	1 Surety
STATE OF ILLINOIS,	110001		
County of			
l,		, a Notary Pu	ublic in and for said County, do hereby certify that
	(Inpart names of individual	and	DINCIDAL & CUPETV
	(Insert names of individuals		,
	this day in person and ackr		cribed to the foregoing instrument on behalf of PRINCIPAL that they signed and delivered said instrument as their free
Given under my hand and not	arial seal this	day of	A.D
My commission expires			
			Notary Public
	Signature and Title line belo	ow, the Principal is ensu	file an Electronic Bid Bond. By signing the proposal and uring the identified electronic bid bond has been executed ons of the bid bond as shown above.
Electronic Bid Bond ID#	Company / Bidder	Name	Signature and Title
בוסטנוסוווס בות בסוות וביד	Company / Diddel	Hallio	Oignature and Title

# 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. 76C55 ST CLAIR County Section 82-1-1HB Route FAI 70 District 8 Construction Funds



# Illinois Department of Transportation

# NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., March 5, 2010. 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 the 10:00 a.m. cut off time.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 76C55 ST CLAIR County Section 82-1-1HB Route FAI 70 District 8 Construction Funds

Removal of the existing structure and replacement with a 2-span, 1 @ 133'-0", 1 @ 163'-0" bridge carrying Exchange Avenue over I-55, pavement reconstruction, ramp modifications, retaining wall construction and other work all on I-55/I-70 in East St. Louis (SN 082-0378).

- 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

Gary Hannig, Secretary

# INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

# Adopted January 1, 2010

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-07) (Revised 1-1-10)

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# STATE OF ILLINOIS

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# SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2007, 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 FAI Route 70; Section 82-1-1HB; St. Clair County; Contract No. 76C55 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**

<u>Exchange Avenue</u>: This improvement begins at Station 10+62.50 and ends at Station 23+00.00 on Exchange Avenue. The gross length of improvement along Exchange Avenue is 875.50 feet (0.166 miles), and the net length of the improvement is 691.36 feet (0.131 miles), all of which is located in the city of East Louis and in St. Clair County, Illinois.

<u>Southbound I-55, Ramp O</u>: This improvement begins at Station 10+06.39 and ends at Station 24+23.97 on southbound I-55, Ramp O. The length of improvement along southbound I-55, Ramp O is 1417.58 feet (0.268 miles), all of which is located in the city of East Louis and in St. Clair County, Illinois.

 $7^{th}$  Street: This improvement begins at Station 12+80.00 and ends at Station 16+36.00 on  $7^{th}$  Street. The length of improvement along  $7^{th}$  Street is 356 feet (0.067 miles), all of which is located in the city of East St. Louis and in St. Clair County, Illinois.

9<sup>th</sup> Street: This improvement begins at Station 3+90.00 and ends at Station 5+60.63 on 9<sup>th</sup> Street. The length of improvement along 9<sup>th</sup> Street is 170.63 feet (0.032) miles), all of which is located in the city of East St. Louis and in St. Clair County, Illinois.

<u>Bowman Access Road</u>: This improvement begins at Station 0+00.00 and ends at Station 19+60.34 on Bowman Access Road. The length of improvement along Bowman Access Road is 1960.34 feet (0.371) miles), all of which is located in the city of East St. Louis and in St. Clair County, Illinois.

<u>CSX Access Road:</u> This improvement begins at Station 1+45.51 and ends at Station 17+68.36 on CSX Access Road. The length of improvement along CSX Access Road is 1622.85 feet (0.307) miles), all of which is located in the city of East St. Louis and in St. Clair County, Illinois.

<u>CSX Access Road Spur:</u> This improvement begins at Station 0+00.00 and ends at Station 2+80.75 on CSX Access Road Spur. The length of improvement along CSX Access Road Spur is 280.75 feet (0.053) miles), all of which is located in the city of East St. Louis and in St. Clair County, Illinois.

# **DESCRIPTION OF PROJECT**

This improvement consists of the removal and replacement of the Exchange Avenue Bridge with approaches, Exchange Avenue, and Ramp O along Interstate Route 55 in St. Clair County, Illinois. Work includes construction of the Exchange Avenue Bridge with an integral retaining wall to the north abutment. Ramp P is to be removed with this contract and relocated under separate contract. Work also includes roadway pavement construction, embankment, grading, roadway drainage, pavement marking, seeding, traffic control and protection, and all incidental and collateral work necessary to complete the improvements as shown on the plans and as described herein.

### MONTHLY LABOR SUMMARY AND ACTIVITY REPORTING SYSTEM

Effective: 1-1-1995 Revised June 2001

I. Monthly Labor Summary Report, Form SBE 148

The <u>prime contractor and each first and second tier sub-contractor</u>, (hereinafter referred to as "subcontractor") shall submit a certified Monthly Labor Summary Report directly to the District Engineer.

This report is in lieu of submittal of the Monthly Workforce Analysis Report, Form SBE 956.

This report must be received in District Eight no later than the tenth day of the next month.

This Report shall be submitted by the prime contractor and each subcontractor, for each consecutive month, from the start, to the completion of their work on the contract.

The data source for this Report will be a summation of all personnel and hours worked on each subject contract for the month based on weekly payrolls for that month.

The Monthly Labor Summary Report is required to be submitted in one of the following formats:

- a.) For contractors having IDOT contracts valued in the aggregate at \$250,000 or less, the report may be typed or clearly handwritten using Form SBE 148 for submittal to the District Engineer for District Eight.
- b.) For contractors having IDOT contracts valued in the aggregate at more than \$250,000, the report must be submitted in a specific "Fixed Length Comma Delimited ASCII Text File Format". The subject file format is detailed on the next page. Submittal of this file may be by 3.5 inch disk, modem, or by e-mail.
- II. Monthly Contract Activity Report, Form SBE 248

The prime contractor and each subcontractor shall submit a monthly report directly to the District Engineer reflecting their contract activity on all Illinois Department of Transportation contracts they have in force in District Eight.

This report shall be submitted for each consecutive month, from the start, to the completion of all contracts in District Eight.

The report must be received in the District Office no later than the tenth day of the next month.

Monthly Labor Summary and Activity Reporting System Codes and Formats

Indicated below for your reference are the Employee Codes and File Formats required for this system.

I.) Monthly Labor Summary Report, Form SBE 148

The following employee codes are to be used to identify each individual on the Summary Report:

1. **Gender: M** - Male **F** - Female

2. Ethnic Group: 1 - White 2 - Black 3 - Hispanic
 4 - American Indian/Alaskan Native 5 - Asian/Pacific Islander

3. Work Classification: OF - Official SU - Supervisor FO - Foremen CL - Clerical CA - Carpenter EO - Operator ME - Mechanic TD - Truck Driver IW - Ironworker PA - Painter OT - Other

**EL** - Electrician **PP** - Pipefitter **TE** - Technical **LA** - Laborer

CM - Cement Mason

**4. Employee Status**: **O** - Owner Operator **J** - Journeyman

**C** - Company **A** – Apprentice **T** - Trainee

Specific "Fixed Length Comma Delimited ASCII File Format"

Order	Field Name	Type	<u>Size</u>
1	Contractor Number	Α	4
2	Contractor Reference Number	Α	6
3	Contract Number	Α	5
4	Period (07/28/2000)	D	10
5	SSN (111-11-1111)	Α	11
6	Name	Α	40
7	Gender	Α	1
8	Ethnic Group	Α	1
9	Work Classification	Α	1
10	Employee Status	Α	1
11	Total Hours (0000060.00)	N	10

File Name Conventions: (Contractor Number + Report Month/Year).Txt i.e. 20001298.Txt

II.) Monthly Contract Activity Report, Form SBE 248

The following activity codes are to be used to identify the contractor's contract status each month on the Monthly Activity Report, Form SBE 248:

A. Contract Status: 1 - Not Started 2 - Active 3 - No Work

4 - Suspended 5 - Complete

Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

All prime and subcontractors having contracts in the aggregate exceeding \$250,000 must provide a "Fixed Length Comma Delimited ASCII File" for approval prior to the start of construction.

This Special Provision must be included in each subcontract agreement.

The Department of Transportation is requesting disclosure of information necessary to accomplish the statutory purpose as outlined under 23CFR part 230 and 41CFR part 60.4 and the Illinois Human Rights Act. Disclosure of this information is REQUIRED. Failure to comply with this special provision may result in the withholding of payments to the contractor, and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

This Special Provision must be included in each subcontract agreement.

### **EMBANKMENT**

Revised November 1, 2006

Material which is proposed for use by the Contractor to be used for embankment construction must be inspected and approved by the District Geotechnical Engineer. In order to be approved for use as embankment material, it must meet all applicable requirements of Sections 202, 203, 204, 205, and 502 of the Standard Specifications and meet the following requirements:

- 1. It must fall in one of the following Highway Research Board Classifications: A-1, A-2, A-3, A-4, A-6, or A-7-6.
- 2. It shall have a Liquid Limit of 49 or less.
- 3. Any A-4, A-6 or A-7-6 material to be used as borrow for embankment construction shall not have an organic content greater than 7%.
- 4. Classification of the material for points 1 and 2 shall be determined in accordance with the latest AASHTO Designation: M 145.
- 5. When tested for density in place, any soil classified as an A-4 shall not contain more than 100% of optimum moisture content determined according to AASHTO T-99.

The outside 9 feet (3 meters) of those portions of the embankment which will be permanently exposed in the completed roadway shall be constructed using native materials of a classification that will support vegetation and contain a plasticity index of 12 or greater as directed by the Engineer.

The lime modified soil layer shall be constructed with a minimum of 18 inches (450 mm) of "reactive" soil as defined by Article 1009.02 of the Standard Specifications.

### **SEEDING**

Effective: January 1, 2009

Revise the following seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

"Table 1 - SEEDING MIXTURES				
Class – Type		Seeds	lb/acre (kg/hectare)	
2 Roadside Mixture 7/		Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	100 (110)	
		Perennial Ryegrass	50 (55)	
		Creeping Red Fescue	40 (50)	
		Red Top	10 (10)	
2A	Salt Tolerant Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	60 (70)	
		Perennial Ryegrass	20 (20)	
		Red Fescue (Audubon, Sea Link, or Epic)	30 (20)	
		Hard Fescue (Rescue 911, Spartan II, or Reliant IV)	30 (20)	
		Fults Salt Grass 1/	60 (70)"	

Revise Note 7 of Table 1 – Seeding Mixtures of Article 250.07 of the Standard Specifications to read:

"7/ In Districts 1 through 6, the planting times shall be April 1 to June 15 and August 1 to November 1. In Districts 7 through 9, the planting times shall be March 1 to June 1 and August 1 to November 15. In District 8 when Class 2 seeding is done between March 1st and June 1st, the seed mixture shall also include 48 pounds per acre (55kg/ha) of Spring Oats. When Class 2 seeding is done between August 1st and November 15th, the seed mixture shall also include 56 pounds per acre (63kg/ha) of Balboa Farm Rye or 60 pounds per acre (67kg/ha) of Winter Wheat. Seeding may be performed outside these dates provided the Contractor guarantees a minimum of 75 percent uniform growth over the entire seeded area(s) after a period of establishment. Inspection dates for the period of establishment will be as follows: Seeding conducted in Districts 1 through 6 between June 16 and July 31 will be inspected after April 15 and seeding conducted between November 2 and March 31 will be inspected after September 15. Seeding conducted in Districts 7 through 9 between June 2 and July 31 will be inspected after April 15 and seeding conducted between November 16 and February 28 will be inspected after September 15. The guarantee shall be submitted to the Engineer in writing prior to performing the work.

After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

Revise Table II of Article 1081.04(c)(6) of the Standard Specifications to read:

		TAI	BLE II			
	Hard		Pure		Secondary *	
	Seed	Purity	Live	Weed	Noxious Weeds	
	%	%	Seed %	%	No. per oz (kg)	
Variety of Seeds	Max.	Min.	Min.	Max.	Max. Permitted	Notes
Alfalfa	20	92	89	0.50	6 (211)	1/
Clover, Alsike	15	92	87	0.30	6 (211)	2/
Red Fescue, Audubon	0	97	82	0.10	3 (105)	-
Red Fescue, Creeping	-	97	82	1.00	6 (211)	-
Red Fescue, Epic	-	98	83	0.05	1 (35)	-
Red Fescue, Sea Link	-	98	83	0.10	3 (105)	-
Tall Fescue, Blade Runner	-	98	83	0.10	2 (70)	-
Tall Fescue, Falcon IV	-	98	83	0.05	1 (35)	-
Tall Fescue, Inferno	0	98	83	0.10	2 (70)	-
Tall Fescue, Tarheel II	-	97	82	1.00	6 (211)	-
Tall Fescue, Quest	0	98	83	0.10	2 (70)	
Fults Salt Grass	0	98	85	0.10	2 ( 70)	-
Kentucky Bluegrass	-	97	80	0.30	7 (247)	4/
Oats	-	92	88	0.50	2 ( 70)	3/
Redtop	-	90	78	1.80	5 (175)	3/
Ryegrass, Perennial, Annual	-	97	85	0.30	5 (175)	3/
Rye, Grain, Winter	-	92	83	0.50	2 ( 70)	3/
Hard Fescue, Reliant IV	-	98	83	0.05	1 (35)	-
Hard Fescue, Rescue 911	0	97	82	0.10	3 (105)	-
Hard Fescue, Spartan II	-	98	83	0.10	3 (105)	-
Timothy	-	92	84	0.50	5 (175)	3/
Wheat, hard Red Winter	<u> </u>	92	89	0.50	2 ( 70)	3/"

Revise the first sentence of the first paragraph of Article 1081.04(c)(7) of the Standard Specifications to read:

"The seed quantities indicated per acre (hectare) for Prairie Grass Seed in Classes 3, 3A, 4, 4A, 6, and 6A in Article 250.07 shall be the amounts of pure, live seed per acre (hectare) for each species listed."

# **EXPANSION JOINTS**

Effective: April 10, 2003 Revised: November 1, 2006

Add the following paragraph after the first paragraph of Article 420.05(d)(2) of the Standard Specifications:

For expansion joints formed using dowel bar basket assemblies, the caps shall be installed on the alternating free ends of the bars.

# **OFFICE COPY MACHINE**

Effective: January 1, 1987 Revised: November 1, 2006

The copier specified in Article 670.02 shall meet the following specifications:

(1) Edge-to-edge copying.

- (2) Up to 11 in x 17 in (275 mm x 425 mm) size for copy-size capabilities.
- (3) A detachable platen cover in order to copy portions of large-bound documents.
- (4) A cabinet stand for the copier.

# **TELEPHONE ANSWERING MACHINE**

Effective: January 11, 1990 Revised: November 1, 2006

The telephone answering machine specified in Article 670.02 shall meet the following minimum specifications:

- (1) Time/Day Indication A computerized voice records the date and time that each message is received.
- (2) Beeperless Remote Any remote touch-tone phone can be used to review all messages by the use of an access code.
- (3) Digital System Pre-recorded and received messages are managed on separate cassettes.
- (4) Conversation Record The operator can record any phone call.
- (5) Remote Turn-On Any remote touch-tone phone can be used to turn on the answering machine by the use of an access code.
- (6) Full Message The Caller is advised if the memory is insufficient to record the call.
- (7) Battery Back-Up The settings and messages are protected from power failures.
- (8) Two-Line Capacity Projects that have a second phone line through the provision of a 670.05 Engineer's Field Laboratory shall provide a single phone answering machine that services both lines.

Prior to the purchase of this item, the Contractor shall submit specifications for the proposed machine to the Engineer for his approval.

# TRAFFIC CONTROL PLAN

Effective: July 12, 1993 Revised: May 12, 1997

Traffic control shall be in accordance with 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 of 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:

In addition, the following Special Provision(s) will also govern traffic control for this project:

Traffic Control and Protection
Interstate Weekend Closure, Special
Traffic Control Surveillance
Changeable Message Sign
Construction and Maintenance Sign Supports

### CONSTRUCTION AND MAINTENANCE SIGN SUPPORTS

Effective: April 21, 1981 Revised: November 1, 2006

This work shall be done according to Section 1106 of the Standard Specifications and Highway Standard 701901 except as herein modified.

All construction signs mounted on permanent support for use in temporary traffic control having an area of 10 square feet (1 square meter) or more shall be mounted on two 4 in x 4 in (100 mm x 100 mm) or two 4 in x 6 in (100 mm x 150 mm) wood posts.

Type A metal post (two for each sign) conforming to Article 1006.29 of the Standard Specifications may be used in lieu of wood posts. Type A metal posts used for these signs may be unfinished.

This work shall not be paid for separately; but shall be considered included in the cost of the traffic control items in this contract.

# **MAINTENANCE OF ROADWAYS**

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

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

# TRAFFIC CONTROL AND PROTECTION

Traffic Control and Protection shall be provided as called for in the plans, these Special Provisions, applicable Highway Standards, applicable sections of the Standard Specifications, or as directed by the Engineer.

Traffic Control and Protection shall be provided as called for in the plans, these Special Provisions, applicable Highway Standards, applicable sections of the Standard Specifications, or as directed by the Engineer.

The governing factor in the execution and staging of work for this project is to provide the motoring public with the safest possible travel conditions along the roadway through the construction zone. The Contractor shall arrange his operations to keep the closing of any lane of the roadway to a minimum.

Traffic Control Devices include signs and their supports, temporary pavement markings, barricades with sand bags, channelizing devices, warning lights, arrow boards, flaggers, and any other device used for the purpose of regulating, detouring, warning or guiding traffic through or around the construction zone. Traffic Control Devices will also include any custom made detour signs that are specific to this contract, as well as mounting hardware, supports, sand bags, bases, and any other material used to properly install said signage.

The Contractor is required to conduct routine inspections of the worksite at a frequency that will allow for the prompt replacement of any traffic control device that has become displaced, worn or damaged to the extent that it no longer conforms to the shape, dimensions, color and operational requirements of the MUTCD, the Traffic Control Standards or will no longer present a neat appearance to motorists. A sufficient quantity of replacement devices, based on vulnerability to damage, shall be readily available to meet this requirement.

The Contractor shall be responsible for the proper location, installation and arrangement of all traffic control devices. Special attention shall be given to advance warning signs during construction operations in order to keep lane assignment consistent with barricade placement at all times. The Contractor shall immediately remove, cover or turn from the view of the motorists all traffic control devices which are inconsistent with detour or lane assignment patterns and conflicting conditions during the transition from one construction stage to another. When the Contractor elects to cover conflicting or inappropriate signing, materials used shall totally block out reflectivity of the sign and shall cover the entire sign. The method used for covering the signing shall meet with the approval of the Engineer.

The Contractor shall coordinate all traffic control work on this project with adjoining or overlapping projects, including barricade placement necessary to provide a uniform traffic detour pattern. When directed by the Engineer, the Contractor shall remove all traffic control devices, which were furnished, installed and maintained by him under this contract, and such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until specific authorization for relocation or removal is received from the Engineer.

The Contractor shall ensure that all traffic control devices installed by him are operational, functional and effective 24 hours a day, including Sundays and holidays.

<u>Signs</u>. All signs, except those referring to daily lane closures, shall be post mounted in accordance with Standard 702001 for all projects that exceed four days.

Prior to the beginning of construction operations, the Contractor will be provided a sign log of all existing signs within the limits of the construction zone. The Contractor is responsible for verifying the accuracy of the sign log. Throughout the duration of this project, all existing traffic signs shall be maintained by the Contractor. All provisions of Article 107.25 of the Standard Specifications shall apply, except the third paragraph shall be revised to read: "The Contractor shall maintain, furnish and replace at his own expense, any traffic sign or post which has been damaged or lost by the Contractor or a third party."

Whenever any vehicle, equipment, workers or their activities infringe on the shoulder or within 4.5 m (15 feet) of the traveled way and the traveled way remains unobstructed, then the applicable Traffic Control Standard shall be 701006. "Shoulder Work Ahead" sign (W21-5(0)-48) shall be used in lieu of the "Workers" sign (W21-1 or W21-1a).

<u>Barricades</u>. Any drop off greater than 75 mm (3 inches), but less than 150 mm (6 inches) within 2.5 m (8 feet) of the pavement edge shall be protected by Type I or II barricades equipped with mono-directional steady burn lights at 30 m (100 feet) center to center spacing. If the drop off within 2.5 m (8 feet) of the pavement edge exceeds 150 mm (6 inches), the barricades mentioned above shall be placed at 15 m (50 feet) center to center spacing. Barricades that must be placed in excavated areas shall have leg extensions installed such that the top of the barricade is in compliance with the height requirements of Standard 702001.

All Type I and Type II barricades, drums, and vertical panels shall be equipped with a steady burn light when used during hours of darkness unless otherwise stated herein.

Check barricades shall be placed in work areas perpendicular to traffic every 300 m (1,000 feet), one per lane and per shoulder, to prevent motorists from using work areas as a traveled way. Two additional check barricades shall be placed in advance of each patch excavation or any hazard in the work area, the first at the edge of the open traffic lane and the second centered in the closed lane. Check barricades shall be Type I or II and equipped with a flashing light.

<u>Public Convenience and Safety</u>. At the preconstruction meeting, the Contractor shall furnish the name of the individual in his direct employ who is to be responsible for the installation and maintenance of the Traffic Control for this project. The Contractor shall also provide a telephone number where a responsible individual can be contacted on a 24-hour-a-day basis to receive notification of any deficiencies regarding traffic control and protection. The Contractor shall dispatch men, materials and equipment to correct any such deficiencies. The Contractor shall respond to any call from the Department concerning any request for improving or correcting traffic control devices and begin making the requested repairs within two hours from the time of notification.

Personal vehicles shall not park within the right-of-way except in specific areas designated by the Engineer.

No road closure, lane closures or restriction shall be permitted without prior approval by the Engineer.

<u>Traffic Control Details and Highway Standards</u>. All work shall conform to the Traffic Control details shown in the plan and the following Highway Standards:

OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
OFF-RD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24 " (600 mm) FROM PAVEMENT EDGE
OFF-RD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24 " (600 mm) FROM PAVEMENT EDGE
OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
LANE CLOSURE, 2L, 2W, MOVING OPERATIONS, DAY ONLY
APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
LANE CLOSURE, FREEWAY/EXPRESSWAY
LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP FOR SPEEDS >= 45 MPH
LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY, FOR SPEEDS 45 MPH TO 55 MPH
LANE CLOSURE, MULTILANE, FOR SPEEDS 45 MPH TO 55 MPH
LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS, SPEED >= 45 MPH
TWO LANE CLOSURE FREEWAY/EXPRESSWAY
RAMP CLOSURE FREEWAY/EXPRESSWAY
PARTIAL EXIT RAMP CLOSURE FREEWAY/EXPRESSWAY
URBAN LANE CLOSURE, 2L, 2W, UNDIVIDED
URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN
URBAN LANE CLOSURE, MULTILANE INTERSECTION
LANE CLOSURE MULTILANE 1W OR 2W CROSSWALK OR SIDEWALK CLOSURE
TRAFFIC CONTROL DEVICES
TEMPORARY CONCRETE BARRIER

Notice of Detour. Two weeks prior to closing a road and detouring traffic, the Contractor shall submit a completed "Road Construction Information" form (OPER 2410) to the Department and the city of East St. Louis.

<u>Method of Measurement</u>. This item of work will be measured on a lump sum basis for furnishing, installing, maintaining, replacing, relocating and removing all traffic control devices and detour signage used for the purpose of regulating, warning, directing or diverting traffic during the construction or maintenance of this improvement as required in the plans, specifications, listed Highway Standards, and these Special Provisions. Applications of individual Highway Standards will not be measured separately.

<u>Basis of Payment</u>. This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION and no additional compensation will be allowed. Applications of individual Highway Standards will not be paid for separately but shall be included in the contract unit price for TRAFFIC CONTOL AND PROTECTION. The salvage value of the materials removed shall be reflected in the bid price for this item.

# INTERSTATE WEEKEND CLOSURE, SPECIAL

This work shall consist of furnishing, installing, maintaining, monitoring, and complete removal of all traffic control necessary to successfully and safely detour traffic around a weekend Interstate closure.

Interstate I-55/70 will be closed for one weekend to allow the demolition of the Exchange Avenue Bridge and the L&N Railroad Bridge.

The weekend closure will not be allowed if the proposed weekend includes, or is adjacent to the 7 major holiday periods specified in section 107.09. These holidays include New Year's Day, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

The Interstate closure will not be allowed during major events in the St. Louis Metro area. These events include, but are not limited to, St. Louis Cardinals' baseball home games, St. Louis Rams' football home games, St. Louis Blues home games, the Fair St. Louis Celebration, the Mardi Gras Parade, the Big Muddy Blues' Festival, Gateway International Raceway Events, and other possible events not listed here. The final determination on the acceptability of a weekend to do the closure will rest with the Engineer.

The Contractor shall notify the Engineer 3 weeks (21 days) prior to the anticipated weekend closure. 2 weeks (14 days) prior to the anticipated shutdown, the Contractor shall have Changeable Message Signs (CMS) in place according to Interstate 55/70 Weekend Closure Plan Sheets 1-15 to alert the motoring public to the upcoming closure. These messages shall be coordinated with IDOT's Traffic Management Center (TMC) at 618-346-3279. IDOT will be responsible for all media releases regarding the closure.

Interstate I-55/70 will be closed from the I-55/70 and I-64 Interchange in East St. Louis to northeast of the I-55/70 and IL 203 Interchange. Detour signing and specific lane closures are detailed in the plan set on Interstate 55/70 Weekend Closure Plan Sheets 1-15. These drawings show the appropriate traffic control standards to be used. Any variation from the plans shown shall be approved by the engineer.

The Interstate may be completely closed to traffic from 9:00 p.m. Friday evening to 5:00 a.m. Monday morning.

The Contractor will be allowed to begin traffic control set up at 6:00 p.m. Friday Evening according to Interstate 55/70 Weekend Closure Plan Sheets 1-15, as long as there is no direct impact to the p.m. traffic leaving St. Louis.

Contractor shall field-mark intended locations of signs a minimum of 7 days prior to the scheduled closure. The Resident Engineer must approve the marked locations before the contractor begins to install the signs. Sign that are installed prior to 6:00 p.m. of the Friday Evening of the scheduled closure must be completely covered until needed.

All devices used to provide traffic control shall be NCHRP 350 Compliant.

The Contractor shall designate a representative that is solely responsible for the traffic control related to this item. This representative shall be able to be contacted and respond accordingly at all times during the closure. Due to the continuous work schedule, it is anticipated the appointed representative may experience shift change. This is acceptable, as long as the engineer is notified of the representative's shift schedule before the closure begins.

Liquidated Damages. Should the Contractor, or in case of default, the surety, fail to open up the Interstate 55/70 mainline pavement, both northbound and southbound, by 5:00 a.m. on the first Monday following the weekend closure required for the Exchange Avenue Bridge and L&N Railroad Bridge demolition, the Department, the traveling public, state and local police and governmental authorities will be damaged in various ways, including but not limited to, increased construction administration cost, potential liability, traffic and traffic flow regulation cost, traffic congestion and motorist delay, with its resulting cost to the traveling public. These damages are not reasonably capable of being computed or quantified. Therefore, the Contractor will be charged with liquidated damages specified in the amount of \$2,500.00 for every fifteen (15) minute increment beginning strictly at 5:00 a.m. on the first Monday morning following the weekend closure, with liquidated damages continuing at 5:15 a.m., 5:30 a.m. and so on. It shall be the responsibility of the Engineer to determine the quantity of excess closure time.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per LUMP SUM for INTERSTATE WEEKEND CLOSURE, SPECIAL, which will be payment in full for furnishing, maintaining, and removing traffic control for the closure described.

# **INTERMEDIATE COMPLETION DATES**

The Contractor shall meet the following intermediate completion dates for the following work items:

April 15, 2010: Relocation of sewers affected by removal of the existing Exchange Avenue bridge substructure. Successful completion of the relocation efforts shall be as such as to not create backups or flooding to the existing system to remain during the interim.

June 1, 2010: Construction of the Bowman Yard Access Road between 9<sup>th</sup> Street and Exchange Avenue. Successful completion will be determined by the opening of the roadway to maintenance yard personnel and vehicles.

May 1, 2010: Relocation of all ITS facilities on the project resulting in a successful turn-on inspection of wireless communication devices with communication capability at the TMC.

Contractor's liability for failure to meet these dates shall be as specified in Section 108 of the Standard Specifications.

### MAINTENANCE OF BOWMAN YARD ACCESS ROAD

The Contractor shall maintain the aggregate portion of the Bowman Yard Access Road throughout the duration that the access road is open to Bowman Maintenance Yard traffic. The limits of the aggregate portion are from Station 13+50 to 9<sup>th</sup> Street (approximately 550 feet).

The Engineer will conduct periodic inspections to determine if repairs are required to maintain the road. If repairs are necessary, the Engineer will notify the Contractor to make the repairs. The Contractor must make all required repairs within 24 hours of notification by the Engineer.

This work will be paid for according to Article 109.04 of the Standard Specifications.

# STATUS OF UTILITIES TO BE ADJUSTED

NAME AND ADDRESS OF UTILITY	TYPE	LOCATION	ESTIMATED DATE RELOCATION COMPLETED
Illinois American Water 100 Water Works Drive PO Box 24040 Belleville, IL 62223-9040 Brent O'Neill 618-239-3253	Water	Illinois American Water has three conflicts. A 20" main running N from Sta. 11+00 N. 7 <sup>th</sup> St. N approx. 800' then E for approx. 500'to I-55 then N approx. 200'. A 24" line running N from Sta. 11+00 N. 7 <sup>th</sup> St. N approx. 800' then NE approx.250' to Winstanley Ave. then E for approx. 400'. All are in conflict with Ramp O. And an 8" line on Exchange Ave. from Approx. Stas. 10+62 - 16+00. All mains to be relocated and removed.	10/01/2010
AT&T Illinois 2250 North Jasper St. Decatur, IL 62526 Tom Long 217-429-8596	Telephone	AT&T has five conflicts. Two aerial, copper& fiber cables from Approx. Sta. 16+00 N. 7 <sup>th</sup> St. N approx. 300' then E approx.500', An aerial cable from the alley between N.7 <sup>th</sup> St. and N. 8 <sup>th</sup> St. @ Exchange & Winstanley Aves. N for approx.450', An aerial cable on 7 <sup>th</sup> St. from Approx. Stas. 11+00 - 16+00, A buried cable on the W side of 7 <sup>th</sup> St. E approx. 100' to the IDOT Bowman Yard, and an aerial cable crossing and 3 poles lead east of Interstate 55/70 @ Approx. Sta. 19+95. All to be relocated.	7/1/2010

Charter Communications 941 Charter Commons Town and Country, MO 63017 Garry Warren 618-779-4179	CATV	Charter Communications has three conflicts. An aerial cable from Approx. Sta. 16+00 N. 7 <sup>th</sup> St. N approx. 300' then E approx.500', An aerial cable from the alley between N.7 <sup>th</sup> St. and N. 8 <sup>th</sup> St. between Exchange and Winstanley Aves. N for approx. 450', And an aerial cable from Approx. Stas. 11+00 - 16+00 on 7 <sup>th</sup> St. All to be relocated.	7/1/2010
Ameren IP-Electric 1050 West Blvd. PO Box 428 Belleville, IL 62220 Jason Klein 618-236-4309	Electric	Ameren has four conflicts. An aerial lead and 6 poles from Approx. Sta. 16+00 N. 7 <sup>th</sup> St. N approx. 300' then E approx.500', An aerial lead and 14 poles from Approx. Stas. 13+00 – 2+50 Bowman Access Yard Road, An aerial lead and 7 poles on the west side of N. 7 <sup>th</sup> St. from Approx. Stas. 11+00 - 16+00, And an aerial lead and 4 poles the feeds the Bowman Yard from 9 <sup>th</sup> and Exchange. All to be relocated	7/1/2010
Ameren IP-Gas 1050 West Blvd. PO Box 428 Belleville, IL 62220 Brian Kelly 618-267-1916	Gas	Ameren Gas has five conflicts. A 1.5" main crossing and parallel on 7 <sup>th</sup> street from Approx. Stas. 12+80 - 16+50, A 2" main from Approx. Stas. 11+00 - 14+00 Parallel on Exchange crossing Interstate 55/70 WB ramp, A 2" main crossing EB Interstate 55/70 at Sta. 75+50, A 2" main crossing Interstate 55/70 at sta. 77+95, And a 2" main from sta. 21+75 - 23+50 in conflict with Ramp O. All to be relocated.	7/1/2010

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 and 107.20 of the Standard Specifications for Road and Bridge Construction shall apply.

If any utility adjustment or removal has not been completed when required by the Contractor's operation, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's operations were affected.

# TREE REMOVAL FOR UTILITY ADJUSTMENT/RELOCATION

It may be necessary for the Contractor to schedule his tree removal operation in order to facilitate utility adjustments/relocations that are a result of this project, and thus impact the project schedule. This removal shall be done in conjunction with the special provision entitled "Status of Utilities to be Adjusted", and as directed by the Engineer.

This work shall be in accordance with Section 201 of the Standard Specifications.

Any cost incurred due to compliance with this special provision will not be paid for separately, but rather will be included in the cost for TREE REMOVAL (6 TO 15 UNIT DIAMETER), TREE REMOVAL (OVER 15 UNITS DIAMETER) or TREE REMOVAL ACRES.

### PILE EXTRACTION

<u>Description</u>. This item consists of the removal and satisfactory disposal of existing piles as specified herein and as directed by the Engineer. The holes left in the ground after pile removal must be completely filled with granular material. The concrete structures and footings supported over the piles will be removed and paid for separately.

The Contractor shall extract existing piles as shown on the contract drawings and as describe below:

Existing Retaining Wall "T": Extract all existing piles.

<u>Existing East Wingwall of South Abutment:</u> Extract all existing piles from the South end of East Wingwall to first construction joint (approximately 23'-3" long section of wingwall from the South end of the wall).

<u>Existing Plans</u>. See Appendix for original plans for the existing structures involved in this work. The original plans, however, may not show all modifications that have been made to the structures over the years. The completeness of these plans is not guaranteed and no responsibility is assumed by IDOT for their accuracy. Information is furnished for Contractor's convenience and is to be used solely at the Contractor's risk.

<u>Construction Requirements</u>. The removal of existing piles must be performed in accordance with applicable provisions of Section 501 of the Standard Specifications. The Contractor must submit a list of equipment and proposed method for removal and disposal of the existing piles for the Engineer's review.

All piles must be extracted to their full length and the holes left must be filled with FA1 or FA2 according to section 1000 of the Standard Specifications. All materials removed under this item will become property of the Contractor, and must be disposed of by the Contractor at his/her own expense in a manner satisfactory to the Engineer and in conformance with all governing laws, codes, ordinances or other regulations.

Prior to commencing work under this item, the Contractor must verify the location of existing utilities and adjacent facilities. Extraction of piles must be performed in such a manner so as not to cause any settlement or damage to the existing utilities and/or adjacent facilities. Any damage to existing utilities and/or adjacent facilities must be repaired by the Contractor at his/her own expense and in a manner satisfactory to the Engineer.

<u>Method of Measurement</u>. Pile Extraction will be measured for payment at the contract unit price per each pile extracted and disposed of off site.

<u>Basis of Payment</u>. This item will be paid for at the contract unit price per each for PILE EXTRACTION, which payment will constitute full compensation for all labor, materials, tools, and equipment required for removal and disposal of existing piles and filling of the holes with granular material as described herein, and as directed by the Engineer.

# **REMOVAL OF EXISTING STRUCTURES NO. 1**

<u>Description</u>. This item must consist of the removal and satisfactory disposal of existing Exchange Avenue Bridge over I-55 / I-70, Structure No. 082-0016, including bridge substructure, wingwalls, superstructure, concrete deck and asbestos overlay (if any) as detailed in the plans, described herein and according to Section 501 of the Standard Specifications, and as directed by the Engineer. The scope of this item must also include removal and disposal of miscellaneous items appurtenant to the structures, including but not limited to bridge railings, fence, expansion joint materials and anchorages, piles, drainage scuppers and down spouts, structural steel, reinforcing steel, bearings, existing conduits, conduit supports, electrical wires, junction boxes, traffic signals etc. The Contractor must submit a detailed procedure for removing the existing structures, to the Engineer for approval, prior to starting this Work.

The Contractor must take all necessary precautions in removing, handling, transporting and subsequent disposal of all materials removed containing asbestos. All such work must be performed in conformance with all governing laws, codes, ordinances or other regulations.

The Contractor shall remove existing substructure units, wingwalls and associated piles to the elevation as describe below:

<u>Existing North Abutment and Median Pier:</u> Remove existing North abutments and median Pier to the bottom existing footing elevation. All piles shall be removed to at least 1 ft below existing footing elevation.

<u>Existing South Abutment:</u> Remove existing South abutment to the top of existing footing elevation.

<u>Existing West Wingwall of North Abutment:</u> Remove existing West Wingwall of North Abutment to the bottom of existing footing elevation. All piles shall be removed at least 5 ft below existing footing elevation.

<u>Existing East Wingwall of North Abutment:</u> Remove existing East Wingwall of North Abutment to the bottom of existing footing elevation. All piles shall be removed at least 1 ft below existing footing elevation.

<u>Existing East Wingwall of South Abutment:</u> Remove existing East wingwall of South Abutment to the bottom of existing footing elevation. All piles shall be removed at least 1 ft below existing footing elevation.

<u>Existing West Wingwall of South Abutment:</u> Remove existing West wingwall of South Abutment to the bottom of existing footing elevation. All piles shall be removed at least 1 ft below existing footing elevation.

Pile Extraction is not included with this work. Pile Extraction will be completed as a separate pay item in accordance with Special Provision for Pile Extraction.

<u>Existing Plans</u>. See Appendix for original plans for the existing structures involved in this work. The original plans, however, may not show all modifications that have been made to the structures over the years. The completeness of these plans is not guaranteed and no responsibility is assumed by IDOT for their accuracy.

Information is furnished for Contractor's convenience and is to be used solely at the Contractor's risk.

<u>Construction Requirements</u>. The removal of existing structures must be performed according to Section 501 of the Standard Specifications. Materials that are required to be salvaged (if any) under the contract are listed in the plans. Materials to be salvaged must be carefully removed and stored near the project site at a location designated by the Engineer.

All removed materials containing asbestos must be stockpiled separately from other removed materials. All stockpiled materials containing asbestos must be hauled to an approved landfill disposal site. These materials must be wetted down and covered with an approved wetting material while stockpiled and being hauled away in trucks to prevent debris or dust from entering into the atmosphere.

Under no circumstances will the disposed material containing asbestos be permitted for use in recycling. The Contractor must keep records of removal, stockpiling, trucking and the landfill disposal site used, and submit such records to the Engineer.

<u>Method of Measurement</u>. No separate measurement will be made for removal of existing structures.

Excavation of earth necessary to perform the removal of existing structures will not be measured for payment.

Any existing piles which are to be removed and not cut-off will be measured for payment in accordance with the Special Provision for Pile Extraction.

<u>Basis of Payment</u>. This item will be paid for at a contract unit price Each for REMOVAL OF EXISTING STRUCTURES NO. 1, which payment must constitute full compensation for all labor, materials, tools and equipment required for removal and disposal of existing structures and incidental items, as detailed in the plans, described herein and as directed by the Engineer.

### **REMOVAL OF EXISTING STRUCTURES NO. 2**

<u>Description</u>. This item must consist of the removal and satisfactory disposal of existing Retaining Wall "T" located along 8th Street & I-55 / I-70 at North-East quadrant of existing Exchange Avenue bridge over I-55 / I-70 (Structure No. 082-0016). The scope of this item must include, but not limited to excavation, removal of existing concrete, reinforcing steel, miscellaneous steel embedded or attached thereto including electrical conduits, conduit supports, electrical wires, junction boxes, traffic signals, fencing, railings etc., as detailed in the plans, described herein and according to Section 501 of the Standard Specifications, and as directed by the Engineer. The Contractor must submit a detailed procedure for removing the existing structures, to the Engineer for approval, prior to starting this Work.

Pile Extraction is not included with this work. Pile Extraction will be completed as a separate pay item in accordance with Special Provision for Pile Extraction.

Existing Plans. See Appendix for original plans for the existing structures involved in this work.

The original plans, however, may not show all modifications that have been made to the structures over the years. The completeness of these plans is not guaranteed and no responsibility is assumed by IDOT for their accuracy. Information is furnished for Contractor's convenience and is to be used solely at the Contractor's risk.

<u>Method of Measurement</u>. No separate measurement will be made for removal of existing structures.

Excavation of earth necessary to perform the removal of existing structures will not be measured for payment.

Any existing piles which are to be removed and not cut-off will be measured for payment in accordance with the Special Provision for Pile Extraction.

<u>Basis of Payment</u>. This item will be paid for at a contract unit price each for REMOVAL OF EXISTING STRUCTURES NO. 2, which payment must constitute full compensation for all labor, materials, tools and equipment required for removal and disposal of existing structures and incidental items, as detailed in the plans, described herein and as directed by the Engineer.

## **REMOVAL OF EXISTING STRUCTURES NO. 3**

<u>Description</u>. This item must consist of the removal and satisfactory disposal of partial lengths of existing Retaining Wall "S2" located along I-55 / I-70 at South-West quadrant of existing Exchange Avenue bridge over I-55 / I-70 (Structure No. 082-0016). The scope of this item must include, but not be limited to excavation, removal of existing concrete, reinforcing steel, miscellaneous steel embedded or attached thereto including electrical conduits, conduit supports, electrical wires, junction boxes, traffic signals, fencing, railings etc., as detailed in the plans, described herein and according to Section 501 of the Standard Specifications, and as directed by the Engineer. The Contractor must submit a detailed procedure for removing the existing structures, to the Engineer for approval, prior to starting this Work.

The Contractor shall remove existing retaining wall "S2" from the East end of the wall (or from end of South-West wingwall of Exchange Ave bridge over I-55 / I-70) to first expansion joint (approximately 28'-9" long section of wall from the East end of the wall).

Pile Extraction is not included with this work. Pile Extraction will be completed as a separate pay item in accordance with Special Provision for Pile Extraction.

<u>Existing Plans</u>. See Appendix for original plans for the existing structures involved in this work. The original plans, however, may not show all modifications that have been made to the structures over the years. The completeness of these plans is not guaranteed and no responsibility is assumed by IDOT for their accuracy. Information is furnished for Contractor's convenience and is to be used solely at the Contractor's risk.

<u>Method of Measurement</u>. No separate measurement will be made for removal of existing structures.

Excavation of earth necessary to perform the removal of existing structures will not be measured for payment.

Any existing piles which are to be removed and not cut-off will be measured for payment in accordance with the Special Provision for Pile Extraction.

<u>Basis of Payment</u>. This item will be paid for at a contract unit price each for REMOVAL OF EXISTING STRUCTURES NO. 3, which payment must constitute full compensation for all labor, materials, tools and equipment required for removal and disposal of existing structures and incidental items, as detailed in the plans, described herein and as directed by the Engineer.

## **REMOVAL OF EXISTING STRUCTURES NO. 4**

<u>Description</u>. This item must consist of the removal and satisfactory disposal of existing Retaining Wall "U" located along existing Ramp "P" at South-East quadrant of existing Exchange Avenue bridge over I-55 / I-70 (Structure No. 082-0016). The scope of this item must include, but not be limited to excavation, removal of existing concrete, reinforcing steel, miscellaneous steel embedded or attached thereto including electrical conduits, conduit supports, electrical wires, junction boxes, traffic signals, fencing, railings etc., as detailed in the plans, described herein and according to Section 501 of the Standard Specifications, and as directed by the Engineer. The Contractor must submit a detailed procedure for removing the existing structures, to the Engineer for approval, prior to starting this Work.

Pile Extraction is not included with this work. Pile Extraction will be completed as a separate pay item in accordance with Special Provision for Pile Extraction.

<u>Existing Plans</u>. See Appendix for original plans for the existing structures involved in this work. The original plans, however, may not show all modifications that have been made to the structures over the years. The completeness of these plans is not guaranteed and no responsibility is assumed by IDOT for their accuracy. Information is furnished for the Contractor's convenience and is to be used solely at the Contractor's risk.

<u>Method of Measurement</u>. No separate measurement will be made for removal of existing structures.

Excavation of earth necessary to perform the removal of existing structures will not be measured for payment.

Any existing piles which are to be removed and not cut-off will be measured for payment in accordance with the Special Provision for Pile Extraction.

<u>Basis of Payment</u>. This item will be paid for at a contract unit price each for REMOVAL OF EXISTING STRUCTURES NO. 4, which payment must constitute full compensation for all labor, materials, tools and equipment required for removal and disposal of existing structures and incidental items, as detailed in the plans, described herein and as directed by the Engineer.

#### REMOVAL OF EXISTING SUPERSTRUCTURES NO. 1

<u>Description</u>. This item must consist of the removal and satisfactory disposal of existing superstructure of Louisville and Nashville Railroad Bridge over I-55 / I-70, Ramp "L" & Ramp "N" as detailed in the plans, described herein and according to Section 501 of the Standard Specifications, and as directed by the Engineer.

The scope of this item must also include removal and disposal of miscellaneous items appurtenant to the superstructure, including but not limited to rails, rail ties, asphaltic planks, waterproofing membrane, bridge railings, fence, expansion joint materials and anchorages, drainage scuppers and down spouts, structural steel, reinforcing steel, bearings, existing conduits, conduit supports, electrical wires, junction boxes, traffic signals etc. The Contractor must submit a detailed procedure for removing the existing structures, to the Engineer for approval, prior to starting this Work.

The Contractor must take all necessary precautions in removing, handling, transporting and subsequent disposal of all materials removed containing asbestos. All such work must be performed in conformance with all governing laws, codes, ordinances or other regulations.

<u>Existing Plans</u>. See Appendix for original plans for the existing structures involved in this work. The original plans, however, may not show all modifications that have been made to the structures over the years. The completeness of these plans is not guaranteed and no responsibility is assumed by IDOT for their accuracy. Information is furnished for Contractor's convenience and is to be used solely at the Contractor's risk.

<u>Construction Requirements</u>. The removal of existing superstructures must be performed according to Section 501 of the Standard Specifications. Materials that are required to be salvaged (if any) under the contract are listed in the plans. Materials to be salvaged must be carefully removed and stored near the project site at a location designated by the Engineer.

All removed materials containing asbestos must be stockpiled separately from other removed materials. All stockpiled materials containing asbestos must be hauled to an approved landfill disposal site. These materials must be wetted down and covered with an approved wetting material while stockpiled and being hauled away in trucks to prevent debris or dust from entering into the atmosphere.

Under no circumstances will the disposed material containing asbestos be permitted for use in recycling. The Contractor must keep records of removal, stockpiling, trucking and the landfill disposal site used, and submit such records to the Engineer.

<u>Method of Measurement</u>. No separate measurement will be made for removal of existing superstructures. Excavation of earth necessary to perform the removal of existing superstructures will not be measured for payment.

<u>Basis of Payment</u>. This item will be paid for at a contract unit price each for REMOVAL OF EXISTING SUPERSTRUCTURES NO. 1, which payment must constitute full compensation for all labor, materials, tools and equipment required for removal and disposal of existing superstructures and incidental items, as detailed in the plans, described herein and as directed by the Engineer.

## PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL

This work consists of constructing ADA-accessible sidewalk monolithic with a concrete barrier pad. This work shall be done according to Section 424 of the Standard Specifications and as detailed in the plans.

This work will be paid for at the contract unit bid price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL.

Required reinforcement bars per the plan details will not be paid for separately but shall be included in the bid price per square foot for PORTLAND CEMENT CONCRETE SIDEWALK, SPECIAL.

## CONCRETE BARRIER WALL (SPECIAL)

This work consists of constructing a concrete barrier wall with top-mounted pedestrian railing. This work shall be done according to the applicable portions of Section 637 of the Standard Specifications, as detailed in the plans, and as directed by the Engineer.

This work will be paid for at the contract unit bid price per foot for CONCRETE BARRIER WALL (SPECIAL).

All materials required to construct the barrier wall as specified in the plan details will not be paid for separately but shall be included in the bid price per foot for CONCRETE BARRIER WALL (SPECIAL).

#### PEDESTRIAN RAILING

This work consists of constructing a concrete steel pedestrian railing with posts set in concrete footings. This work shall be done according to the applicable portions of Section 509 of the Standard Specifications, as detailed in the plans, and as directed by the Engineer.

All materials required to construct the pedestrian railing and footings as specified in the plan details will not be paid for separately but shall be included in the bid price per foot for PEDESTRIAN RAILING.

#### **CONCRETE BARRIER REMOVAL**

This work consists of the removal and disposal of concrete barrier according to Section 440 of the Standard Specifications and as detailed in the plans.

The Contractor shall use care in the removal of the barrier so as not to damage any drainage castings, pavement, or shoulder to remain. Damage to any appurtenances to remain will be at the cost of the Contractor.

This work will be paid for at the contract unit bid price per foot for CONCRETE BARRIER REMOVAL.

#### **WASHOUT BASIN**

This work consists of constructing a reinforced concrete truck washout basin in the new Bowman Maintenance Yard site expansion.

Construction and materials shall be according to the details in the plans and as directed by the Engineer.

This work will be paid for at the contract unit bid price per lump sum for WASHOUT BASIN.

The work for installing the type C catch basin and lid which serves as the washout basin drain/sediment trap shall be paid for separately. All other labor, materials, and equipment necessary to construct the washout basin shall be included in the cost of WASHOUT BASIN.

#### **CLASS A PATCHES, TYPE IV**

This work involves constructing class A pavement patches according to Section 442 of the Standard Specifications. The patches are necessary due to impacts from the excavation necessary for the removal and replacement of the Exchange Avenue bridge center pier located at the center of I-55/I-70.

Existing pavement thicknesses are not provided in the plans. Prior to bidding it is advised that the Contractor seek as-built information from the Department to ascertain likely pavement thicknesses.

Following excavation for the piers and prior to placing the patches, the sub-base under the patches shall be repaired to the satisfaction of the Engineer.

This work will be paid for at the contract unit bid price per square yard for CLASS A PATCHES, TYPE IV.

Sub-base and base repair necessary due to bridge excavation work will not be paid for separately but shall be included in the cost of CLASS A PATCHES, TYPE IV.

## MANHOLES, TYPE A, 4'-DIAMETER, WITH SALVAGED FRAME AND GRATE

This work consists of constructing manholes while salvaging the existing frame and grate for reuse at the same location. This work shall be done according to Section 602 of the Standard Specifications and as detailed in the plans and herein.

The Contractor shall use care while removing the old manhole so as to not damage the existing frame and grate to be salvaged. Any damage done to the frame and grate shall be at the cost of the Contractor.

This work will be paid for at the contract unit bid price per each for MANHOLES, TYPE A, 4'-DIAMETER, WITH SALVAGED FRAME AND GRATE.

## MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE

This work consists of constructing manholes with type 1 frame and lids and restrictor plate. This work shall be done according to Section 602 of the Standard Specifications and as detailed in the plans and herein.

This work will be paid for at the contract unit bid price per each for MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID, RESTRICTOR PLATE.

## MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID

This work consists of reconstructing manholes of various diameters and heights to accommodate proposed sewer work. This work shall be in accordance with Section 602 of the Standard Specifications with the following additional requirements:

Prior to ordering any materials or conducting any work, the Contractor and Engineer shall field verify the work to be done, as well as review any as-built drawings available from the Department or respective owner of the facility. Once verbal agreement is reached between the Engineer and Contractor on the proposed scope of work, the Contractor shall submit to the Engineer a narrative description of the work to be performed along with shop drawings sealed by a Illinois licensed professional engineer or Illinois licensed structural engineer, depending on the scope and scale of the work involved. No work may commence on the manholes to be reconstructed until written approval is received from the Engineer.

The cost of field verifying, reviewing existing data, writing scopes, and drawing and sealing the design shall not be paid for separately but shall be included in the cost of MANHOLES TO BE RECONSTRUCTED WITH NEW TYPE 1 FRAME, CLOSED LID.

#### **STORM SEWERS**

Add the following paragraph to Article 550.06 of the Standard Specifications:

Extensions to existing storm sewers shall either meet an existing bell or spigot or shall be supplied with a concrete collar, a mission band seal, or approved coupling. The cost of labor and materials to complete this work shall be included in the cost of the storm sewer installed.

## STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2

This work shall consist of constructing storm sewers of the required inside diameter in accordance with applicable parts of Section 550 of the Standard Specifications, applicable sections of the current edition of the IEPA Regulations (35 III. Adm. Code 653.119), the applicable sections of the current edition of the Standard Specifications for Water and Sewer Main Construction in Illinois, and as herein specified.

Storm sewers constructed to meet water main standards shall be constructed of the following pipe materials:

Elastomeric seals (gaskets) used for push-on joints shall comply with ASTM Standard F477.

This work will be measured and paid for at the contract unit price per foot for STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 of the diameter specified.

## **COMBINED SEWER REMOVAL**

Description. This work shall consist of providing all labor, equipment and materials for removing combined sewers as shown on the plans or as directed by the Engineer.

General Requirements. Work under this item shall be performed in accordance to Section 551 of the Standard Specifications, except that all references to storm sewer shall be replaced with combined sewer.

Method of Measurement. This work will be measured for payment in feet, measured as removed.

Basis of Payment. This work shall be paid for at the contract unit price per foot for COMBINED SEWER REMOVAL, of the size specified.

## **FOUNDATION REMOVAL**

This work shall consist of the removal and disposal of building foundations as detailed in the plans. Disposal shall be according to 202.03 of the Standard Specifications.

Types and thicknesses of the foundations are not provided in the plans. Prior to bidding on this item the Contractor should field verify the foundation types and thicknesses. No adjustments to the bid price will be allowed.

This work will be paid for at the contract unit price per square foot for FOUNDATION REMOVAL.

#### **FENCE REMOVAL**

Description. This work shall consist of providing all labor, equipment, and incidentals necessary for removal and disposal of the existing fence of all kinds as shown in the plans.

Construction Requirements. No removal work shall be completed without the approval of the Engineer. All associated hardware and appurtenances of the existing fence shall be removed off-site and disposed of by the Contractor in a legal disposal site. All postholes shall be backfilled and compacted to the satisfaction of the Engineer.

Method of Measurement. Fence Removal shall be measured for payment in feet of FENCE REMOVAL and measured along the top of the fence from center to center of end post, including the length occupied by gates.

Basis of Payment. This work will be paid for at the contract unit price per foot for FENCE REMOVAL.

#### REMOVAL OF ARCHITECTURAL SALVAGE

This work shall consist of the removal of lettered castings from 1117 North 9th Street (parcel #) and delivery of the castings to the address listed below.

The Contractor shall remove the lettered castings from above the garage door of the old Kassly Funeral Home located on the northeast corner of Exchange Ave. and 9th Street in East St. Louis, Illinois. The Contractor shall package the castings such that the castings will not be damaged during transport. The Contractor shall transport the castings to Kassly Mortuary, 9900 St. Clair Ave, Fairview Heights, Illinois and there unload the castings at the direction of the Engineer or Chas or Jim Kassly. If the castings are damaged during removal or delivery, it shall be the responsibility of the Contractor to replace the castings at the Contractor's expense.

The Contractor shall contact Chas Kassly or Jim Kassly at (618) 398-1122, 48 hours prior to delivery of the castings.

This work will be paid at the contract lump sum price for REMOVAL OF ARCHITECUTRAL SALVAGE.

Contact information: Chas Kassly Jim Kassly 9900 St. Clair Ave. Fairview Heights IL (618) 398-1122

#### **AVAILABILITY AND VACANCY OF BUILDINGS**

The Contractor is advised that all buildings scheduled for demolition under this contract are vacant and available for immediate demolition. The Contractor shall, however, obtain permission from the Engineer prior to the start of work under this contract.

## **BASEMENT FLOORS**

The Contractor shall break the concrete basement floors into pieces not exceeding 2 ft. square before the basement is filled with suitable material as specified in the Standard Specifications, Article 1003.01. This work will not be paid for separately, but considered as included in the contract lump sum price bid for BUILDING REMOVAL OF THE NO. SPECIFIED.

#### REMOVAL OF MISCELLANEOUS ITEMS

The Contractor is advised that it is the intent of the provision that each parcel be clear of all real property, chattel, debris and all rubbish such that the property can be site graded, seeded and present a neat and clean appearance on completion of this project. The Contractor will then be required to remove all driveways, patios, sidewalk, miscellaneous sheds, pools, fountains, decks, abandoned cars or trucks, private power poles, and other miscellaneous items including debris and rubbish to the satisfaction and approval of the Engineer.

The Contractor is advised to inspect the various parcels involved prior to bidding, as no additional compensation will be allowed of these items.

Removal of the items as herein specified and site grading will not be paid for separately, but considered as included in the contract lump sum price bid for BUILDING REMOVAL OF THE NO. SPECIFIED from the various properties involved.

#### REMOVAL OF MISCELLANEOUS TREES AND SHRUBS

The Contractor is advised that it is the intent of this provision that each parcel be clear of all trees, shrubbery and landscape items such that the property can be site graded, seeded and present a neat and clean appearance on completion of this project. The Contractor will then be required to remove and dispose of all trees and shrubs.

The Contractor is advised to inspect the various parcels involved prior to bidding, as no additional compensation will be allowed of these items.

Removal and disposal of the items as herein specified and site grading will not be paid for separately, but considered as included in the contract lump sum price bid for BUILDING REMOVAL OF THE NO. SPECIFIED from the various properties involved.

#### **AIR CONDITIONERS**

According to USEPA regulations all Freon that is present in any AC units shall be recycled or reclaimed prior to commencing demolition activities. Nothing special needs to be done with the AC units once the Freon is removed.

The Contractor is advised to inspect the various parcels involved prior to bidding, as no additional compensation for reclamation of freon from AC units will be allowed of these items.

Reclamation, Removal and disposal of the AC units as herein specified will not be paid for separately, but considered as included in the contract lump sum price bid for BUILDING REMOVAL OF THE NO. SPECIFIED from the various properties involved.

## **DELINEATOR REMOVAL (SPECIAL)**

This item of work shall include the existing delineator posts and reflectors at the locations shown on the plans or as directed by the Engineer. Upon removal of the reflectors and posts the Contractor shall be responsible for their disposal.

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

Basis of Payment: The work of removing the delineator posts and reflectors will be paid for at the contract unit price per each for DELINEATOR REMOVAL. No additional compensation will be allowed for two single reflectors placed on one post.

#### FORM LINER TEXTURED SURFACE

<u>Description:</u> This work shall be performed in accordance with applicable portions of Section 503 of IDOT Standard Specification for Road and Bridge Construction except as modified herein.

This item shall include, but not be limited to designing, developing, furnishing and installing form liners and forming concrete using single and/or multiple use form liners to produce Bush Hammer surface texture. Apply Bush Hammer surface texture at locations shown in the contract drawings. Provide form liners to produce a Bush Hammer surface texture with a maximum relief range of  $^3/_{16}$ " to  $^5/_{16}$ ".

Provide architectural form liners from the listed manufactures or an approved equal:

- Greenstreak, Inc. 3400 Tree Court Industrial Boulevard St. Louis, Missouri 63122 (800) 325-9504 www.greenstreak.com
- 2. Scott System, Inc. 10777 East 45th Ave. Denver, CO 80239 (303) 373-2500 www.scottsystem.com
- 3. Symons
  2400 Arthur Avenue
  Elk Grove, IL 60007
  (800) 937-2700
  www.symons.com

<u>Submittals:</u> Contractor shall submit qualification data demonstrating capabilities and experience; include list of past project with contact information. Shop drawings shall be submitted for approval depicting the form liner pattern along with an installation procedure coordinated with the Contractor.

Contractor shall provide a full scale mock-up containing Bush Hammer surface texture for approval. The mock-up shall be a minimum  $5 \text{ ft } \times 5 \text{ ft } \times 6$  inches thick.

<u>Material:</u> Provide Single-Use Form Liners of the Rigid polymer (HIPS) or polystyrene (SPS) plastic type, Multiple-Use Form Liners of the Rigid Polymer (ABS) or Elastomeric Urethane type. Form liners shall be of high quality and capable of withstanding anticipated concrete pour pressure without causing leakage or physical defect. Form liners shall attach easily to forms and be removable without causing concrete surface damage or weakness in the substrate. Form liner release agent shall be according to recommendations of the form liner manufacturer. Form liner release agents shall be compatible with all curing agents and admixtures. Form liner release agent shall be non-staining, non-residual, non-reactive and shall not contribute to the degradation of the form liner material.

<u>Method of Measurement</u>. This work will be measured for payment in place and the area computed in square feet.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square feet for Form Liner Textured Surface.

## DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE

<u>Description</u>. This item consists of the disconnection, removal, and disposal of the existing electric connection to the sign lighting. Removal of the existing sign luminaire(s) will be included with removal of the sign structure.

<u>Removal</u>. The Contractor must disconnect the existing power feed to the sign lighting units and remove the wiring back to the nearest location where the sign lighting is spliced to the roadway lighting circuit. The Contractor must provide all materials and labor required to maintain operation of the existing lighting circuit.

No removal work shall be permitted without approval from the Engineer. Cables in unit duct will be removed from the duct and become property of the Contractor. The empty duct shall be removed to 1 foot below ground level and the hole shall be backfilled.

All equipment and material removed as part of this item shall become property of the Contractor and shall be removed from the site.

<u>Method of Measurement</u>. Each electric connection to an existing disconnect switch for sign lighting on a structure that is disconnected, removed, and disposed of, including associated wiring back to the nearest splice, will be measured for payment.

<u>Basis of Payment</u>. This work will be paid for at the Contract unit price each for DISCONNECT SIGN LIGHTING AND REMOVE WIRING TO NEAREST SPLICE.

## **LUMINAIRE**

Add the following table(s) to Article 1067 of the Standard Specifications:

# IDOT DISTRICT 8 LUMINAIRE PERFORMANCE TABLE (FOR LUMINAIRE, SODIUM VAPOR, HORIZONTAL MOUNT, 250 WATT)

GIVEN CONDITIONS				
ROADWAY DATA	Pavement Width	16 ft.		
	Number of Lanes	1		
	Median Width	N/A		
	I.E.S. Surface Classification	R3		
	Q-Zero Value	0.07		
MOUNTING DATA	Mounting Height	45 ft.		
	Mast Arm Length	15 ft.		
	Set-Back From Edge of Pavement	15 ft.		
LUMINAIRE DATA	Lamp Type	HPS		
	Lamp Lumens	27500		
	I.E.S. Vertical Distribution	Medium		
	I.E.S. Control Of Distribution	Cutoff		
	I.E.S. Lateral Distribution	III		
	Total Light Loss Factor	0.7		
LAYOUT DATA	Spacing	170 ft.		
	Configuration	Single Sided		
	Luminaire Overhang Over Edge of Pavement	0 ft.		

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

## PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINANCE	Average Horizontal Illuminance, E <sub>AVE</sub>	0.9 Fc
	Uniformity Ratio, $E_{AVE}/E_{MIN}$	3.0:1 (Max)
LUMINANCE	Average Luminance, L <sub>AVE</sub>	N/A
	Uniformity Ratio, L <sub>AVE</sub> /L <sub>MIN</sub>	N/A
	Uniformity Ratio, L <sub>MAX</sub> /L <sub>MIN</sub>	N/A
	Veiling Luminance Ratio, L <sub>V</sub> /L <sub>AVE</sub>	N/A

# IDOT DISTRICT 8 LUMINAIRE PERFORMANCE TABLE (FOR UNDERPASS LUMINAIRE, 150 WATT, HIGH PRESSURE SODIUM VAPOR)

GIVEN CONDITIONS				
ROADWAY DATA	Pavement Width	18 ft.		
	Number of Lanes	1		
	Median Width	8 Ft.		
	I.E.S. Surface Classification	R3		
	Q-Zero Value	0.07		
MOUNTING DATA	Mounting Height	16 ft.		
	Mast Arm Length	0 ft.		
	Set-Back From Edge of Pavement	6 ft.		
LUMINAIRE DATA	Lamp Type	HPS		
	Lamp Lumens	16000		
	I.E.S. Vertical Distribution	Medium		
	I.E.S. Control Of Distribution	Cutoff		
	I.E.S. Lateral Distribution	III		
	Total Light Loss Factor	0.7		
LAYOUT DATA	Spacing	30 ft.		
	Configuration	Opposite		
	Luminaire Overhang Over Edge of Pavement	0 ft.		

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

## PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINANCE	Average Horizontal Illuminance, E <sub>AVE</sub>	6.0 Fc
	Uniformity Ratio, $E_{AVE}/E_{MIN}$	2.0:1 (Max)
LUMINANCE	Average Luminance, L <sub>AVE</sub>	N/A
	Uniformity Ratio, L <sub>AVE</sub> /L <sub>MIN</sub>	N/A
	Uniformity Ratio, L <sub>MAX</sub> /L <sub>MIN</sub>	N/A
	Veiling Luminance Ratio, L <sub>V</sub> /L <sub>AVE</sub>	N/A

## MAINTENANCE OF EXISTING ELECTRICAL DEVICES

Effective: Unknown Revised: October 15, 1996

The existing electrical devices which lie within the construction limits of this project will continue to be the maintenance responsibility of the Illinois Department of Transportation. Electrical devices are defined to mean highway lighting installations, traffic signals, flashing beacons, sign truss illumination units, changeable message signs, motorist aid call boxes, dewatering pumps, speed monitoring devices, traffic volume count stations, wrong way movement detectors, following-too-close monitors, ice/fog detectors or any such devices or facilities the Department may have to maintain.

Any damage or malfunctions of these devices, observed by the Contractor, shall be reported immediately to the Department.

If it is determined by the Engineer that the Contractor is responsible for damage of any type to above-mentioned existing electrical devices, including underground wiring, as a result of negligence or poor workmanship, the Contractor shall be responsible for the repair of these facilities. These repairs shall be accomplished by whatever method the Department deems necessary. In the event the repairs are not made by the Contractor, the Contractor will be required to reimburse the Department for such repairs within 60 days of receiving written notification of said damage.

The Department will continue to maintain the existing electrical devices until such time as the Contractor removes these devices, if required by this contract. Any new, rebuilt, or modernized equipment installed as a requirement of this contract shall be the maintenance responsibility of the Contractor until such time as this equipment is final inspected and found to be installed in a satisfactory manner by the Department. Existing individual equipment not involved with the work of this contract will continue to be the maintenance responsibility of the Department.

## **DOCUMENTATION**

At the pre-construction meeting, the Contractor shall submit the following items for approval by the Engineer.

Five (5) complete copies of the manufacturer's descriptive literatures and technical data for the equipment that will be installed on the contract. The descriptive literatures and technical data shall be adequate for determining whether the equipment meets the requirements of the plans and specifications. If the literature contains more than one (1) item, the Contractor shall indicate which item or items will be furnished.

Three (3) operations and maintenance manuals shall be supplied for all equipment and components of this project. The system operator's manual and equipment manuals shall contain as a minimum the Operator's manual which includes:

- Step-by-step system operation instructions
- Theory of system operation
- Explanations and descriptions of data elements
- Recovery procedures to be followed in case of system malfunction
- Procedures for updating all elements of the data base
- Functional descriptions of all equipment in the system

Equipment installation and maintenance manual for each controller, auxiliary device, software, and all other equipment and components provided on this project which includes:

- Technical descriptions of the operation of each system component
- Operation instructions for each type of equipment
- Theory of operation describing the interaction of equipment components and signal flow
- Detailed schematic diagrams
- Wiring diagrams that identify wire tagging used for all electrical connections
- Troubleshooting procedures to assist the maintenance staff in the identification and isolation of malfunctions
- Wiring diagrams for each location's cabinet

The Engineer will review the literature and furnish written approval or rejection to the Contractor within 15 calendar days after receipt of the literature. If the literature is rejected, the Contractor shall resubmit corrected literature within an additional fifteen (15) calendar days. Within ten (10) calendar days after receipt of written approval of any material or equipment, the Contractor shall order such material or equipment and shall furnish a copy of such order to the Engineer.

#### WIRELESS COMMUNICATION DEVICE

Proxim Tsunami MP.11 5012 Series, GigaLink 642, or equivalent. Unit includes the features and meets the performance requirements listed below:

- 1. Full duplex bandwidths, 32Mbps minimum over-the-air throughput
- 2. Ethernet and coax compatible
- 3. Narrow line-of-sight capable, for security and interference free operation
- 4. Capable of broadcast transmission in GHz band which would not require an FCC spread spectrum license
- 5. UL Listed
- 6. Data encryption, with password protection

<u>Basis of Payment</u>: The cost of this work will be included in the cost of WIRELESS COMMUNICATION DEVICE and paid for as each, which price shall be payment in full for furnishing the communication device and antennae with necessary connections and adjustments for proper operations.

## FIBER OPTIC CABLE IN CONDUIT, 72 COND. S.M. F.O.

This work shall consist of furnishing and installing fiber optic cable in conduit as indicated on the plans.

The cable shall be Corning Cable Systems Type 072EW4-T3100A20 or equivalent (ALTOS fiber optic cable, maximum attenuation of 0.35dB/km at 1310nm, 0.25dB/km at 1550nm).

A minimum of 40 feet of slack cable shall be provided for each handhole nearest the controller cabinet, 20 feet of slack shall be in each controller cabinet and 30 feet of slack in all other handholes. The controller cabinet slack cable shall be stored as directed by the Engineer. All other fiber optic cables shall be clearly labeled.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per foot for FIBER OPTIC CABLE IN CONDUIT, 72 COND. S.M. F.O. which will be payment in full for furnishing and installing all single mode fiber optic cable in conduit

#### FIBER OPTIC CABLE

Substitute the following to Section 871.04 Extra Cable Length table of the Standard Specifications:

A minimum of 40 feet of slack cable shall be provided for each handhole nearest the controller cabinet, 20 feet of slack shall be in each controller cabinet and 30 feet of slack in all other handholes. The controller cabinet slack cable shall be stored as directed by the Engineer. All other fiber optic cables shall be clearly labeled.

#### FIBER OPTIC TERMINATION IN CABINET

This work shall consist of terminating existing fibers, new fibers and furnishing and installing fiber optic breakout kits, cable management hardware and distribution enclosures in field cabinets or buildings as indicated on the plans. The single mode fibers shall be terminated at each location per the schedule in the plans. All fiber optic cabling shall be clearly labeled. Existing multi-mode fibers located in the ground field controller cabinet and junction boxes that are bare, shall also be terminated and included in the cost of this pay item.

The required ST connectors shall be included at no additional cost to the Department. All fiber optic patch cables required to light all terminations shall be installed at no additional cost to the Department.

Perform appropriate tests and provide documentation according to the FIBER OPTIC CABLE SPLICING, TESTING AND ACCEPTANCE STANDARDS, AND PROCEDURES special provision, and standard specifications 864.03.

<u>Basis of Payment</u>: This work shall be included in the cost of FIBER OPTIC CABLE, IN CONDUIT, 72 COND SMFO and FIBER OPTIC CABLE IN CONDUIT, respectively, which will be payment in full for splicing all required multi-mode and single-mode fibers, testing and supplying and installing new breakout kits, cable management hardware, and distribution enclosures at a cabinet or the TMC building location.

#### FIBER OPTIC SPLICING IN CABINET

This work shall consist of splicing existing fibers, new fibers, and furnishing and installing distribution enclosures in field cabinets or buildings as indicated on the plans. The single mode fibers shall be spliced at each location per the schedule in the plans.

All splices shall be fusion spliced in an environmentally controlled enclosure and no mechanical splicing shall be accepted. All fiber optic cabling shall be clearly labeled.

Corning PCH-04U closet connector housings and splice tray kits or equivalent shall be provided at each splice point as necessary.

Perform appropriate tests and provide documentation according to the FIBER OPTIC CABLE SPLICING, TESTING AND ACCEPTANCE STANDARDS, AND PROCEDURES special provision.

<u>Basis of Payment</u>: This work shall be included in the cost of FIBER OPTIC CABLE, IN CONDUIT, 72 COND SMFO and FIBER OPTIC CABLE IN CONDUIT, respectively, which will be payment in full for terminating all required multi-mode and single-mode fibers, testing, and supplying and installing new cable management hardware, splice trays, and distribution enclosures at a cabinet or the TMC building location.

## **ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C**

In order to trace the fiber optic cable after installation, a black insulated copper tracer cable No. 14 shall be installed with the fiber optic cable where there is no other electric cable per the applicable portions of Section 873 of the Standard Specifications. The tracer cable splices are allowed in handhole, only. All tracer splices shall be kept to a minimum and shall incorporate maximum lengths of cable supplied by the manufacturer. The tracer cable splice shall be per Section 870 of the Standard Specifications. Conductors shall be spliced in a rigid mold. Rosincore solder shall be used.

<u>Basis of Payment</u>: The tracer cable shall be paid for separately as ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C per foot, which price shall include all associated labor and material for installation.

#### FIBER OPTIC TO ETHERNET MEDIA CONVERTER

This work shall consist of installing and furnishing a field hardened, industrial-grade fiber optic to Ethernet media converter. The media converter shall be a multimode device 1FS D7120 or equivalent. All components shall be tested and certified that they operate.

The unit shall have the following components:

- Redundant DC power inputs
- Relay output alarm activation by link disconnection or power failure
- Copper Port: 10/100BaseT(x) auto negotiation speed and auto MDI?MDIX connection
- LED Indicator: Power, Faults, 10/100, Full/Half duplex, collision
- DIP switch: 100BaseFX Full/Half duplex selection, port break alarm mask
- Alarm contact: One relay output with current carrying capacity of 1A @ 24 VDC
- IEEE802.3, 802.3u, Link Fault Pass-Through
- DIN-Rail mountable
- Operating Temperature 0 to 60 deg C (32 to 140 deg F)
- Warranty: 5-year labor and parts from date contract is accepted.

Basis of Payment: This work will be paid for at the contract unit price each for FIBER OPTIC TO ETHERNET MEDIA CONVERTER, which price shall be payment in full for furnishing, installing, and testing all equipment and all necessary Ethernet cabling and mounting accessories.

## COAX TO ETHERNET MEDIA CONVERTER

This work shall consist of installing and furnishing a Coaxial cable to Ethernet media converter. The media converter shall be a TP50 RJ45 to F coax adapter, or equivalent, be tested and certified that they operate.

<u>Basis of Payment</u> This work will be paid for at the contract unit price each for COAX TO ETHERNET MEDIA CONVERTER, which price shall be payment in full for furnishing, installing, and testing all equipment and all necessary Coaxial cable and mounting accessories.

# FIBER OPTIC CABLE SPLICING, TESTING AND ACCEPTANCE STANDARDS, AND PROCEDURES

- A. During construction, an Optical Domain Reflectometer (OTDR) shall be used to test splices and shall use an OTDR and a 1-km launch reel (for single mode fiber) or a 300 km launch reel (for multi-mode fiber) to test pigtail connectors. Such construction tests shall be uni-directional and performed at both 1310 nm and 1550 nm for single mode fiber and at 850 nm for multi-mode fiber. The Contractor may substitute another fiber optic testing device for an OTDR if the device specifications, testing parameters, and reason for using this type of device is submitted for review and approval by the Engineer.
- B. If the loss value of two (2) connectors and the associated pigtail splice exceeds 1dB for single mode fiber or 2 dB for multi-mode fiber, then splice and re-splice until the loss value is 1.0 dB or less, or 2 dB or less, respectively.
- C. If the loss value for a splice, when measured in one direction with an OTDR, exceeds 0.15 dB, break the splice and re-splice until the loss value is 0.15 dB or less, provided that, not able to achieve a loss value of 0.15 dB after three total splicing attempts, then the maximum loss value shall be 0.3 dB.
- D. After end-to-end connectivity has been established on the fibers during construction the following shall be completed:
  - a.) bi-directional end-to-end tests
  - b.) test continuity to confirm that no fibers have crossed at any splice points
  - c.) record loss measurements using a light source and a power meter
  - d.) take OTDR traces and record splice loss measurements
- E. Bi-directional end-to-end tests and OTDR traces shall be performed at both 1310 nm and 1550 nm for single mode fiber and at 850 nm for multi-mode fiber. All losses for each splice point shall be measured, verified, and averaged in both directions.

## F. ODTR Equipment and Settings

The Contractor shall use OTDR equipment and setting that are in the Engineer's opinion, suitable for performing accurate measurements of the fiber.

## G. Acceptance Test Deliverables

The Contractor shall provide data sheets or computer media, in format that is readily accessible to the Department, containing the following information for the relevant fibers and cable segments for approval prior to connecting any fiber optic hardware:

- a.) Verification of end-to-end fiber continuity with power level readings for each fiber taken with a light source and power meter.
- b.) Verification that the loss at each splice point is below 0.3 dB.
- c.) The final bi-directional OTDR test data, with distances.
- d.) Cable manufacturer, cable type (buffer/ribbon), fiber type, cable reel number, number and distance of each section of cable between splice points.

<u>Basis of Payment</u> The cost of performing the appropriate tests and providing the documentation shall be included in the cost of the FIBER OPTIC CABLE, IN CONDUIT, 72 COND SMFO and FIBER OPTIC CABLE IN CONDUIT.

## FIBER OPTIC UTILITY MARKER

Marking of the Fiber Optic In-ground conduit runs will be done to prevent future damage to the fiber backbone. The markers will be placed every 300 feet along the fiber run and at other important junctions, turns, or other areas as specified by the field engineer.

The markers shall adhere to the following minimum specifications:

The marker shall be a cylindrical marker mounted on a 3.5" O.D. post. The marker shall be comprised of polymer materials which are resistant to impact, ultraviolet light, ozone, or hydrocarbon damage. The post and marker shall remain impact resistant in temperatures of -20 degrees to 140 degrees F.

The marker shall incorporate a cylindrical tube construction. It shall be capable of permanent or temporary installation on a 3.5" O.D. tube and shall utilize an anchor barb below ground level to prevent rotation and removal. The marker shall have an outside diameter of 3.82 inches. The nominal wall thickness shall be 0.13 inches and the overall length shall be 18 inches.

The marker shall be colored red on top of orange. Red shall be from the top to halfway down the marker (9 inches) and then orange the remaining 9 inches. The marker shall be pigmented throughout its entire cross section and shall incorporate UV resistant materials to prevent fading or cracking in outdoor environments.

The marker graphics shall include the following: On the red portion of the marker in the vertical direction it shall say "Buried Cables" above the symbol for no digging. It shall have the same verbiage on the opposite side (180 degrees away). Ninety degrees from this, on both sides, shall be the verbiage "Danger", also in the vertical direction.

On the Orange portion of the marker in the horizontal direction and on two sides of the marker it shall incorporate the IDOT logo and the words, 'Illinois Department of Transportation". Directly below this it shall say, "Intelligent Transportation System". Below this it shall say, "Before digging, trenching, or pushing pipe in this vicinity, call 618-346-3233. Failure to comply will result in Legal Action." Directly below this, a horizontal line and then "MARKER ID NUMBER" with a blank space for the marker id number to be inserted in the field. The Contractor shall be responsible for adding the MARKER ID NUMBER based on the following template:

557007.84.01F
Where:
5570 = Interstate Designation
07.74 = Milepost number to nearest hundredth of mile
01 = Marker number
F = Fiber Marker

Directly below this again include the symbol for no digging and the words "Buried Cable". All graphics shall consist of a solvent-based ink that is abrasive and UV resistant. The marker shall exhibit good workmanship and shall be free of burns, discoloration, and other objectionable marks or defects, which affect appearance or serviceability.

The marker shall have a minimum tensile strength of 2700 pounds per square inch, as measured by ASTM D638 (specimen Type I with separation rate of two inches per minute.) The marker tensile strength shall not deviate more than 10 percent from the standard room temperature result when tested at both 140 degrees and -20 degrees F after a minimum of two (2) hours conditioning at the respective temperature.

The marker shall be a six foot post with an 18" marker attached and installed to a two foot burial depth. It shall be capable of withstanding at least one vehicle impact at 35 mph. The marker shall return upright within 15 degrees of vertical position within a maximum of 30 seconds from the time of impact. The warning legend shall be retained on the marker after each impact.

GPS Coordinates for every line marker placed will be measured. The coordinates shall be measured in geographic decimal degrees and recorded in a table provided to IDOT in both electronic and hard copy format. GPS coordinate data collection shall continue to fiber termination points at controller cabinets and to the TMC so all conduit and fiber runs are clearly identified. The conduit, fiber markers, handholes, and controller cabinets shall be located with an accuracy level of eighteen (18) inches. The fiber optic utility markers, conduit, handholes, and controller cabinets shall be distinguishable in the GPS locator device as they are collected, so they are clearly identified in the table provided to the Department.

<u>Basis of Payment</u> This work shall be paid for at the contract unit price each for FIBER OPTIC UTILITY MARKER as described above.

#### **WIDE AREA NETWORK**

This work shall consist of installing, configuring and placing into operation the wide area network devices furnished for this project, and reconfiguring existing network devices so that the overall network operates properly.

The Contractor may replace components of the existing system at no additional cost to the Department. All work required to modify the existing network and in order to integrate the new equipment to be installed as referenced below with the existing system is included in the unit cost of WIDE AREA NETWORK. Any equipment that is to be replaced shall require written authorization by the Engineer. The appropriate wire, cables, connectors, ancillary devices for equipment connection and operation are also included in this pay item. This system shall consist of the following equipment:

 New Wireless communication devices, which are paid for by WIRELESS COMMUNICATION DEVICE

The new wireless communication devises shall be installed and tested; shall do minimum 20 bandwidth throughput analysis and provide results to the Department. Contractor must demonstrate failed fiber optic communication link cut over to wireless communication devices link functionality to department representative.

The existing network hardware and configuration was installed on the previous projects. Specific network configuration information will be made available to the successful bidder, and shall remain confidential.

<u>Basis of Payment</u> This work will be paid for at the contract unit price lump sum for WIDE AREA NETWORK, which price shall be payment in full for configuring and placing into operation the wide area network devices furnished for this project, and reconfiguring existing network devices so that the overall network operates properly.

#### **COAXIAL CABLE IN CONDUIT**

This work shall consist of furnishing and installing coaxial cable in conduit as indicated on the plans.

The cable shall be RG59/U Coaxial Cable or equivalent

A minimum of 20 feet of slack cable shall be provided in the controller cabinet. The controller cabinet slack cable shall be stored as directed by the Engineer. All coaxial cables shall be clearly labeled.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per foot for COAXIAL CABLE IN CONDUIT, which will be payment in full for furnishing, installing and terminating all coaxial cable in conduit.

## **CAT 5 ETHERNET CABLE**

This work shall consist of furnishing and installing CAT 5 Ethernet cable as indicated on the plans.

The cable shall be CAT 5, CAT 5e or equivalent

A minimum of 20 feet of slack cable shall be provided. The slack cable shall be stored as directed by the Engineer. All cables shall be clearly labeled.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per foot for CAT 5 ETHERNET CABLE, which will be payment in full for furnishing, installing and terminating all Ethernet cable.

#### REMOVE FIBER OPTIC CABLE FROM CONDUIT

This work shall consist of removing any fiber optic cable that is being disconnected, and removed as indicated on plans. The fiber optic cable my not be removed until new fiber has been installed, terminated and tested.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price lump sum for REMOVE FIBER OPTIC CABLE FROM CONDUIT, which price shall be payment in full for removal of all fiber optic cable in conduit, hand holes and controller cabinets.

## **ABANDON CONDUIT IN PLACE**

This work shall consist of sealing and capping both ends of abandon conduit with standard pipe caps. After cap is secured a permanent barker should be used to indicate abandon conduit. No abandon conduit shall be sealed and capped until all cable has been removed from the conduit.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price each for ABANDON CONDUIT IN PLACE, which price shall be payment in full for sealing and capping both ends of abandon conduit.

## 3" UNIDUCT, FLEXIBLE, NON METALLIC, ATTACHED TO STRUCTURE

This work shall consist of furnishing and installing uniduct raceway attached to structure as indicated on the plans.

All Uniduct 2700 series or approved equal latching raceway shall be manufactured with a coextruded design of rigid PVC compound with a flexible PVC hinge. The raceway shall have a smooth finish, available in ivory, white, black, gray and brown colors.

The latching raceway shall be a one-piece design with a flexible hinge. The cover shall open to provide accessibility and latch securely closed. The raceway shall be available in 6' and 8' [1.83m and 2.44m] lengths.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per foot for 3" UNIDUCT FLEXIBLE, NON METALLIC, ATTACHED TO STRUCTURE.

## **ELECTRIC CABLE IN CONDUIT, NO 12 3C**

This work shall consist of furnishing and installing electric cable no. 12, 3C in conduit for power as indicated on the plans.

The cable shall be 12AWG/3C Electric Cable or equivalent

A minimum of 20 feet of slack cable shall be provided in the controller cabinet. The controller cabinet slack cable shall be stored as directed by the Engineer.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per foot for ELECTRIC CABLE IN CONDUIT, NO 12 3C, which will be payment in full for furnishing and installing all Electrical cable in conduit.

## **CONDUIT IN TRENCH 2" DIA., PVC TYPE C**

This work shall consist of work that is described in Section 810 of the Standard Specifications.

All in ground 2" conduit used in the installation for the fiber backbone will be Type C Schedule 80 PVC with 2.067" inside diameter, or equivalent.

This work shall consist of furnishing and installing 2" conduit attached to structure shall be Standard Type C Schedule 80 or equivalent, including all fittings and accessories at the locations specified on the plans.

The conduit shall comply with NEMA TC 2 & NEMA TC 3. "NEMA TC2" shall be stamped on all conduit.

<u>Basis of Payment:</u> This work shall be paid at the contract unit price per foot for CONDUIT IN TRENCH 2" DIA., PVC TYPE C.

## **CONDUIT IN TRENCH 4" DIA., PVC TYPE C**

This work shall consist of work that is described in Section 810 of the Standard Specifications.

All in ground 4" conduit used in the installation for the fiber backbone will be Opti-com Type C PVC with Opti-com 44R Ribbed Polyethylene Inner duct with four (4) 1.263" inside diameter ducts, or Carlon Multi Gard, Multi-Cell PVC Type C with four (4) 1.19" inside diameter ducts, or equivalent. Each innerduct shall be of a different color. The color shall be consistent throughout the system so that the white inner duct is always matched with white, blue with blue, etc. A pull tape shall be installed in each inner duct.

This work shall consist of furnishing and installing 4" conduit attached to structure shall be Opticom Standard Type C with Opticom 44R Ribbed Polyethylene Inner duct with 4 1.263" inside diameter ducts or equivalent, including all fittings and accessories at the locations specified on the plans.

The conduit shall comply with NEMA TC10 with the exception of 3" bell (6" bell is acceptable). "NEMA TC10" shall be stamped on all conduit.

<u>Basis of Payment:</u> This work shall be paid at the contract unit price per foot for CONDUIT IN TRENCH 4" DIA., PVC TYPE C.

## **CONDUIT PUSHED, 4" DIA., PVC SCHEDULE 40**

This work shall consist of furnishing and installing 4" conduit pushed and shall be Opti-com PVC Conduit Schedule 40 with Opti-com 44R Ribbed Polyethylene Inner duct with four (4) 1.263" inside diameter ducts or Carlon Multi Gard, Multi-Cell PVC Schedule 40 with four (4) 1.19" inside diameter ducts, or equivalent, including all fittings and accessories attached to supports at the locations specified on the plans. The method used to install this conduit shall be the method described in section 810.03 of the standard specifications.

Each innerduct shall be of a different color. The color shall be consistent throughout the system so that the white inner duct is always matched with white, blue with blue, etc. A pull tape shall be installed in each inner duct.

<u>Basis of Payment</u> This work shall be paid at the contract unit price per foot for CONDUIT PUSHED, 4" DIA., PVC SCHEDULE 40.

#### **HANDHOLES**

Add the following to Section 814 of the Standard Specifications:

All handholes shall be cast-in-place concrete, with a minimum inside dimension of 21-1/2 inches. Frames and lid openings shall match this dimension. The minimum wall thickness for heavy-duty hand holes shall be 12 inches. The handhole cover shall be labeled "ITS" with legible raised letters.

All conduits shall enter the handhole at a minimum depth of thirty (30) inches. However, the depth of conduit from detector locations located less than five (5) feet from the handhole may be less than thirty (30) inches.

All cable hooks shall be hot-dipped galvanized in accordance with AASHTO Specification M111. Hooks shall be a minimum of 3/8-inch diameter and extend into the handhole at least 6 inches. Hooks shall be placed a minimum of 12 inches below the lid, or lower if additional space is required. All cable hooks shall be secured with a retaining nut tightened against the handhole concrete.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price each for HANDHOLE AND HD HANDHOLE as shown on the plans.

## INTERCEPT EXISTING CONDUIT

Intercepting existing conduit shall consist of locating existing conduit, exposing existing conduit, furnishing and installing necessary elbows and fittings to connect intercepted conduit to new conduit and backfill over new connection.

Contractor shall protect and maintain any connections within the existing conduit and only take the existing cables in the conduit out of service for a brief time during the Interception process.

Contractor will be responsible for any damage to conduit and wiring contained within during this process.

If an existing conduit is intercepted to connect to a new handhole, payment will be made to INTERCEPT EXISTING CONDUIT and connect it to a new handhole. The handhole in this situation will be paid for as HANDHOLE.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per each for INTERCEPTING EXISTING CONDUIT. This work will only be paid one time per location of interception, with no extra payment for multiple conduits, if encountered.

## TRAINING AND INSTALLATION

The suppliers of the hardware and software included, paid for, and provided for in the following pay items shall supervise the installation and testing of such items:

- FIBER OPTIC TERMINATION IN CABINET
- FIBER OPTIC SPLICING IN CABINET
- WIDE AREA NETWORK
- WIRELESS COMMUNICATION DEVICES
- MEDIA CONVERTERS

A factory certified representative shall be present for the turn-on. In addition to the turn-on, the representative from the supplier shall be on-site for a minimum of one (1) day unless otherwise stated in this contract. The representative shall work with the other suppliers and representatives.

This representative shall be available for troubleshooting and if need be to meet with Department personnel and other suppliers for troubleshooting the project.

In addition to the installation, each representative shall provide training for a period of no less than two (2) hours to maintenance, communications and engineering personnel in the operation, setup, and maintenance of their company's equipment.

The cost of providing the factory certified representative and training of Department of Transportation personnel shall be included in the cost of the particular pay item's contract unit price.

#### WARRANTY

The Contractor shall warranty all materials and workmanship including labor for a period of two (2) years after the completion and acceptance of the installation of the items included in the following pay items:

- FIBER OPTIC SPLICING IN CABINET
- WIDE AREA NETWORK
- WIRELESS COMMUNICATION DEVICES

unless other warranty requirements prevail.

The Contractor shall obtain from the manufacturers, warranties for all electronic and mechanical equipment. These warranties shall be transferred to the Department or other maintaining agencies upon the completion and acceptance of the project. The manufacturer shall warrant the equipment and all parts thereof against any defects of design, workmanship, and materials, and guarantee to promptly repair or replace, free of charge, any item that has become defective for reasons not proven to have been caused by negligence on the part the user or acts of a third party during the warranty period.

The warranty period shall begin when the Contractor completes all construction obligations related to this item and when the components for this item have been accepted, which shall be documented as the final completion date in the construction status report. This warranty shall include repair and/or replacement of all failed components via a factory authorized depot repair service. All items sent to the depot for repair shall be returned within two (2) weeks of the date of receipt at the facility. The depot location shall be in the United States. Repairs shall not require more than two (2) weeks from date of receipt and the provider of the warranty shall be responsible for all return shipping costs. The depot maintainer designated for each component shall be authorized by the original manufacturer to supply this service.

A warranty certificate shall be supplied for each component from the designated depot repair site indicating the start and end dates of the warranty. The certificate shall be supplied at the conclusion of the system acceptance test and shall be for a minimum of two (2) years after that point. The certificate shall name the Department as the recipient of the service. The Department shall have the right to transfer this service to other private parties who may be contracted to perform overall maintenance of the system.

#### FINAL SYSTEM ACCEPTANCE

The Contractor shall request a turn-on of the WIRELESS COMMUNICATION DEVICES and WIDE AREA NETWORK after all of the equipment has been completely installed, fully operable, fully documented, and IDOT staff training completed. The WIRELESS COMMUNICATION DEVICE and WIDE AREA NETWORK must be inspected at the same time. Inspecting one (1) system without the others will not be permitted. All required system hardware and software shall be completely installed and fully operable prior to the systems inspection request. The inspection request must be made to the Engineer a minimum of three (3) working days prior to the time of the requested inspection. During the inspection all items will be tested for proper operation according to the contract and to the satisfaction of the Engineer and the Bureau of Operations. The Contractor shall be provided with a punchlist indicating which equipment failed the inspection and require corrective measures. Upon the turn-on inspection, the Engineer may allow the systems to operate in continuous operation but this shall not relieve the Contractor from correcting the failed items. The Contractor shall notify the Engineer when all the failed items on the punchlist have been corrected and shall request an inspection. A turn-on inspection shall not be considered successful until each item on the punchlist has been corrected by the Contractor to operate according to the contract and to the satisfaction of the Engineer.

After a successful turn-on inspection WIRELESS COMMUNICATION DEVICES and WIDE AREA NETWORK shall enter a 30 calendar day minimum on site monitoring phase.

During this phase the Contractor shall monitor the operation of the systems. Failure of any component during the monitoring period, with the exception of expendable items such as fuses, shall be reported to the Engineer and corrective measures shall be taken by the Contractor to the satisfaction of the Engineer. A failed item in any system shall necessitate restarting the 30 calendar day monitoring period for all systems for the full 30 day duration beginning at the time when the failed item was corrected by the Contractor to the satisfaction of the Engineer.

At the end of a 30 calendar day monitoring period the Contractor shall provide the Engineer with a monitoring log for the items covering the thirty calendar day period. The Contractor shall utilize the system software capabilities to store and generate monitoring logs. Upon review of the logs and further equipment performance testing to the satisfaction of the Engineer, he/she will issue a WIRELESS COMMUNICATION DEVICE, and WIDE AREA NETWORK, Acceptance Notice or notify the Contractor in writing of the deficiencies.

This is not a pay item and cost shall be included in the cost of the particular pay item's contract unit price.

#### TEMPERATURE CONTROL FOR CONCRETE PLACEMENT

Effective: October 17, 2008

Delete the second and third sentences of the second paragraph of Article 1020.14(a) of the Standard Specifications.

#### **BRACED EXCAVATION**

Effective: August 9, 1995 Revised: July 1, 2002

<u>Description.</u> This work shall consist of furnishing, installing and removing all necessary sheeting and bracing members required to support the excavation according to the applicable requirements of Section 502 of the Standard Specifications. This item shall also include all excavation of earth necessary to obtain the bottom of footing elevations shown on the plans where braced excavation is indicated. The bracing shall properly support excavations by the use of sheeting, timber or plates etc., to prevent movement of soil, structures, pavements or utilities outside of the excavated area.

<u>Construction Requirements.</u> The Contractor shall submit design calculations and shop drawings prepared and sealed by an Illinois Licensed Structural Engineer for the temporary earth retention system. Shop drawings shall show the design and all necessary details for the construction of the bracing system. The design calculations and shop drawings shall be submitted to the Engineer for approval.

Approval of the Engineer shall be received before the Contractor proceeds with his construction operations. However, in any event, the Contractor shall be fully responsible for the safety, stability and adequacy of the bracing system and shall be solely responsible and liable for all damages resulting from his construction operations or from failure or inadequacy of the bracing system.

In the event the bracing system protecting the existing embankment fails or is otherwise inadequate, in the judgment of the Engineer, the Contractor shall, at his own expense, take all necessary steps to restore the embankments to a safe operating condition to the satisfaction of the Engineer.

Bracing members shall be installed as soon as an excavation level is reached to permit their installation.

<u>Method of Measurement.</u> This work shall be measured in cubic yards (cubic meters) according to the requirements for structure excavation as specified in Section 502.12(b) of the Standard Specifications.

<u>Basis of Payment.</u> This work, as herein specified and shown on the plans, will be paid for at the contract unit price per cubic yard (cubic meter) for BRACED EXCAVATION. Payment for BRACED EXCAVATION will be limited to those locations shown on the plans. All sheeting and bracing members associated with braced excavation will not be measured for payment but shall be included in the cost for BRACED EXCAVATION. No separate payment will be made for structure excavation where BRACED EXCAVATION is shown.

## **STORM SEWER (WATER MAIN REQUIREMENTS)**

This work shall consist of constructing a storm sewer to meet water main standards, as required by the IEPA requirements or when otherwise specified. The work shall be performed in accordance with applicable parts of Section 550 of the Standard Specifications, applicable sections of the current edition of the IEPA Regulations (35 III. Adm. Code 653.119), the applicable sections of the current edition of the Standard Specifications for Water and Sewer Main Construction in Illinois, and as herein specified.

This provision shall govern the installation of all storm sewers which do not meet IEPA criteria for separation distance between storm sewers and water mains. Separation criteria for storm sewers placed adjacent to water mains and water services are as follows:

- 1. Water mains and water service lines shall be located at least 3.05 meters (10 ft) horizontally from any existing or proposed drain, storm sewer, or sewer service connection.
- 2. Water mains and water service lines may be located closer than 3.05 meters (10 ft) to a sewer line when:
  - a) local conditions prevent a lateral separation of 3.05 meters (10 ft), and
  - b) the water main or water service invert is 460 millimeters (18 in) above the crown of the sewer, and
  - c) the water main or water service is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
- 3. A water main or water service shall be separated from a sewer so that its invert is a minimum of 460 millimeters (18 in) above the crown of the drain or sewer whenever water mains or services cross storm sewers, sanitary sewers or sewer service connections.

The vertical separation shall be maintained for that portion of the water main or water services located 3.05 meters (10 ft) horizontally of any sewer or drain crossed.

When it is impossible to meet 1, 2, or 3 above, the storm sewer shall be constructed of concrete pressure pipe, slip-on or mechanical joint ductile iron pipe, or PVC pipe equivalent to water main standards of construction. Construction shall extend on each side of the crossing until the perpendicular distance from the water main or water service to the sewer or drain line is at least 3.05 meters (10 ft).

Storm sewers constructed to meet water main standards shall be constructed of the following pipe materials:

## Concrete Pressure Pipe

Concrete pressure pipe shall conform to the latest AWWA Standard C 300, C 301, C 302, and C 303.

Joints shall conform to Article 41-2.07B of the "Standard Specifications for Water and Sewer Main Construction in Illinois."

## **Ductile-Iron Pipe**

Ductile-iron pipe shall conform to ANSI A 21.51 (AWWA C151), class or thickness designed per ANSI A 21.50 (AWWA C150), tar (seal) coated and/or cement lined per ANSI A 21.4 (AWWA C104), with a mechanical or rubber ring (slip seal or push on) joints.

Joints for ductile-iron pipe shall be in accordance with the following applicable specifications:

- 1. Mechanical Joints AWWA C111 and C600
- 2. Push-On Joints AWWA C111 and C600

#### Plastic Pipe

Polyvinyl Chloride (PVC) and Chlorinated Polyvinyl Chloride (CPVC) shall conform to NSF Standard 14 and ASTM Standard B 1784 or AWWA Standard C 900 or C 905. Piping materials designated Class 12454B (PVC 1120), Class 12454C (PVC 1220) and Class 23447B (CPVC 4120) are acceptable in the following pressure ratings: schedule ratings shall be in accordance with ASTM Standards B 1785 (PVC) and F441 (CPVC); standard dimension ratio pressure rated (SDR-PR) shall be in accordance with ASTM Standards D2241 (PVC) and ASTM F442 (CPVC). Schedule 80 is required for all pipe sizes; pipe to be threaded shall be at least Schedule 120. SDR rating of 26 or less shall be required for PVC 1120, PVC 1220 and CPVC 4120. All pipe and fittings shall bear the National Sanitation Foundation (NSF) seal of approval. The piping shall be visibly marked with specific schedule number of SDR rating.

In addition to these pipes, reinforced concrete culvert, storm drain, and sewer pipe shall also be allowed for water-sewer line crossing but not for parallel construction. The reinforced concrete pipe shall conform to ASTM C-76 of the class required by Article 550.03 of the Standard Specifications with the joints conforming to ASTM C 361 or C 433.+.

Jointing shall be pressure slip jointed, solvent welded, heat welded, flanged, or threaded joint. Special precautions shall be taken to insure clean, dry contact surfaces when making solvent or heat welded joints. Adequate setting time shall be allowed for maximum strength.

Elastomeric seals (gaskets) used for push-on joints shall comply with ASTM Standard F477.

Solvent cement shall be specific for the piping material and shall comply with the ASTM Standard D2564 (PVC) and F493 (CPVC) and be approved by NSF.

This work will be measured and paid for at the contract unit price per foot for STORM SEWER (WATER MAIN REQUIREMENTS) of the diameter specified

#### **WORK DURING PEAK HOURS**

The Contractor shall have all lanes in each direction as shown in the Suggested Stages of Construction and Traffic Control plan sheets open to traffic during peak hours. The Contractor will not be permitted to conduct any operation in the open lanes nor will the Contractor be permitted to restrict or impede the flow of traffic during peak hours. This shall include the installation and removal of the permanent lane closures, striping, and signing shown in the Suggested Stages of Construction and Traffic Control plan sheets. Peak hours for this project are defined as occurring from 3:00 PM to 6:00 PM in the eastbound direction and 6:00 AM to 9:00 AM in the westbound direction.

Additionally, there are events of regional significance that may impact traffic within the project limits. For these events, the Contractor will be informed by the Engineer regarding special peak hour restrictions that will be implemented. Events of regional significance will include, but may not be limited to, St. Louis Cardinal home games, St. Louis Rams home games, St. Louis Blues home games, racing events at Gateway International Raceway, Fair St. Louis, and Live on the Levee.

Peak hour restrictions for Cardinal home night games will be defined as occurring from 3:00 PM to 7:00 PM in the westbound direction and from 9:00 PM to 30 minutes after the end of the game in the eastbound direction. The peak hour restrictions for day games are defined as 10:00 AM to 1:00 PM in the westbound direction and 2:00 PM to 30 minutes after the end of the game in the eastbound direction.

## Failure To Open Traffic Lanes To Traffic For Peak Periods

If the Contractor fails to completely open and keep open all lanes of traffic open during the peak hours described elsewhere in these Special Provisions, he shall be liable to the Department in the amount of \$1000 for each and every 15 minute interval or portion thereof that a lane is blocked outside the allowable time limitations. No provision of this clause shall be construed as a penalty but as liquidated and ascertained damages. Such damages may be deducted by the Department from any monies due to the Contractor. These damages shall apply during the length of the contract and includes any extensions of the contract time.

#### CHAIN LINK GATE 10'X30', DOUBLE SWING

This item shall consist of all materials and labor necessary to furnish and install twin swinging 10 FT by 15 FT Gates, to accommodate a 10 FT by 30 FT opening.

Gate shall be constructed according to Section 664 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction and Standard Drawing 664001-02, with the following modifications:

Gate Posts shall be Steel Pipe posts meeting requirements of ASTM F1184, Type II, and requirements for steel pipe framework specified in the ASTM Standard Specifications, 4.0 inches outside diameter, 9.11 pounds per linear foot for Group 1A pipe, or 6.56 pounds per linear foot for Group 1C pipe minimum. Gate posts, when installed, shall have a minimum of 10 FT exposed.

Steel pipe framing shall meet requirements of ASTM F1184. The gate frame shall be 8 FT tall, but overall finished gate height shall be 10 FT. 6 strands of equally spaced barbed-wire shall be placed vertically above the 8 FT fence frame to increase the height of the gate to 10 FT.

Fence Fabric shall be Type 1, Class D Zinc-Coated Steel as described in IDOT's Standard Specifications for Bridge and Road Construction Section 1006.27.

Gate shall be fully lockable by use of a padlock.

Basis of Payment. Furnishing and installing all materials for the gate will be paid for at the contract unit price, per EACH for CHAIN LINK GATE 10' X 30', DOUBLE SWING.

#### **CHAIN LINK CANTILEVER SLIDE GATE, 10'X30'**

This item shall consist of all materials and labor necessary to furnish and install one cantilever 10 FT by 30 FT Gates, to accommodate a 10 FT by 30 FT opening.

Contractor shall install new gate in line with existing chain link fence at IDOT maintenance yard. Contractor shall be responsible to remove necessary portion of existing fence and reattach existing fence materials to new gate. This work shall be considered incidental to installation of the new gate, including any new hardware necessary to reconnect existing fence materials to new fence. Contractor must maintain the integrity of the fence for security purposes during installation of the new gate.

Gate shall be constructed according to Section 664 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction and Standard Drawing 664001-02, with the following modifications:

Gate Posts shall be Steel Pipe posts meeting requirements of ASTM F1184, Type II, and requirements for steel pipe framework specified in the Standard Specifications, 4.0 inches outside diameter, 9.11 pounds per linear foot for Group 1A pipe, or 6.56 pounds per linear foot for Group 1C pipe minimum. These gate posts, when installed, shall have a minimum of 10 FT exposed.

The gate frame shall be 8 FT tall, but overall finished gate height shall be 10 FT. 6 strands of equally spaced barbed-wire shall be placed vertically above the 8 FT fence frame to increase the height of the gate to 10 FT.

Gate frame shall be according to ASTM F1184, Type II heavy duty, top rail gate incorporating a track for top roller and with framing, supports, bracing, hardware and accessories as required for a complete and operational assembly. Brace frame to prevent sagging and apply fabric to entire gate. Provide bar latch and two padlocks to enable both inside and outside padlock to open latch.

Fence Fabric shall be Type 1, Class D Zinc-Coated Steel as described in IDOT's Standard Specifications for Bridge and Road Construction Section 1006.27.

Basis of Payment. Removal of existing fence section, reattachment to new gate, furnishing and installing all materials for the gate will be paid for at the contract unit price, per EACH for CHAIN LINK CANTILEVER SLIDE GATE, 10' X 30'.

## **CHAIN LINK GATE 8'X30', DOUBLE SWING**

This item shall consist of all materials and labor necessary to furnish and install twin swinging 8 FT by 15 FT Gates, to accommodate an 8 FT by 30 FT opening.

Gate shall be constructed according to Section 664 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction and Standard Drawing 664001-02, with the following modifications:

Gate Posts shall be Steel Pipe posts meeting requirements of ASTM F1184, Type II, and requirements for steel pipe framework specified in the ASTM Standard Specifications, 4.0 inches outside diameter, 9.11 pounds per linear foot for Group 1A pipe, or 6.56 pounds per linear foot for Group 1C pipe minimum.

Steel pipe framing shall meet requirements of ASTM F1184. The gate frame shall be 8 FT tall.

Fence Fabric shall be Type 1, Class D Zinc-Coated Steel as described in IDOT's Standard Specifications for Bridge and Road Construction Section 1006.27.

Gate shall be fully lockable by use of a padlock.

Basis of Payment. Furnishing and installing all materials for the gate will be paid for at the contract unit price, per EACH for CHAIN LINK GATE 8' X 30', DOUBLE SWING.

## **DRAINAGE SYSTEM**

Effective: June 10, 1994 Revised: January 1, 2007

<u>Description.</u> This work shall consist of furnishing and installing a bridge drainage system as shown on the plans, including all piping, fittings, support brackets, inserts, bolts, and splash blocks when specified.

Material. The pipe and fittings shall be reinforced fiberglass according to ASTM D 2996 RTRP with a 30,000 psi (207 MPa) minimum short-time rupture strength hoop tensile stress. The reinforced fiberglass shall also have an apparent stiffness factor at 5 percent deflection exceeding 200 cu in.-lbf/sq. in. (22.6 cu mm-kPa) and a minimum wall thickness of 0.10 in. (2.54 mm). All pipe supports and associated hardware shall be hot dip galvanized according to AASHTO M 232 (M 232M). The fiberglass pipe and fittings furnished shall be pigmented through out, or have a resin-rich pigmented exterior coat, specifically designed for overcoating fiberglass, as recommended by the manufacturer. The color shall be as specified by the Engineer. The resin in either case shall have an ultraviolet absorber designed to prevent ultraviolet degradation. The supplier shall certify the material supplied meets or exceeds these requirements.

<u>Design.</u> The drainage system shall be designed as an open system with allowances for the differential expansion and contraction expected between the superstructure and the substructure to which the drainage system is attached.

<u>Installation.</u> All connections of pipes and fittings shown on the plans to facilitate future removal for maintenance cleanout or flushing shall be made with a threaded, gasketed coupler or a bolted gasketed flange system. Adhesive bonded joints will be permitted for runs of pipe between such connections. The end run connection shall feature a minimum nominal 6 in. (150 mm) female threaded fiberglass outlet. Straight runs may utilize a 45 degree reducing saddle bonded to the pipe. The female outlet shall be filled with a male threaded PVC plug.

Runs of pipe shall be supported at spacings not exceeding those recommended by the manufacturer of the pipe. Supports that have point contact or narrow supporting areas shall be avoided. Standard slings, clamps, clevis hangers and shoe supports designed for use with steel pipe may be used. A minimum strap width for hangers shall be 1 1/2 in. (40 mm) for all pipe under 12 in. (300 mm) in diameter and 2 in. (50 mm) for diameters 12 in. (300 mm) or greater. Straps shall have 120 degrees of contact with the pipe. Pipes supported on less than 120 degrees of contact shall have a split fiberglass pipe protective sleeve bonded in place with adhesive.

All reinforced fiberglass pipe, fittings, and expansion joints shall be handled and installed according to guidelines and procedures recommended by the manufacturer or supplier of the material.

<u>Basis of Payment.</u> This work will be paid for at the contract lump sum price for DRAINAGE SYSTEM.

## **CLEANING AND PAINTING NEW METAL STRUCTURES**

Effective Date: September 13, 1994 Revised Date: May 11, 2009

<u>Description.</u> The material and construction requirements that apply to cleaning and painting new structural steel shall be according to the applicable portion of Sections 506 of the Standard Specifications except as modified herein. The three coat paint system shall be the system as specified on the plans and as defined herein. Unless stated otherwise, requirements imposed on the "Contactor" in this specification apply to both the shop painting contractor and the field painting contractor.

Materials. All materials to be used on an individual structure shall be produced by the same manufacturer. The Bureau of Materials and Physical Research has established a list of all products that have met preliminary requirements. Each batch of material must be tested and approved by that bureau before use.

The paint materials shall meet the requirements of the following articles of the Standard Specification:

<u>Item</u>	<u>Article</u>
(a) Inorganic Zinc-Rich Primer	1008.02
(b) Waterborne Acrylic	1008.04
(c) Aluminum Epoxy Mastic	1008.03
(d) Organic Zinc-Rich Primer (Note 1)	

- (e) Epoxy Intermediate (Note 1)
- (f) Aliphatic Urethane (Note 1)

Note 1: These material requirements shall be according to the Special Provision for the Organic Zinc-Rich Paint System.

Submittals. At least 30 days prior to beginning shop or field painting respectively, the Contractor shall submit for the Engineer's review and acceptance, the following applicable plans, certifications and information for completing the field work. Painting work shall not proceed until the submittals are accepted by the Engineer. Qualifications, certifications and QC plans for shop and field cleaning and painting shall be available for review by the QA Inspector.

- a) Contractor Shop Qualifications. Except for miscellaneous steel items such as bearings, side retainers, expansion joint devices, and other items allowed by the Engineer, or unless stated otherwise in the contract, the shop painting Contractors—shall be certified to perform the work as follows: the shop painting Contractor shall possess AISC Sophisticated Paint Endorsement or SSPC-QP3 certification. Evidence of current qualifications shall be provided.
- b) Contractor Field Qualifications. When indicated on the contract plans, the field painting contractor shall possess current SSPC QP1 certification. Evidence of current qualifications shall be provided. The Contractor shall maintain certified status throughout the duration of the painting work under the contract. The Department reserves the right to accept Contractors documented to be currently enrolled in the SSPC-QP7, Painting Contractor Introductory Program, in lieu of the QP certifications noted above.
- c) QC Personnel Qualifications. Personnel managing the shop and field Quality Control program(s) for this work shall possess a minimum classification as a National Association of Corrosion Engineers (NACE) Coating Inspector Level 2-Certified, or shall provide evidence of successful inspection of 3 projects of similar or greater complexity and scope that have been completed in the last 2 years. Copies of the certification and/or experience shall be provided, including names, addresses and telephone numbers of contact persons employed by the bridge owner.

The personnel performing the QC tests for this work shall be trained in coatings inspection and the use of the testing instruments. Documentation of training shall be provided.

The QC personnel shall not perform hands on surface preparation or paint activities unless otherwise approved by the Engineer. Painters shall perform wet film thickness measurements, with QC personnel conducting random spot checks of the wet film. The Contractor shall not replace the QC personnel assigned to the project without advance notice to the Engineer, and acceptance of the replacement(s), by the Engineer.

- d) Quality Control (QC) Program. The shop and field QC Programs shall identify the following; the instrumentation that will be used, a schedule of required measurements and observations, procedures for correcting unacceptable work, and procedures for improving surface preparation and painting quality as a result of quality control findings. The shop program shall include a copy of the quality control form(s) that will be completed daily. The field program shall incorporate the IDOT Quality Control Daily Report form, as supplied by the Engineer.
- e) Field Cleaning and Painting Inspection Access Plan. The inspection access plan for use by Contractor QC personnel for ongoing inspections and by the Engineer during Quality Assurance (QA) observations.
- f) Surface Preparation/Painting Plan. The surface preparation/painting plan shall include the methods of surface preparation and type of equipment to be utilized for solvent cleaning, abrasive blast cleaning, washing, and power tool cleaning. The plan shall include the manufacturer's names of the materials that will be used, including Product Data Sheets and Material Safety Data Sheets (MSDS).

A letter or written instructions from the coating manufacturer shall be included, indicating the required drying time for each coat at the minimum, normal, and maximum application temperatures before the coating can be exposed to temperatures or moisture conditions that are outside of the published application parameters. Application shall be performed in accordance with the coating manufacturer's instructions.

Quality Control (QC) Inspections. The Contractor shall perform first line, in process QC inspections of each phase of the work. The submitted and accepted QC Program(s) shall be used to insure that the work accomplished complies with these specifications. The shop painting Contractor shall use their forms as supplied in their submittal. These shop reports shall be made available for review when requested by the Engineer. The field painting Contractor shall use the IDOT Quality Control Daily Report form supplied by the Engineer to record the results of quality control tests. These field reports shall be turned into the Engineer before work resumes the following day.

The Contractor shall supply all necessary equipment to perform the QC inspections. Equipment shall include the following at a minimum:

- Psychrometer or comparable equipment for the measurement of dew point and relative humidity, together with all necessary weather bureau tables or psychrometric charts.
- Surface temperature thermometer.
- Bresle Cell Kits or CHLOR\*TEST kits for chloride determinations, or equivalent.(only required when erected steel is exposed through the winter prior to field painting.)
- Wet Film Thickness Gage.
- Blotter paper for compressed air cleanliness checks.
- Type 2 Magnetic Dry Film Thickness Gage per SSPC PA2.

- Calibration standards for dry film thickness gage.
- Light meter for measuring light intensity during cleaning, painting, and inspection activities.
- All applicable ASTM and SSPC Standards used for the work.
- Commercially available putty knife of a minimum thickness of 40 mils (1 mm) and a width between 1 and 3 in. (25 and 75 mm). Note that the putty knife is only required in touch-up areas where the coating is being feathered and must be tested with a dull putty knife.

The instruments shall be calibrated by the Contractor's personnel according to the equipment manufacturer's recommendations and the Contractor's QC Program. All inspection equipment shall be made available to the Engineer for QA observations on an as needed basis.

<u>Quality Assurance (QA) Observations</u>. The Engineer may conduct QA observations of any or all phases of the shop or field work. The Engineer's observations in no way relieve the Contractor of the responsibility to provide all necessary daily QC inspections of his/her own and to comply with all requirements of this Specification.

<u>Inspection Access and Lighting.</u> The Contractor shall facilitate the Engineer's observations as required, including allowing ample time to view the work. The field Contractor shall furnish, erect and move scaffolding or other mechanical equipment to permit close observation of all surfaces to be cleaned and painted. This equipment shall be provided during all phases of the work. Examples of acceptable access structures include:

- Mechanical lifting equipment, such as, scissor trucks, hydraulic booms, etc.
- Platforms suspended from the structure comprised of trusses or other stiff supporting members and including rails and kick boards.
- Simple catenary supports are permitted only if independent life lines for attaching a fall arrest system according to Occupational Safety and Health Administration (OSHA) regulations are provided.

When the surface to be inspected is more than 6 ft. (1.8 m) above the ground or water surface, and fall protection is not provided (e.g. guardrails) the Contractor shall provide the Engineer with a safety harness and a lifeline according to OSHA regulations. The lifeline and attachment shall not direct the fall into oncoming traffic. The Contractor shall provide a method of attaching the lifeline to the structure independent of the inspection facility or any support of the platform. When the inspection facility is more than 2 1/2 ft. (800 mm) above the ground, the Contractor shall provide an approved means of access onto the platform.

The Contractor shall provide artificial lighting in areas where natural light is inadequate, as determined by the Engineer, to allow proper cleaning, inspection, and painting. Illumination for inspection shall be at least 30 foot candles (325 LUX). Illumination for cleaning and painting, including the working platforms, access, and entryways shall be at least 20 foot candles (215 LUX).

<u>Construction Requirements for Field Painting.</u> The Contractor shall be responsible for any damage caused to persons, vehicles, or property, except as indemnified by the Response Action Contractor Indemnification Act. Whenever the intended purposes of the protective devices are not being accomplished, as determined by the Engineer, work shall be immediately suspended until corrections are made.

Painted surfaces damaged by any Contractor's operation shall be removed and repainted, as directed by the Engineer, at the Contractor's expense.

The Contractor shall comply with the provisions of the Illinois Environmental Protection Act. Paint drips, spills, and overspray are not permitted to escape into the air or onto any other surfaces or surrounding property not intended to be painted. Containment shall be used to control paint drips, spills, and overspray, and shall be dropped and all equipment secured when sustained wind speeds of 40 mph (64 kph) or greater occur, unless the containment design necessitates action at lower wind speeds. When the containment needs to be attached to the structure, it shall be attached by clamping or similar means. Welding or drilling into the structure shall be prohibited unless otherwise approved by the Engineer in writing. The Contractor shall evaluate project-specific conditions to determine the specific type and extent of containment needed to control the paint emissions and shall submit a plan for containing or controlling paint debris (droplets, spills, overspray, etc.) to the Engineer for approval prior to starting the work. Approval shall not relieve the Contractor of their ultimate responsibility for controlling paint debris from escaping the work zone.

Hold Point Notification for Field Painting. Specific inspection items throughout this specification are designated as Hold Points. Unless other arrangements are made at the project site, the Contractor shall provide the Engineer with a minimum 4-hour notification before a Hold Point inspection will be reached. If the 4-hour notification is provided and the Work is ready for inspection at that time, the Engineer will conduct the necessary observations. If the Work is not ready at the appointed time, unless other arrangements are made, an additional 4-hour notification is required. Permission to proceed beyond a Hold Point without a QA inspection will be granted solely at the discretion of the Engineer, and only on a case by case basis. The Engineer has the right to reject any work that was performed without adequate provision for QA observations

<u>Field Surface Preparation (HOLD POINT).</u> The following processes shall be used to prepare the shop-coated steel surfaces for field painting.

1. <u>Low Pressure Water Cleaning and Solvent Cleaning.</u> The Contractor shall notify the Engineer 24 hours in advance of beginning surface preparation operations.

Washing shall involve the use of potable water at a minimum of 1000 psi (7 MPa) and less than 5000 psi (34 MPa) according to "Low Pressure Water Cleaning" of SSPCSP12. Paint spray equipment shall not be used to perform the water cleaning. The cleaning shall be performed in such a manner as to remove dust, dirt, chalk, insect and animal nests, bird droppings, and other foreign matter prior to solvent cleaning.

If detergents or other additives are added to the water, the detergents/additives shall be included in the submittals and not used until accepted by the Engineer. When detergents or additives are used, the surface shall be rinsed with potable water before the detergent water dries.

After washing has been accepted by the Engineer, all traces of asphaltic cement, oil, grease, diesel fuel deposits, and other soluble contaminants which remain on the steel surfaces to be painted shall be removed according to SSPC – SP1 Solvent Cleaning, supplemented with scraping (e.g., to remove large deposits of asphaltic cement) as required.

The solvent(s) used for cleaning shall be compatible with the primer. The Contractor shall identify the proposed solvent(s) in the submittals. If the primer is softened, wrinkled, or shows other signs of attack from the solvents, the Contractor shall immediately discontinue their use. The name and composition of replacement solvents, together with MSDS, shall be submitted for Engineer acceptance prior to use. If solvent cleaning/scraping is not successful in removing the foreign matter, the Contractor shall use other methods identified in SP1, such as steam cleaning as necessary.

- 2. <u>Water Cleaning Between Coats.</u> When foreign matter has accumulated on a newly applied coat, washing shall be performed prior to the application of subsequent coats.
- 3. <a href="Power Tool Cleaning of Shop-Coated Steel">Power Tool Cleaning SSPC-SP3</a> (Modified). The edges of the coating surrounding the spot repairs shall be feathered. A power tool cleaned surface shall be free of all loose rust, loose and peeling paint, and loose rust that is bleeding through and/or penetrating the coating. All locations of visible corrosion and rust bleed, and lifting or loose paint shall be prepared using the power tools.

Upon completion of the cleaning, rust, rust bleed, and surrounding paint are permitted to remain if they cannot be lifted using a dull putty knife.

<u>Field Soluble Salt Remediation (HOLD POINT)</u>. If the erected steel is exposed to winter weather prior to field painting, the Contractor shall implement surface preparation procedures and processes that will remove chloride from the surfaces prior to field painting. Surfaces that may be contaminated with chloride include, but are not limited to, expansion joints and all areas that are subject to roadway splash or run off such as fascia beams and stringers.

Methods of chloride removal may include, but are not limited to, steam cleaning or pressure washing with or without the addition of a chemical soluble salt remover as approved by the coating manufacturer, and scrubbing before or after initial paint removal. The water does not need to be collected. The Contractor shall provide the proposed procedures for chloride remediation in the Surface Preparation/Painting Plan.

Upon completion of the chloride remediation steps, the Contractor shall use cell methods of field chloride extraction and test procedures (e.g., silver dichromate) accepted by the Engineer, to test representative surfaces for the presence of remaining chlorides. Remaining chloride levels shall be no greater than  $7\mu g/sq$  cm as read directly from the surface without any multiplier applied to the results. The testing must be performed, and the results must be acceptable.

<u>Surface and Weather Conditions (HOLD POINT)</u>. Surfaces to be painted after cleaning shall remain free of moisture and other contaminants. The Contractor shall control his/her operations to insure that dust, dirt, or moisture does not come in contact with surfaces cleaned or painted that day.

Prepared surfaces, shall meet the requirements of the respective degrees of cleaning immediately prior to painting, and shall be painted before rusting appears on the surface. If rust appears or bare steel remains unpainted for more than 12 hours, the affected area shall be prepared again at the expense of the Contractor.

The surface temperature shall be at least 5°F (3°C) above the dew point during final surface preparation operations. The paint manufacturers' published literature shall be followed for specific temperature, dew point, and humidity restrictions during the application of each coat, and for the minimum and maximum time between coats.

The Contractor shall monitor temperature, dew point, and humidity every 4 hours during surface preparation and coating application in the specific areas where the work is being performed. The frequency of monitoring shall increase if weather conditions are changing. The Engineer has the right to reject any work that was performed under unfavorable weather conditions. Rejected work shall be removed, and repainted at the Contractor's expense.

<u>Seasonal Restrictions on Field Cleaning and Painting.</u> Field cleaning and painting work shall be accomplished between April 15 and October 31 unless authorized otherwise by the Engineer in writing.

**Inorganic Zinc-rich/ Waterborne Acrylic Paint system.** This system shall be for shop and field application of the coating system. Shop application of the intermediate and top coats will not be allowed.

In the shop, all structural steel designated to be painted shall be given one coat of inorganic zinc rich primer. In the field, before the application of the intermediate coat, the prime coat and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed as specified above. All damaged shop primed areas shall be spot cleaned per SSPC-SP3 Modified, All damaged areas and all installed fasteners shall be fully primed with aluminum epoxy mastic. The structural steel shall then receive one full intermediate coat and one full topcoat of waterborne acrylic paint.

a) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:

Zinc Primer: 3 mils (75 microns) min., 6 mils (150 microns) max.

Epoxy Mastic(spot coat): 5 mils (125 microns) min., 7 mils (180 microns) max.

Intermediate Coat: 2 mils (50 microns) min., 4 mils (100 microns) max.

Topcoat: 2 mils (50 microns) min., 4 mils (100 microns) max.

The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 7 and 14 mils (180 and 355 microns).

- b) The pressure washing requirement above may be waived if the QC and QA Inspectors verify the primed surfaces have not been contaminated.
- d) Damage to the completed paint system shall be spot cleaned using SSPC-SP3 (Modified). The cleaned areas shall be spot painted with a penetrating sealer as recommended by the manufacturer, which shall overlap onto the existing topcoat. Then the aluminum epoxy mastic shall be spot applied not to go beyond the area painted with the sealer. The acrylic intermediate and topcoat shall be spot applied to the mastic with at least a 6 inch (150 mm) overlap onto the existing topcoat.

**Organic Zinc-Rich/ Epoxy/ Urethane Paint System.** This system shall be for full shop application of the coating system, or when specified on the plans, for the application of two coats in the shop with the finish coat applied in the field.

All contact surfaces shall be masked off prior to shop-application of the intermediate and top coats.

In addition to the requirements of Section 3.2.9 of the AASHTO/AWS D1.5/D1.5:2002 Bridge Welding Code (breaking thermal cut corners of stress carrying members), rolled and thermal cut corners to be painted with organic zinc primer shall be broken if they are sharper than a 1/16 in. (1.5 mm) radius. Corners shall be broken by a single pass of a grinder or other suitable device at a 45 degree angle to each adjoining surface prior to final blast cleaning, so the resulting corner approximates a 1/16 in. (1.5 mm) or larger radius after blasting. Surface anomalies (burrs, fins, deformations) shall also be treated to meet this criteria before priming.

In the shop, all structural steel designated to be painted shall be given one coat of organic zinc rich primer, one coat of epoxy intermediate, and unless stated otherwise in the plans, one coat of urethane finish. Before the application of the field coats, the shop coats and any newly installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed as specified above to remove dirt, oil, lubricants, oxidation products, and foreign substances. All damaged shop coated areas shall then be spot cleaned per SSPC-SP3 (Modified). The surrounding coating at each repair location shall be feathered for a minimum distance of 1 1/2 in. (40 mm) to achieve a smooth transition between the prepared areas and the existing coating. The existing coating in the feathered area shall be roughened to insure proper adhesion of the repair coats.

All damaged areas and all newly installed fasteners shall be fully primed with epoxy mastic. One intermediate coat of epoxy shall be applied over the epoxy mastic and on exposed shop primer. One topcoat of aliphatic urethane shall be applied to all areas where the intermediate coat is visible, whether the intermediate coat was applied in the shop or in the field. The field applied coats shall only overlap onto the existing finish coat where sanding has been performed.

When the plans require the urethane coat to be applied in the field, the maximum recoat time for the intermediate coat shall be observed. If the recoat time for the intermediate coat is exceeded, the Contractor shall remove the shop-applied system, or submit for approval by the Engineer, written recommendations from the coating manufacturer for the procedures necessary to extend that recoat window or otherwise prepare the intermediate coat to receive the finish.

(a) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:

Organic Zinc-Rich Primer: 3 mils (75 microns) min., 5 mils (125 microns) max.

Aluminum Epoxy Mastic (spot coat): 5 mils (125 microns) min., 7 mils (180 microns)

Epoxy Intermediate Coat: 3 mils (75 microns) min., 6 mils (150 microns) max. Aliphatic Urethane Top Coat: 2.5 mils (65 microns) min., 4 mils (100 microns) max.

- (b) The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 8.5 and 15 mils (215 and 375 microns).
- (c) All faying surfaces of field connections shall be masked off after priming and shall not receive the intermediate or top coats in the shop. The intermediate and top coats for field connections shall be applied, in the field, after erection of the structural steel is completed.

# Special Instructions.

Painting Date/System Code. At the completion of the work, the Contractor shall stencil in contrasting color paint the date of painting the bridge, the painting Contractors name, and the paint type code from the Structure Information and Procedure Manual for the system used. The letters shall be capitals, not less than 2 in. (50 mm) and not more than 3 in. (75 mm) in height. When all coats are applied in the shop the shop Contractor shall do the stenciling. When 1 or more coats are applied in the field, the field contractor shall do the stenciling.

The stencil shall contain the following wording "PAINTED BY (insert the name of the painting Contractor)" and shall show the month and year in which the painting was completed, followed by "CODE S" for the Inorganic Zinc/ Acrylic System, "CODE X" for the Organic Zinc/ Epoxy/ Urethane System (field applied finish coats), "CODE AB" for the Organic Zinc/ Epoxy/ Urethane System (shop applied), all stenciled on successive lines. This information shall be stenciled on the cover plate of a truss end post near the top of the railing, or on the outside face of an outside stringer near both ends of the bridge facing traffic, or at some equally visible surface designated by the Engineer.

<u>Method of Measurement.</u> Shop cleaning and painting new structures will not be measured for payment. Field cleaning and painting will not be measured for payment except when performed under a contract that contains a separate pay item for this work.

Basis of Payment. This work will be paid for according to Article 506.07.

#### DRIVEN SOLDIER PILE RETAINING WALL

Effective: November 13, 2002 Revised: October 9, 2009

<u>Description.</u> This work shall consist of providing all labor, materials, and equipment necessary to fabricate, furnish, and drive the soldier piles into position to the specified elevations. Also included in this work is the furnishing and installation of the timber lagging. All work shall be according to the details shown on the plans and as directed by the Engineer.

The remainder of the retaining wall components, if any, as shown on the plans, such as concrete facing, shear studs, reinforcement bars, tie backs, hand rails, and various drainage items etc., are not included in this Special Provision but are paid for as specified elsewhere in this Contract.

<u>Materials</u>. The materials used for the soldier piles and lagging shall satisfy the following requirements:

- (a) The structural steel components for the soldier piles shall conform to the requirements of AASHTO M270, Grade 36 (AASHTO M270M, Grade 250), unless otherwise designated on the plans.
- (b) The Controlled Low-Strength Material (CLSM), used for backfilling shaft excavations to the existing ground surface, shall be according to the Article 1019.
- (c) Timber Lagging. The minimum tabulated unit stress in bending (Fb), used for the design of the timber lagging, shall be 1000 psi (6.9 MPa) unless otherwise specified on the plans.

When treated timber lagging is specified on the plans, the method of treatment shall be according to Article 1007.12. All timber shall meet the inspection requirements of Article 1007.01.

## Construction Requirements. The Contractor shall satisfy the following requirements:

(a) Soldier Pile Fabrication and Placement. The soldier pile is defined as the structural steel section(s) shown on the plans as well as any connecting plates used to join multiple sections. The types of soldier piles shall be defined as HP, W Sections, or Built-Up Sections. Cleaning and painting of all steel components, when specified, shall be as shown on the plans and accomplished according to the special provision for "Cleaning and Painting New Metal Structures". This work will not be paid for separately, but shall be considered included in the cost of Furnishing Soldier Piles of the type specified.

The soldier pile shall be shop fabricated such that no field welding is required. Piles shall be supplied and driven without splices unless approved by the Engineer. Soldier piles furnished with extra length shall be driven to the required tip elevation and cut to satisfy the top of pile elevation or driven past the required tip elevation to avoid cutting. Standard vibratory or impact hammers may be used to install the soldier piles. The Contractor shall use suitable bracing or pile leads to maintain the position of the soldier pile while driving such that the final location will satisfy the Construction Tolerances portion of this Special Provision. At the contractors option and at no extra cost to the department, the piles may be installed by setting them in predrilled excavations and backfilling with CLSM according to Section 593. The drilling methods used to maintain the shaft excavation side wall stability during the various phases of shaft excavation and concrete placement, must be appropriate for the site conditions encountered.

- (b) Obstructions. Obstructions shall be defined as any object (such as but not limited to, boulders, logs, old foundations, etc.) that cannot be penetrated with normal pile driving procedures, but requires special augers, tooling, core barrels or rock augers to remove the obstruction. When obstructions are encountered, the Contractor shall notify the Engineer and upon concurrence of the Engineer, the Contractor shall begin working to core, break up, push aside, or remove the obstruction.
- (c) Construction Tolerances. The soldier piles shall be driven to satisfy the following tolerances:
  - (1) The center of the soldier pile shall be within 1 1/2 in. (38 mm) of plan station and 1/2 in. (13 mm) offset at the top of the pile.
  - (2) The out of vertical plumbness of the soldier pile shall not exceed 0.83 percent.
  - (3) The top of the soldier pile shall be within  $\pm 1$  in. ( $\pm 25$  mm) of the plan elevation.
- (d) Timber Lagging. Timber lagging, when required by the plans, installed below the original ground surface, shall be placed from the top down as the excavation proceeds. Lagging shown above grade shall be installed and backfilled against prior to installing any permanent facing to minimize post construction deflections. Over-excavation required to place the timber lagging behind the flanges of the soldier piles shall be the minimum necessary to install the lagging.

Any voids produced behind the lagging shall be filled with porous granular embankment at the Contractors expense. When the plans require the Contractor to design the timber lagging, the design shall be based on established practices published in FHWA or AASHTO documents considering lateral earth pressure, construction loading, traffic surcharges and the lagging span length(s). The nominal thickness of the lagging selected shall not be less than 3 in. (75 mm) and shall satisfy the minimum tabulated unit stress in bending (Fb) stated elsewhere in this Special Provision. The Contractor shall be responsible for the successful performance of the lagging system until the concrete facing is installed. When the nominal timber lagging thickness(s) and allowable stress are specified on the plans, the timber shall be rough cut or surfaced and according to Article 1007.03.

- (e) Structure Excavation. When structure excavation is necessary to place a concrete facing, it shall be made and paid for according to Section 502 except that the horizontal limits for structure excavation shall be from the face of the soldier pile to a vertical plane 2 ft. (600 mm) from the finished face of the wall. The depth shall be from the top of the original ground surface to the bottom of the concrete facing. The additional excavation necessary to place the lagging whether through soil or CLSM shall be included in this work.
- (f) Geocomposite Wall Drain. When required by the plans, the geocomposite wall drain shall be installed and paid for according to Section 591 except that, in the case where a concrete facing is specified on the plans, the wall drain shall be installed on the concrete facing side of the timber lagging with the pervious (fabric) side of the drain installed to face the timber. When a concrete facing is not specified on the plans, the pervious (fabric) side of the drain shall be installed to face the soil. In this case, the drain shall be installed in stages as the timber lagging is installed. The wall drain shall be placed in sections and spliced, or kept on a continuous roll, so that as each timber is placed, the drain can be properly located as the excavation proceeds.

<u>Method of Measurement</u>. The furnishing and driving of soldier piles will be measured for payment in feet (meters) along the centerline of the soldier pile for each of the types specified. The length shall be determined as the difference between the plan top of soldier pile and the required tip elevation.

Timber lagging shall be measured for payment in square feet (square meters) of timber lagging installed to the limits as shown on the plans. The quantity shall be calculated using the minimum lagging length required on the plans multiplied by the as installed height of timbers, for each bay of timber lagging spanning between the soldier piles.

<u>Basis of Payment</u>. The furnishing of soldier piles will be paid for at the contract unit price per foot (meter) for FURNISHING SOLDIER PILES, of the type specified, for the total number of feet (meters) required by the plan design.

The driving of soldier piles will be paid for at the contract unit price per foot (meter) for DRIVING SOLDIER PILES. Any bracing, cutoffs, or splicing required will not be paid for separately but shall be included in this item.

The timber lagging will be paid for at the contract unit price per square foot (square meter) for UNTREATED TIMBER LAGGING, or TREATED TIMBER LAGGING as detailed on the plans.

Obstruction mitigation shall be paid for according to Article 109.04.

#### **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.

Construction. 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.

#### PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000 Revised: October 9, 2009

<u>Description</u>. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 15, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

<u>Construction Requirements.</u> All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

<u>Method of Measurement.</u> Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

## POROUS GRANULAR EMBANKMENT, SPECIAL

Effective: September 28, 2005 Revised: November 14, 2008

<u>Description.</u> This work shall consist of furnishing and placing porous granular embankment special material as detailed on the plans, according to Section 207 except as modified herein.

Materials. The gradation of the porous granular material may be any of the following CA 8 thru CA 18, FA 1 thru FA 4, FA 7 thru FA 9, and FA 20 according to Articles 1003 and 1004.

<u>Construction.</u> The porous granular embankment special shall be installed according to Section 207, except that it shall be uncompacted.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per Cubic Yard (Cubic Meter) for POROUS GRANULAR EMBANKMENT, SPECIAL.

#### **MECHANICAL SPLICERS**

Effective: September 21, 1995 Revised: May 11, 2009

<u>Description</u>. This work shall consist of furnishing and installing mechanical splices according to the plans and this special provision.

<u>Materials and Procedures</u>. The mechanical connection may be made by means of an approved mechanical splicer. Splicer bar type systems lapped with the primary reinforcement will not be allowed. The mechanical splicer shall develop in tension at least 125 percent of the specified yield strength of the bar.

When both reinforcement bars being spliced are epoxy coated the mechanical splicer shall also be epoxy coated according to AASHTO M284.

Contact the Bureau of Materials for a current list of approved mechanical reinforcing bar splicers/coupler systems.

<u>Installation</u>. The Contractor shall supply the manufacturer's written installation instructions to the Engineer prior to installing the mechanical splices.

<u>Testing</u>. A minimum of two tension tests will be made with the method of splicing selected on each size bar to be spliced. The Contractor shall furnish certified copies of the test reports from an independent testing laboratory.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price each for MECHANICAL SPLICERS.

#### **DEMOLITION PLANS FOR REMOVAL OF EXISTING STRUCTURES**

Effective: September 5, 2007

Add to the beginning of Article 501.02 of the Standard Specifications.

"The Contractor shall submit a demolition plan to the Engineer for approval, detailing the proposed methods of demolition and the amount, location(s) and type(s) of equipment to be used. With the exception of removal of single box culverts, for work adjacent to or over an active roadway, railroad or navigable waterway, the demolition plan shall include an assessment of the structure's condition and an evaluation of the structure's strength and stability during demolition and shall be sealed by an Illinois Licensed Structural Engineer."

#### **PILING**

Effective May 11, 2009

Revise Article 512.11 to read as follows:

**512.11 Penetration of Piles.** Piles shall be installed to a penetration that satisfies all of the following.

- (a) The nominal driven bearing, as determined by the formula in Article 512.14, is not less than the nominal required bearing shown on the plans.
- (b) The pile tip elevation is at or below the minimum tip elevation shown on the plans. In cases where no minimum tip elevation is provided, the piles shall be driven to a penetration of at least 10 ft (3 m) below the bottom of footing or below undisturbed earth, whichever is greater.

Except as required to satisfy minimum tip elevations required in (b) above, piles are not required to be driven more than one additional foot (300 mm) after the nominal driven bearing equals or exceeds the nominal required bearing; more than three additional inches (75 mm) after the nominal driven bearing exceeds 110 percent of the nominal required bearing; or more than one additional inch (25 mm) after the nominal driven bearing exceeds 150 percent of the nominal required bearing.

When piles fail to achieve nominal driven bearings in excess of the nominal required bearing after driving the full furnished lengths, but are within 85 percent of nominal required bearing, these piles shall be left for a minimum of 24 hours to allow for soil setup and retesting before splicing and driving additional length. After the waiting period has passed, the pile shall be redriven to check the gain in nominal driven bearing upon soil setup. The soil setup nominal driven bearing shall be based on the number of redriving blows necessary to drive the pile an additional 3 in. (75 mm) using a hammer that has been warmed up by applying at least 20 blows to another pile. These piles will be accepted if they exhibit a nominal driven bearing larger than nominal required bearing.

# APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS INSIDE ILLINOIS STATE BORDERS (BDE)

Effective: November 1, 2008

Revise the title of Article 107.22 of the Standard Specifications to read:

# "107.22 Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders."

Add the following sentence to the end of the first paragraph of Article 107.22 of the Standard Specifications:

"Proposed borrow areas, use areas, and/or waste areas outside of Illinois shall comply with Article 107.01."

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

Effective: September 1, 1990 Revised: January 1, 2007

BUILDING REMOVAL: This work shall consist of the removal and disposal of  $\underline{1}$  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:

Bldg. No.	Parcel <u>No.</u>	<u>Location</u>	<u>Description</u>
#2	8826251	1101 North 9 <sup>th</sup> Street	2 Story funeral home

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services 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
IDOT
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.2", and "Removal and Disposal of Non-Friable Asbestos Building No. 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. 2
- 2. REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 2
- 3. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 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.

ASBESTOS ABATEMENT (GENERAL CONDITIONS): 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. 2" and "Removal and Disposal of Non-Friable Asbestos, Building No. 2", and as outlined herein.

Sketches indicating the location of Asbestos Containing Material (ACM) are included in the proposal on pages  $\underline{74}$  thru  $\underline{78}$ . Also refer to the Materials Description Table on page  $\underline{73}$  for a brief description and location of the various materials. Also included is a Materials Quantities Table on page  $\underline{73}$ . 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 <u>110</u>, 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.
  - 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 Worker Protection Procedures.
  - 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 non-compliance 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

 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.

REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO.2: 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. 2, as shown, which price shall include furnishing all labor, materials, equipment and services required to remove and dispose of the friable asbestos.

REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 2: 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. 2, 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. 2".

Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay item BUILDING REMOVAL NO.  $\underline{2}$  be deleted.

# **APPENDIX - CASE I ASBESTOS**

# SECTION 1 1.1 Survey Summary Sheet

# SITE INFORMATION:

FAP Route:	998	Address:	1101 North 9th Street
County:	St. Clair	Address:	
IDOT Job No:	R-98-026-08	City, State Zip	East St. Louis, IL 62201
Section:	82 - 1 - 1HB	Property Type:	Commercial Property
Parcel No:	8826251	Construction Date:	Unknown
IDOT Work Order No:	337	Building Size (sqft):	10,315 sqft.

A	sbestos Containing I	Materials
Survey Date By Whom:	October 28, 2009 PSI, Inc. Thomas Novatka 100-08002 Roger Bancroft 100-06262	Firm Inspector IDPH License No.
Results		
Number of Ma	iterial Types Sampled:	<u>13</u>
Number of Sa	mples Collected:	<u>45</u>
Number of Ma	<u>3</u>	
Was Friable A	<u>Yes</u>	
Were Roofing	<u>Yes</u>	
Are There Uni Requirements	<u>Yes</u>	
Laboratory U	tilized:	
Name: Address:	PSI, Inc. 850 Poplar Street Pittsburgh, PA 15220	3
Building Acc	ess Limitations:	
<u>None</u>		

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# SECTION 1 1.2 Survey Summary & Results

ACM SURVEY RESULTS - Parcel No. 8826251
Commercial Property
1101 North 9th Street
East St. Louis, Illinois 62201

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

MTL#	MATERIAL	LOCATION	F/NF <sup>1</sup>	COND.2	% ACM <sup>3</sup>	# SAMPLES	QUANTITY
	DESCRIPTION						(ENG/MET)
1	Terrazzo flooring	Front entrance; east side of building	NF	Fair	ND	3	100 st 9.3 sm
2	Flat, built-up roofing	Garage	NF	Fair	ND	3	2,400 st 223 sm
3	Roof flashing	Garage	NF	Fair	ND	3	220 to
4	Black sealant	Garage roof	NF	Fair	10%	3	220 lf 67.1 lm
5	Hard plaster/ skim coat	Interior hallways	F	Poor	ND/ND	5.	3,200 st 297.3 sm
6	Drywall/joint compound/ tape	Room walls	NF	Fair	ND/ND/ND	3	3,000 st 278.7 sm
7	Ceiling plaster/ skim coat	Ceilings on first floor	F	Fair	ND/ND	5	3,200 st 297.3 sm
8	Acoustical ceiling plaster	Ceilings on second floor	F	Fair	ND	5	3,200 sf 297.3 sm
9	Drywall skim coat	First floor	F	Fair	ND	3	3,000 sf 278.7 sm
10	White 'popcom' ceiling	First and second floor rooms	F	Fair	ND	3	950 sf 88.3 sm
11	12" x 12" dark green vinyl floor tile/ black mastic	Basement	NF	Fair	ND/ND	3	1,000 sf 92.9 sm
12	Gray fibrous duct seam tape	Basement	F	Fair	60%	3	10 lf 3.0 lm
13	9" x 9" brown viny! floor tile/ black mastic	Basement bathroom	NF	Fair	4% tile 5% mastic	3	50 sf 4.6
TOTAL QUANTITY OF ACM					50 sf 230 lf		

F = Friable; NF = Nonfriable

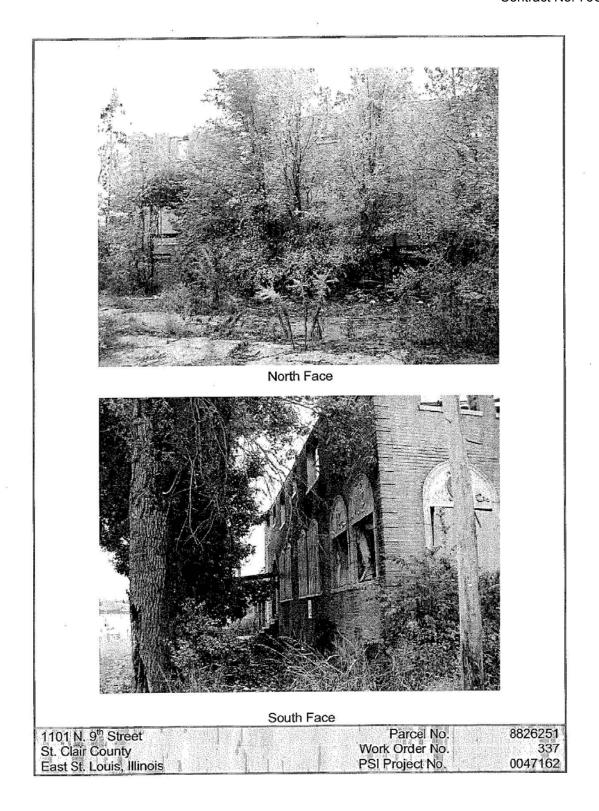
Friability is further defined in section 4. Either good, fair or poor.

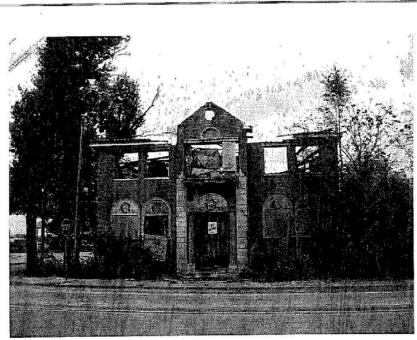
ND = None Detected
Point Count Analysis

Illinois Department of Transportation Work Order No. 337

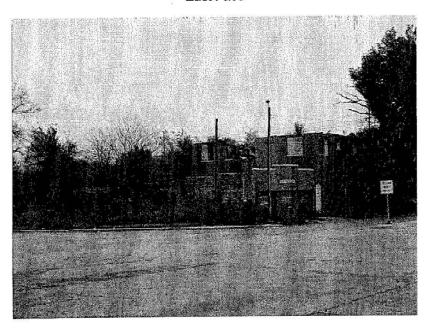
PSI Project No. 0047162

Cond. = Condition Of Materials
 ND = None Detected



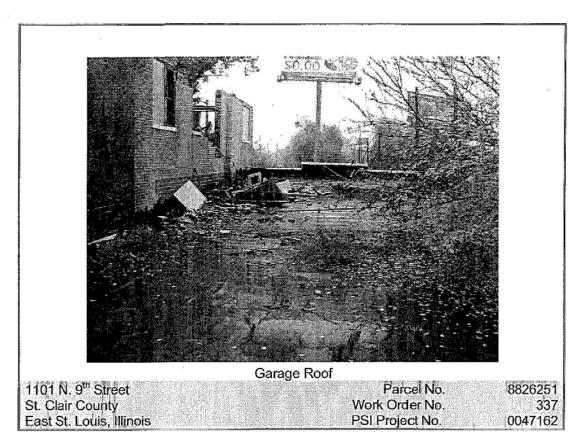


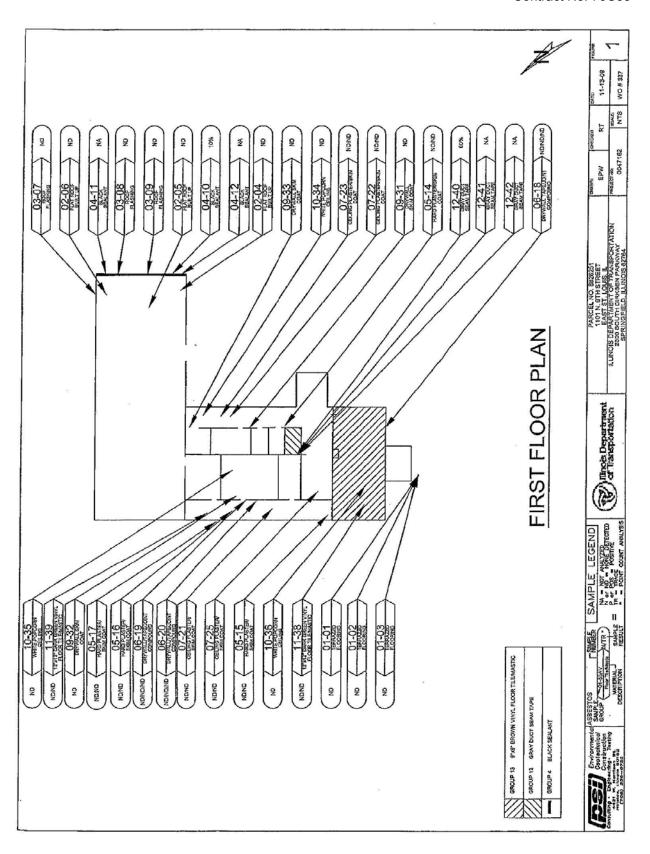
East Face

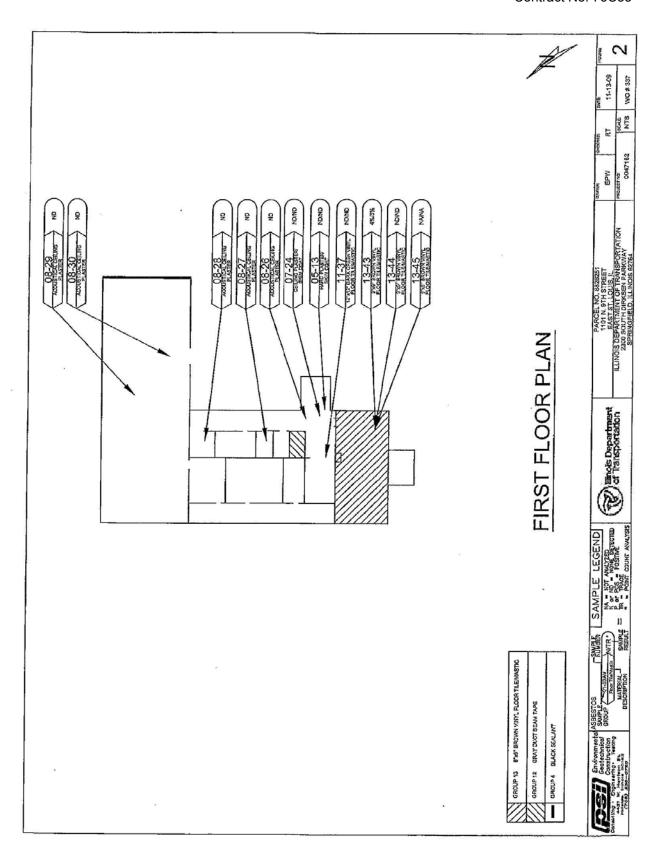


West Face

1101 N. 9<sup>th</sup> Street St. Clair County East St. Louis, Illinois Parcel No. Work Order No. PSI Project No. 8826251 337 0047162







# BUILDING REMOVAL - CASE II (NON-FRIABLE ASBESTOS ABATEMENT) (BDE)

Effective: September 1, 1990 Revised: January 1, 2007

BUILDING REMOVAL: This work shall consist of the removal and disposal of  $\underline{3}$  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:

Bldg. No.	Parce <u>No.</u>		Description
#1	8826220	1112 North 7 <sup>th</sup> Street, E. St. Louis	One Story, 1000SF
#3	8826274	713 Rear Exchange, E. St. Louis	two Story, 1200SF
#5	8826219	1110 North 7 <sup>th</sup> Street, E. St. Louis	One Story, 1000SF

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services 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
IDOT
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).

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)" and "Removal and Disposal of Non-Friable Asbestos Building No. 1,3, and 5" 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 non-friable asbestos is removed prior to demolition. Any salvage value shall be reflected in the contract unit price for this item.

<u>EXPLANATION OF BIDDING TERMS</u>: Two separate contract unit price items have been established for the removal of each building. They are:

- 1. BUILDING REMOVAL NO. 1,3,5
- 2. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1,3,5

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.

ASBESTOS ABATEMENT (GENERAL CONDITIONS): This work consists of the removal and disposal of 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 Provision for "Removal and Disposal of Non-Friable Asbestos, Building No. 1,3, and 5," and as outlined herein.

Sketches indicating the location of Asbestos Containing Material (ACM) are included in the proposal on pages <u>87</u> thru <u>107</u>. Also refer to the Materials Description Table on pages <u>86</u>, <u>93</u>, <u>94</u>, <u>& 95</u> for a brief description and location of the various materials. Also included is a Materials Quantities Table on pages <u>86</u>, <u>93</u>, <u>94</u>, <u>& 95</u>. This table states the ACM is 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 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 <u>110</u>, 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 the permit(s) 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.
  - 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 Worker Protection Procedures.
  - 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 non-compliance 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 the "Notifications" paragraph.
- 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 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.

# ABATEMENT AIR MONITORING: 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. Interior Non-Friable Asbestos-Containing Materials. The Contractor shall perform personal air monitoring during removal of all non-friable 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.
- C. Exterior Non-Friable Asbestos-Containing Materials. The Contractor shall perform personal air monitoring during removal of all non-friable 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.

## D. 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.

REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1,3, and 5: 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. 1,3, and 5, 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 non-friable asbestos is removed first, shall be represented by the pay item "BUILDING REMOVAL NO. \_".

Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay item BUILDING REMOVAL NO. 1,3, and 5 be deleted.

# **APPENDIX - CASE II ASBESTOS**

SECTION 1
1.1 Survey Summary Sheet

# **SITE INFORMATION:**

1112 N. 7th Street N/A FA Route: Address: 998 County: IDOT Job No: St. Clair Address: R-98-026-08 City, State Zip East St. Louis, IL 62201 82-1-HB and 1DM-1 (82-1K) 8826220 Property Type: Construction Date: Section: Single family residence Parcel No: ~1959 1,000 sf IDOT Work Order No: 331 Building Size (sf):

A	sbestos Containing I	Vlaterials
Survey Date By Whom:	September 10, 2009 PSI, Inc. Edward Wagner 100-01778 Tom Novatka 100-08002	Firm Inspector IDPH License No. Inspector IDPH License No.
Number of Ma	iterial Types Sampled:	<u>18</u>
Number of Sa	mples Collected:	<u>56</u>
Number of Ma	terials Testing Positive:	2
Was Friable ACM Found?		<u>Yes</u>
Were Roofing Materials Sampled?		<u>Yes</u>
Are There Unit Requirements	que State or Local ?	<u>Yes</u>
Laboratory U	tillzed:	
Name: Address:	PSI, Inc. 850 Poplar Street Pittsburgh, PA 15220	
Building Acce	ess Limitations:	
<u>None</u>		3

Illinols Department of Transportation Work Order No. 331

PSI Project No. 0047162 Page 1

# SECTION 1 1.2 Survey Summary & Results

ACM SURVEY RESULTS - Parcel # 8826220 Single Family Residence 1112 N. 7<sup>th</sup> Street East St. Louis, IL 62201

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 <sup>1</sup>	COND.2	% ACM <sup>3</sup>	# SAMPLES	QUANTITY (ENG/MEY)
01	Asphalt roofing shingles (Black)	House roof; bottom layer	NF	Poor	ND	3	1,000 s 92,9 sr
02	Rolled asphalt sheeting (Black)	House roof, east & west side	NF	Роог	ND	3	1,000 s 92.9 sr
03	Rolled asphalt sheeting (Green)	House roof west side & addition	NF	Poor	ND	3	300 s 27.9 sr
04	Chimney flashing	Chimney	NF	Poor	7%	3	15 4,6 (r
05	Asphalt roofing shingles w/ backing (White)	Front porch	NF	Poor	ND ND	3	108 : 10.0 sr
06	Rolled asphalt sheeting (Gray)	Addition, west roof, & apex	NF	Poor	ND	3	120 : 11.1 sr
07	Rolled asphalt sheeting (Dark Green)	Addition	NF	Poor	ND	3	180 s
08	Rolled asphalt sheeting w/ backing (Black)	Addition	NF	Poor	ND	3	180 : 16.7 si
09	Asphalt sheeting siding w/ two layers backing (White)	Addition	NF	Poor	ND	3	320 s 29.7 st
10	Duct seam tape	Crawispace	NF	Poor	50%	3	26 7.6 lr
11	Gypsum board	Kitchen, living room, dining room	NF	Poor	ND	3	900 g 83.6 sr
12	Drywali & joint compound	Bathroom, kitchen, den	NF	Poor	ND ND	3	150 s 13.9 sr
13	Gray vinyl sheet flooring	Living room	NF	Poor	ND	3	200 s 18.6 sr
14	Black vinyl sheet flooring	Den & dining room	NF	Poor	ND	3	400 s 37.2 sr
15	2' x 4' White w/ gouges ceiling tile	Den	F	Роог	ND	3	200 s
16	Vinyl sheet flooring/ backing	Kitchen	NF	Poor	ND ND	3	130 s 12.1 sn
17	White vinyl sheet flooring (Sub-layer)	Kitchen	NF	Poor	ND	3	130 s
18	Celling/ wall plaster	Kitchen, dining room, den, & ilving room	F	Роог	ND ND	5	7,000 s 650.3 sn
OTAL C	QUANTITY OF ACM						40 [

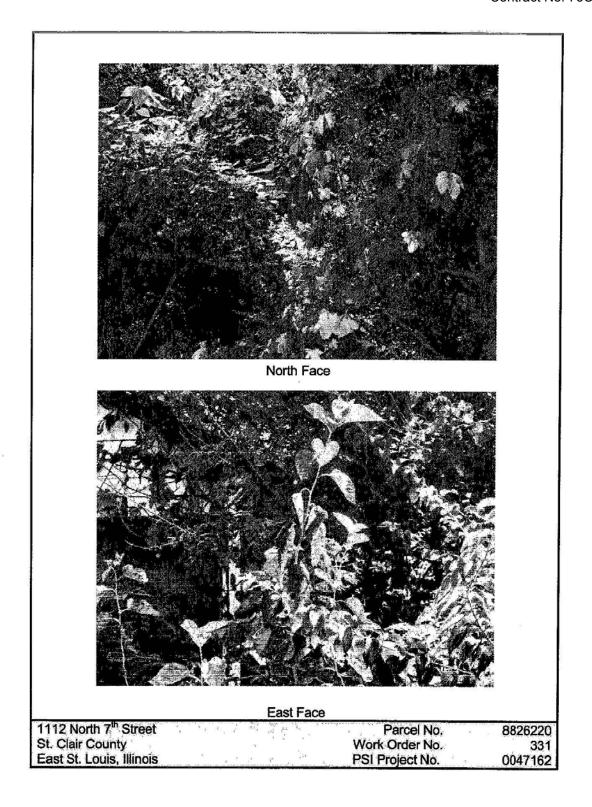
F = Friable; NF = Nonfriable Cond. = Condition Of Materials ND = None Detected

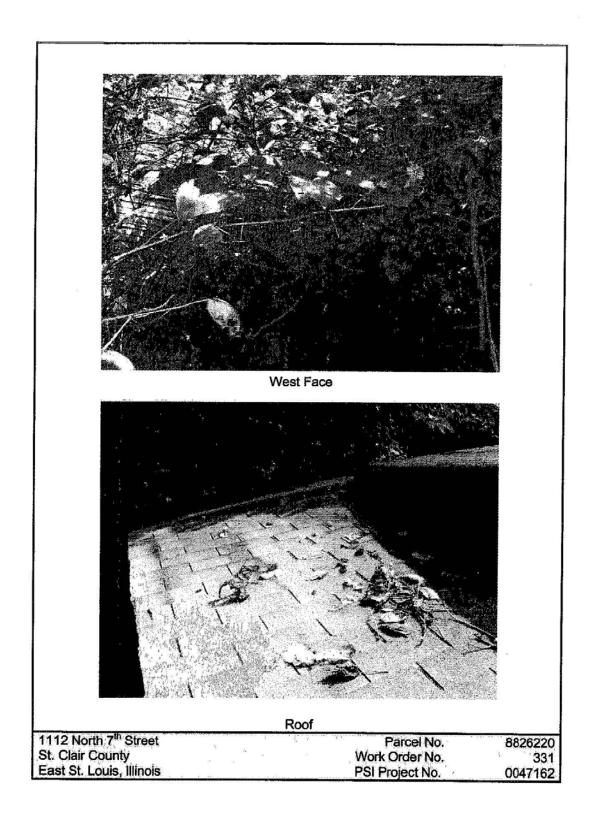
Friability is further defined in section 4. Either good, fair or poor.

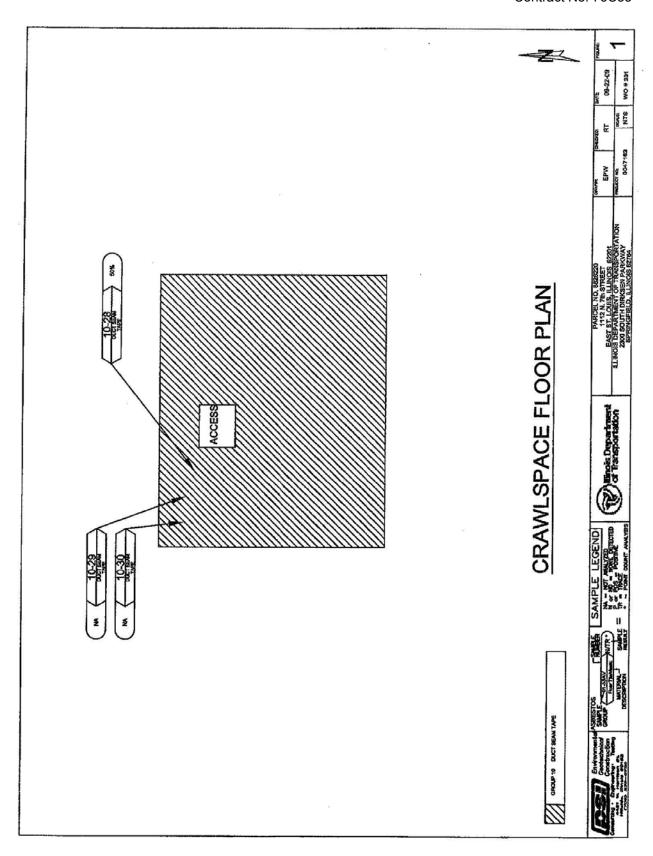
**Point Count Analysis** 

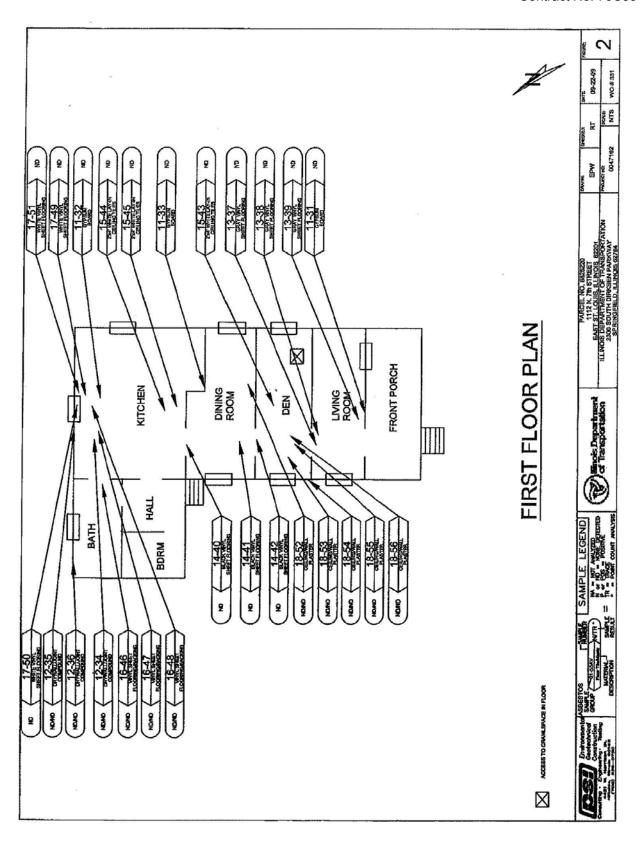
Illinois Department of Transportation Work Order No. 331

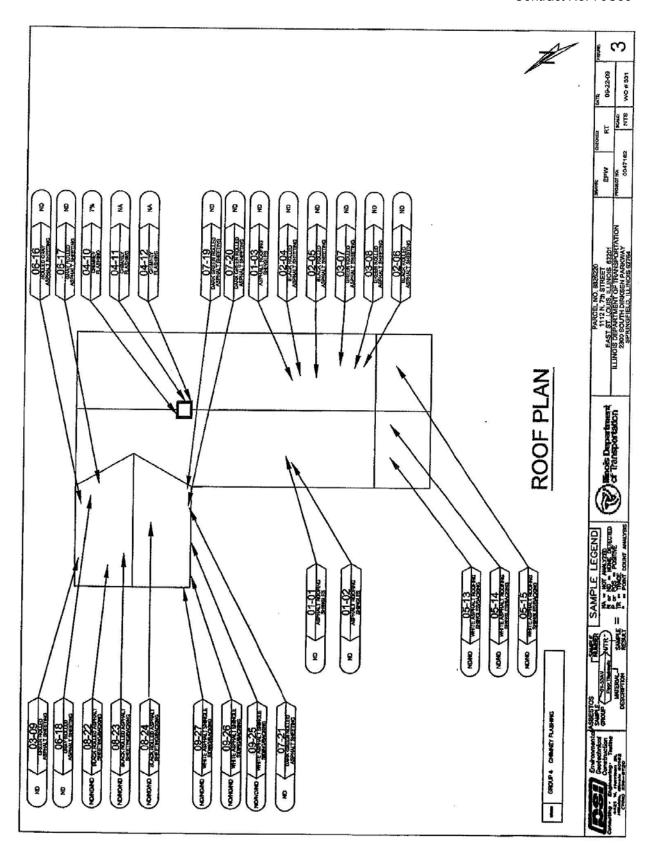
PSI Project No. 0047162











# SECTION 1 1.1 Survey Summary Sheet

# **SITE INFORMATION:**

FA Route: Address: 713 N. Exchange Street 998 County: Address: N/A St. Clair IDOT Job No: R-98-026-08 City, State Zip East St. Louis, IL 62201 82-1-HB and 1DM-1 (82-1K) 8826274 Property Type: Construction Date: Section: Single family residence ~1964 1,200 sf Parcel No: IDOT Work Order No: Building Size (sf):

Α	sbestos Containing l	Materials
Survey Date By Whom:	September 9, 2009 PSI, Inc. Edward Wagner 100-01778 Tom Novatka 100-08002	Firm Inspector IDPH License No. Inspector IDPH License No.
Results	aterial Types Sampled:	43
	mples Collected:	<u>134</u>
Number of Ma	iterials Testing Positive:	<u>8</u>
Was Friable A	CM Found?	<u>No</u>
Were Roofing	Materials Sampled?	<u>Yes</u>
Are There Uni Requirements	que State or Local ?	Yes
Laboratory U	tilized:	
Name: Address:	PSI, Inc. 850 Poplar Street Pittsburgh, PA 15220	
Building Acce	ess Limitations:	
None		

Illinois Department of Transportation Work Order No. 331

# SECTION 1 1.2 Survey Summary & Results

# ACM SURVEY RESULTS - Parcel # 8826274 Single Family Residence 713 Rear Exchange Avenue East St. Louis, IL 62201

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 <sup>1</sup>	COND.2	% ACM <sup>3</sup>	#SAMPLES	QUANTITY (ENG/MET)
01	Celling/ wall plaster	Throughout	F	Poor	ND ND	7	7,000 st
02	12" x 12" Salmon/ green self-stick vinyl floor tile	Kitchen	NF	Poor	ND ND	3	200 st 18.6 sm
03	Red/ gray vinyl sheet flooring	Kitchen	NF	Poor	ND ND	3	200 s 18.6 sm
04	Drywall & joint compound (Ceiling & walls)	Bedrooms #1, 2, 3, 4, bathroom , stairwell, and second floor hall	NF	Poor	ND ND	3	400 si 37.2 sm
05	Multi-colored vinyl sheet flooring	Bedroom #1 & bathroom #2	NF	Poor	10%	3	300 sf 27.9 sm
06	Green/ white vinyl sheet flooring	Bedroom #1	NF	Poor	ND ND	3	240 sf 22.3 sm
07	Decorative surface	Bedroom #1	NF	Poor	ND	3	240 sf 22.3 sm
80	12" x 12" Brown vinyi floor tile/ mastic	Living room	NF	Poor	3% ND	3	200 sf 18.6 sm
09	Wood grain vinyl sheet flooring	Living room	NF	Poor	10%	3	200 sf 18.6 sm
10	12" x 12" Self-stick patterned vinyl floor tile	Bottom of stairs/ landing	NF	Poor	ND ND	3	18 sf 1.7 sm
11	Green patterned vinyl sheet flooring	Stairwell, landing, bedrooms #2, 3, 4	NF	Fair	ND ND	3	750 sf 69.7 sm
12	12" x 12" Brown vinyl floor tile/ mastic	Mid stairs	NF	Poor	ND ND	3	27 sf 2.5 sm
13	Wall patch	Stairwell	NF	Poor	ND	3	65 sf 6.0 sm
14	12" x 12" Black/ white self- stick vinyl floor tile	Second floor hall and bathroom	NF	Poor	ND ND	3	110 sf 10,2 sm
15	Yellow/ green patterned vinyl sheet flooring	Second floor hall	NF	Poor	10%	3	60 sf 5.6 sm
16	Black/ red/ white vinyl sheet flooring	Second floor hall	NF	Poor	ND	3	60 sf 5.6 sm
17	12" x 12" Wood pattern self- stick vinyl floor tile	Bedroom #2	NF	Poor	ND ND	3	200 sf 18.6 sm
18	Tan/ black vinyl sheet flooring	Bedroom #2 & closet	NF	Poor	ND	3	200 sf 18.6 sm
19	Light green patterned vinyl sheet flooring	Bedroom #3	NF	Poor	ND	3	120 sf 11,1 sm

F = Friable; NF = Nonfriable
Cond. = Condition Of Materials

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

ND = None Detected

Point Count Analysis

Illinois Department of Transportation Work Order No. 331

# ACM SURVEY RESULTS - Parcel # 8826274 Single Family Residence 713 Rear Exchange Avenue East St. Louis, IL 62201

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 <sup>1</sup>	COND.2	% ACM <sup>3</sup>	# SAMPLES	QUANTITY (ENG/MET)
20	12" x 12" Light/ dark brown splotched vinyl floor tile	Bathroom #2 & hall	NF	Poor	2% ND	3	100 si 9.3 sm
21	12" x 12" Gray vinyi floor tile/ mastic	Bathroom & hall	NF	Poor	ND ND	3	100 sf 9.3 sm
22	12" x 12" Blue self-stick wall tile	Bathroom	NF	Poor	ND ND	3	50 st 4.6 sm
23	12" x 12" Dark blue patterned vinyl floor tile	Bathroom	NF	Poor	ND DN	3	25 sf 2.3 sm
24	Yellow mastic/ white vinyl sheet flooring/ black mastic	Bathroom	NF	Poor	ND 10% ND	3	50 sf 4.6 sm
25	12" x 12" Stone patterned self-stick vinyl ficor tile/ tan mastic/ black mastic	Bathroom	NF	Poor	2% ND 4%	3	60 sf 4.6 sm
26	Black/ yellow self-stick vinyl floor tile	Bathroom	NF	Poor	ND ND ND	3	15 sf 1.4 sm
27	Loose drywali	Second floor hall	NF	Poor	ND	3	64 sf 5,9 sm
28	Mirror mastic	Bedroom #1 & 3	NF	Poor	ND ND	3	100 sf 9.3 sm
29	Brown/ orange patterned vinyl sheet flooring	Bedroom #1	NF	Poor	15%	3	250 sf 23.2 sm
30	12" x 12" White/ gold self- stick vinyl floor tile	Kitchen	NF	Poor	ND ND	3	8 sf 0.7 sm
31	12" x 12" White/ gray swirls vinyl floor tile/ yellow mastic/ tan mastic	Front porch	NF	Good	ND ND ND	3	70 sf 6.5 sm
32	Rolled asphalt sheeting	Front porch roof	NF	Poor	ND	3	105 sf 9.8 sm
33	Asphalt shingles (Gray)	Siding patching; west & south sides	NF	Good	ND	3	660 sf 61.3 sm
34	Asphalt roofing shingles (Black)	House roof	NF	Good	ND	3	1,127 sf 107.7 sm
35	Asphalt siding shingles w/ pressed wood backing (Red)	House exterior; original siding	NF	Good	ND	3	3,440 sf 319.6 sm
36	Corrugated backing paper (Gray)	House exterior; original siding	F	Good	ND	3	3,440 sf 319,6 sm

F = Friable; NF = Nonfriable

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

ND = None Detected
Point Count Analysis

Illinois Department of Transportation Work Order No. 331

Cond. = Condition Of Materials

## **SECTION 1** 1.2 Survey Summary & Results

ACM SURVEY RESULTS - Parcel # 8826274

Single Family Residence 713 Rear Exchange Avenue East St. Louis, IL 62201

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

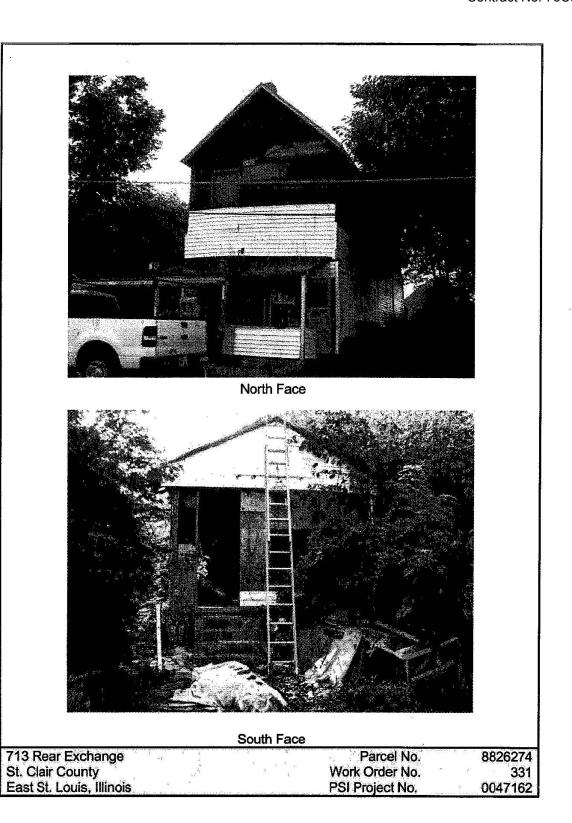
MTL#	MATERIAL DESCRIPTION	LOCATION	F/NF <sup>1</sup>	COND.2	% ACM <sup>3</sup>	# SAMPLES	QUANTITY (ENG/MET)
37	Rolled asphalt sheeting (Green)	Siding patching west	NF	Good	ND	3	334 sf 31.0 sm
38	Rolled asphalt sheeting (Red)	Siding patching west & south side (First sub- layer)	NF	Good	ND	3	336 sf 31.2 sm
39	Rolled asphalt sheeting (Green)	Siding patching west side (Second sub-layer)	NF	Good	ND	3	208 sf 19.3 sm
40	Asphalt shingles w/ pressed wood backing (Pink)	Siding patching west & south sides	NF	Good	ND ND	3	660 sf 61.3 sm
41	Rolled asphalt sheeting (Gray)	Siding patching; house south side	NF	Good	ND	3	1,150 sf 106.8 sm
42	Rolled asphalt sheeting (1 Layer backing)	Shed roof	NF	Fair	ND ND	3	88 sf 8.2 sm
43	Black asphalt siding shingles	Side of shed	NF	Fair	ND ND	3	136 sf 12.6 sm
TOTAL C	QUANTITY OF ACM						1,210 af

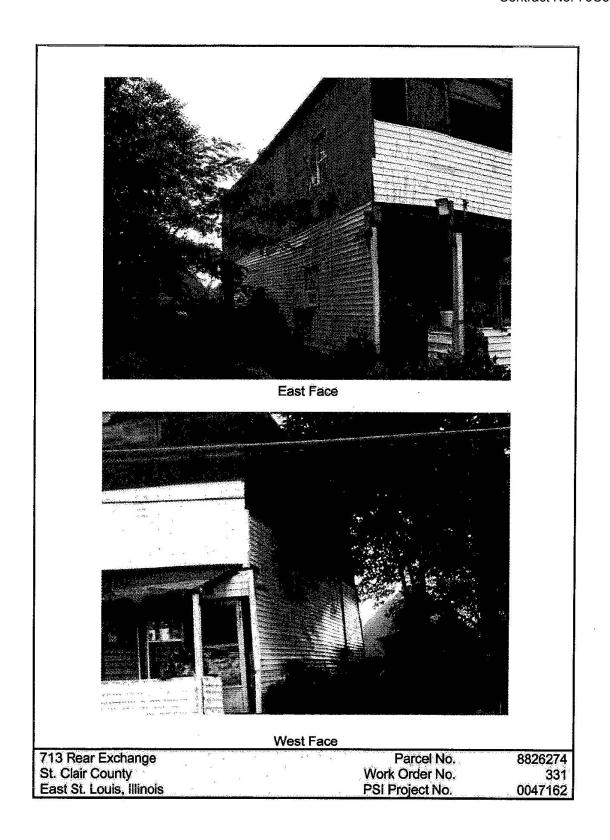
F = Friable; NF = Nonfriable Cond. = Condition Of Materials ND = None Detected

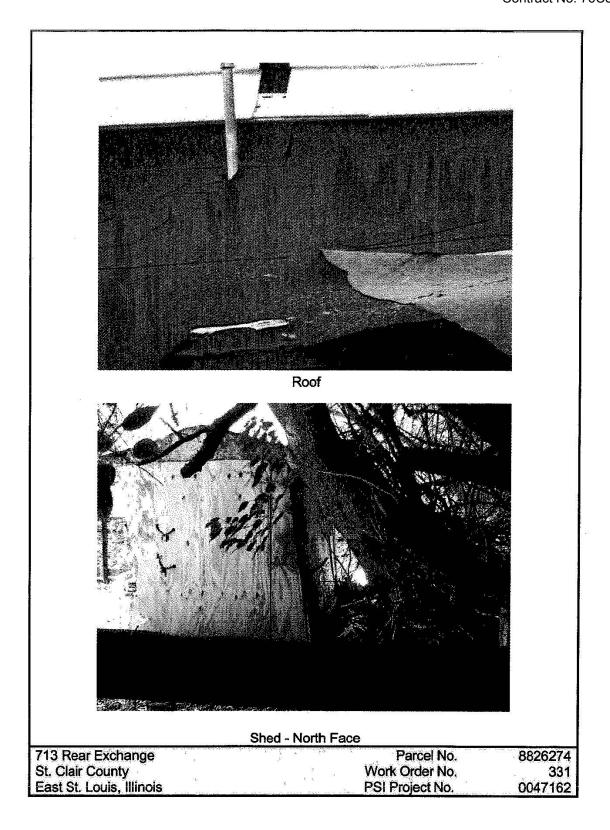
Friability is further defined in section 4. Either good, fair or poor.

**Point Count Analysis** 

Illinois Department of Transportation Work Order No. 331



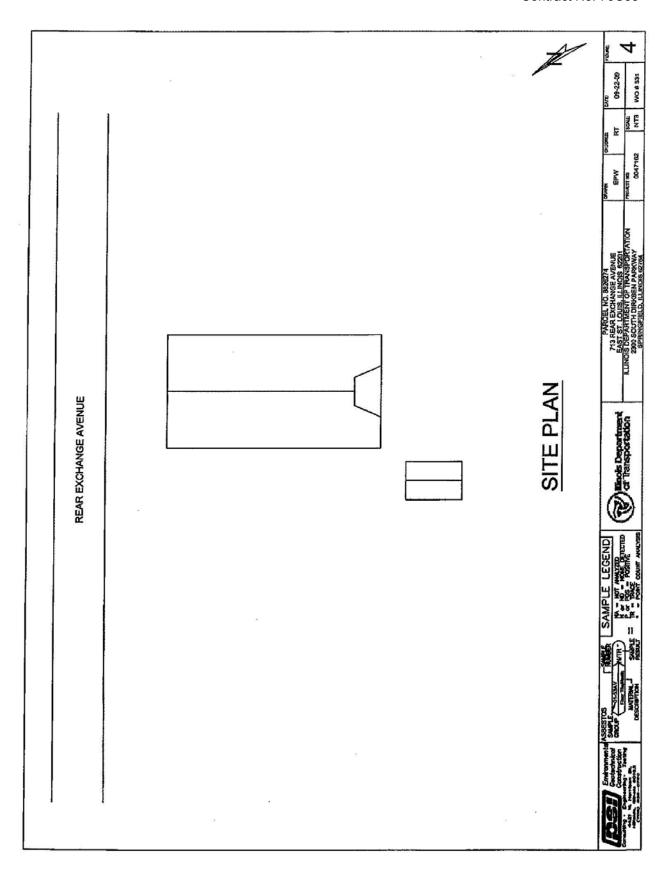


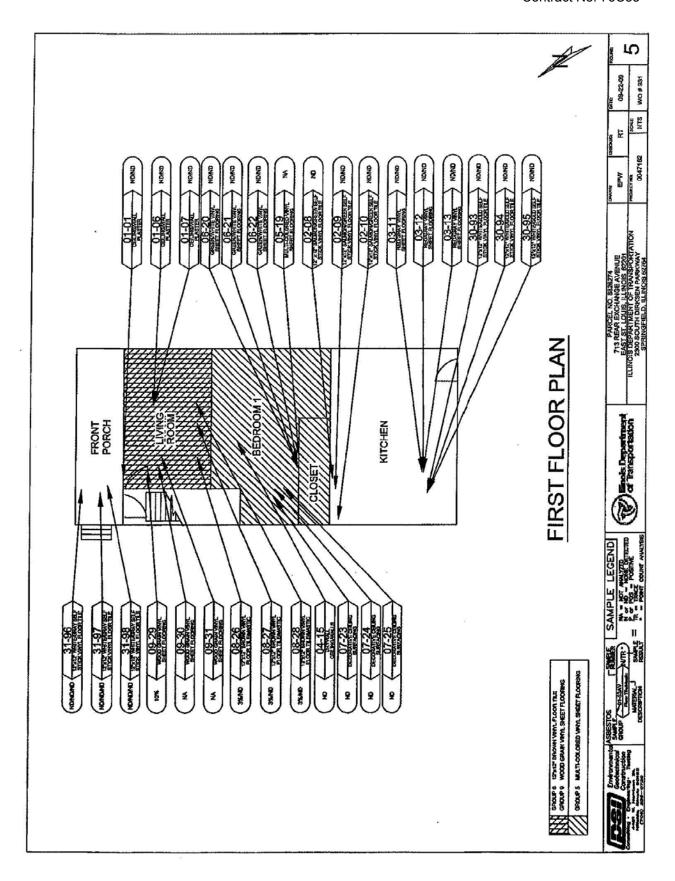


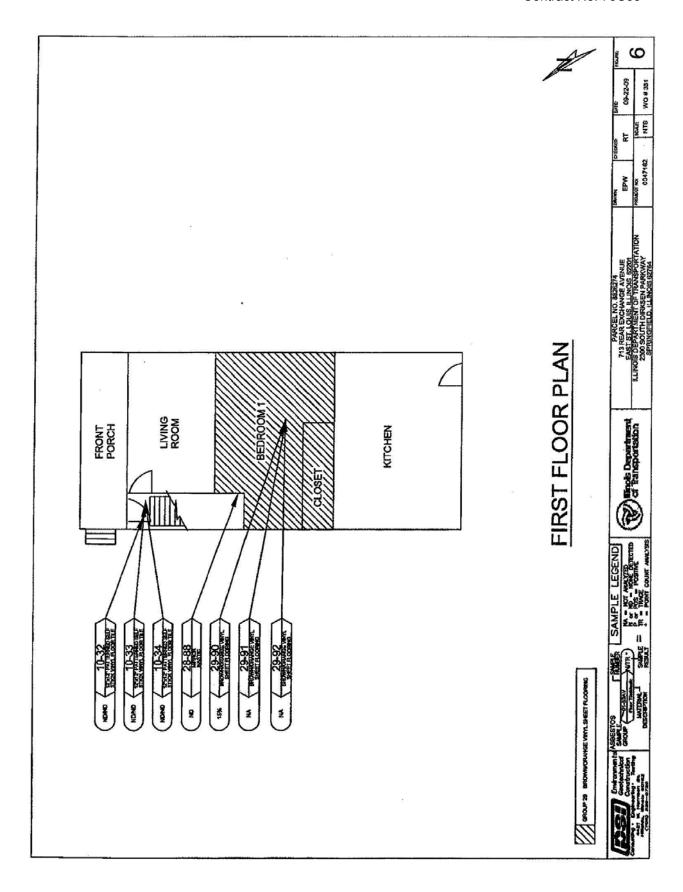


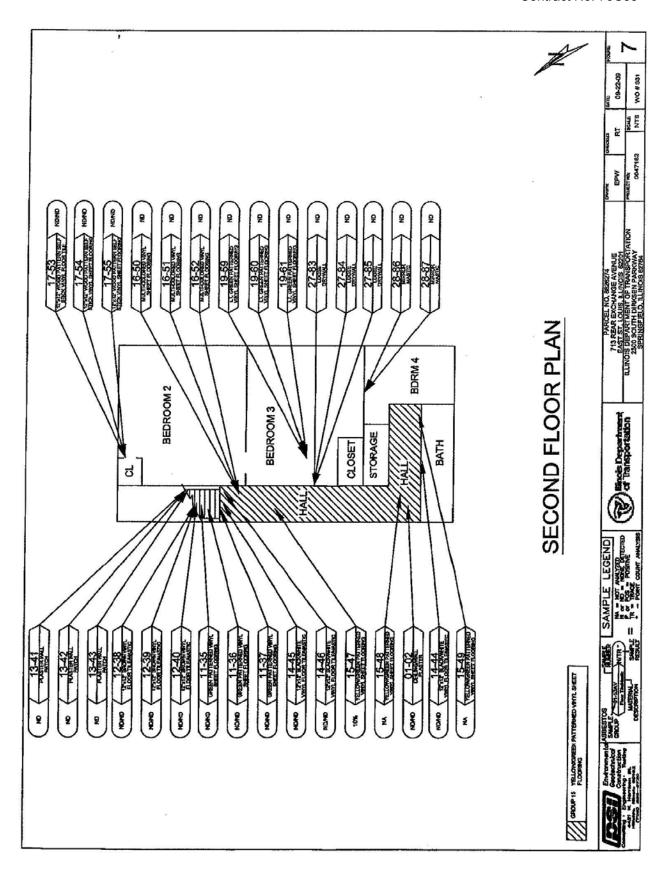
Shed - Southeast Face

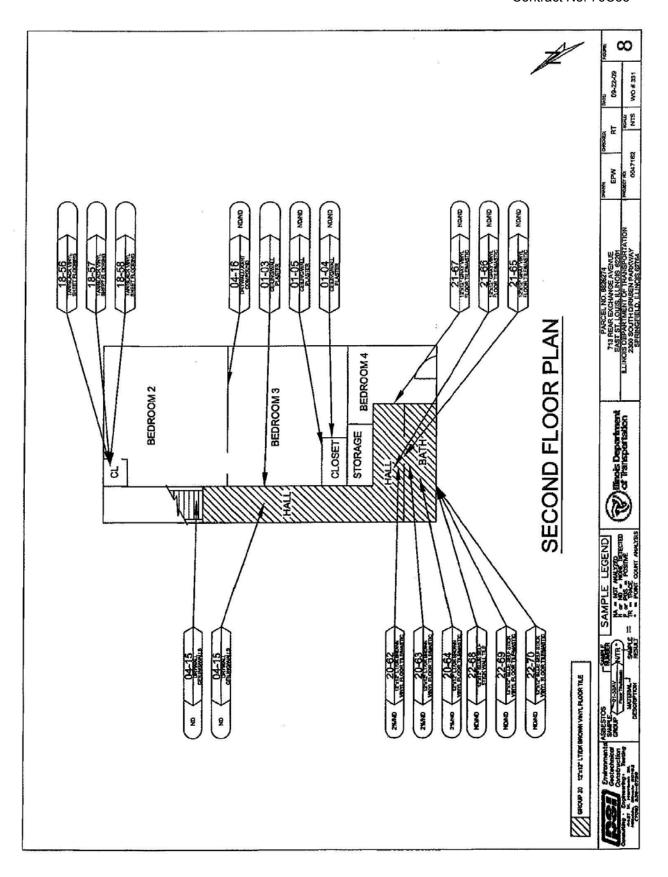
713 Rear Exchange	Parcel No.	8826274
St. Clair County	Work Order No.	331
East St. Louis, Illinois	PSI Project No.	0047162

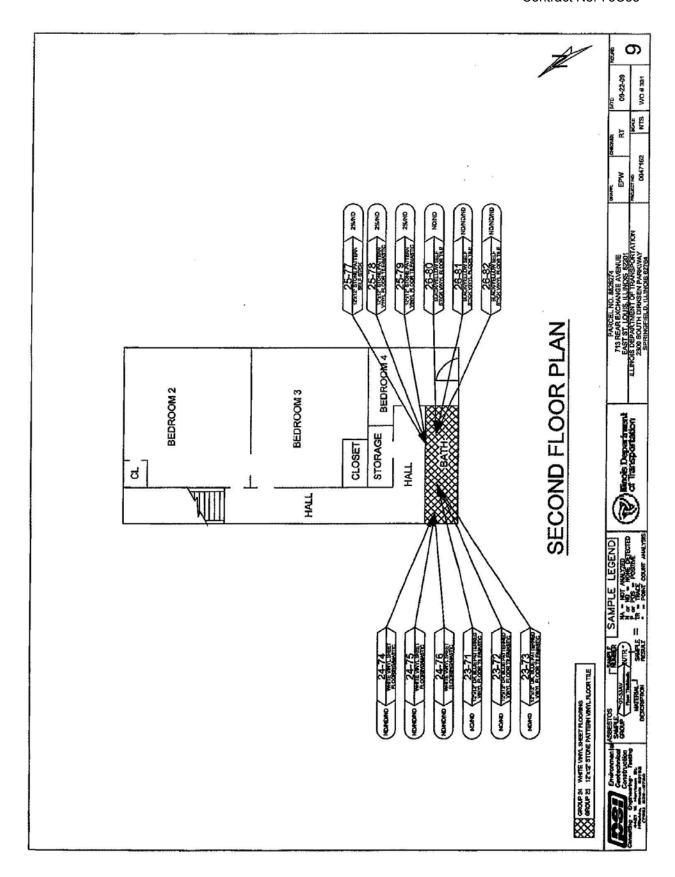


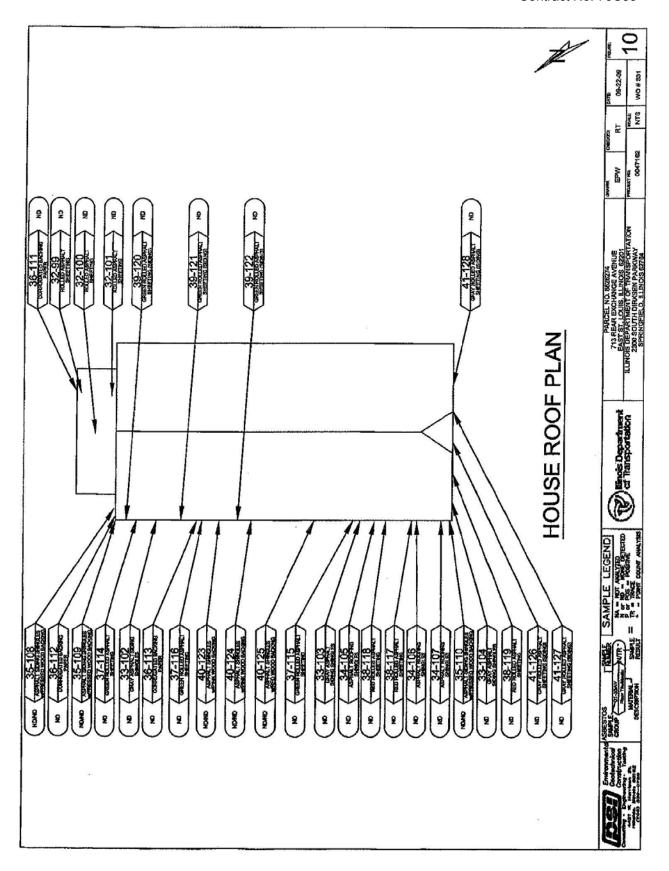


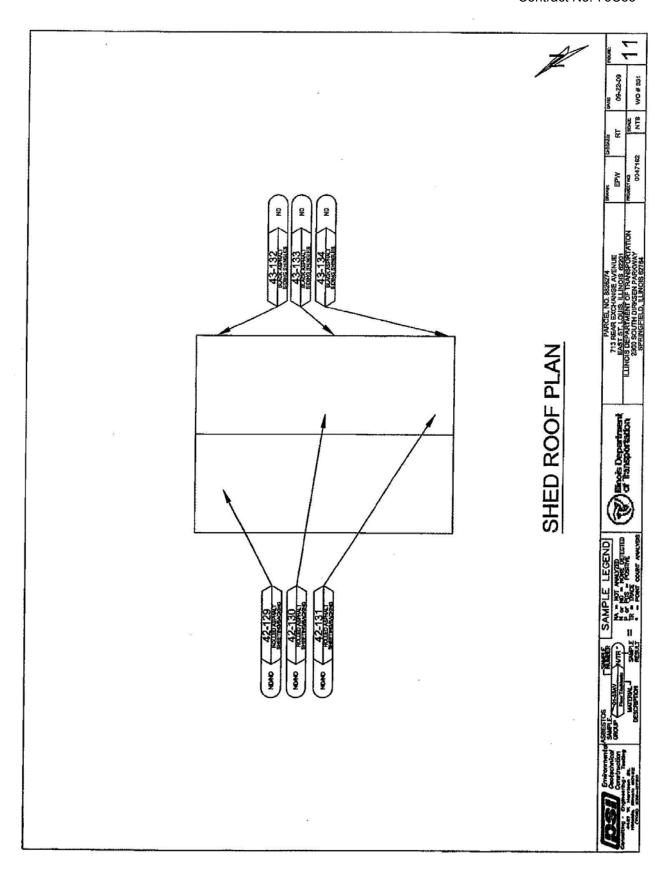












## **BUILDING REMOVAL - CASE IV (NO ASBESTOS) (BDE)**

Effective: September 1, 1990 Revised: January 1, 2007

BUILDING REMOVAL: This work shall consist of the removal and disposal of  $\underline{2}$  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:

Bldg. No.	Parc <u>No.</u>		Description
#4	8826274	713 Rear Exchange, E. St. Louis	Shed
#6	8818125	Lot 10, 8 <sup>th</sup> Street, E. St. Louis	building ruins

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services 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
IDOT
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).

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. Any salvage value shall be reflected in the contract unit price for this item.

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 demolition activity.

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. Prior to starting work, the Contractor shall submit proof of written notification and compliance with the "Notifications" paragraph.

# **APPENDIX D**

# SHIPPING MANIFEST Generator

	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 Agend	у		
5.	Description of Materials			
6.	Containers	No.	Туре	
7.	Total Quantity	$M^3$	(Yd <sup>3</sup> )	
8.	Special Handling Instructions and Addition	nal Inform	ation	
9.	OPERATOR'S CERTIFICATION: I hereb	y declare	that the conte	nts of this
	consignment are fully and accurately desc			
	name and are classified, packed, marked			
	in proper condition for transport by highwa	ay accordi	ng to applicab	le international
D.~	and government regulations.	Cian	2011110	Month Day Year
Pr	inted/Typed Name & Title		nature	Month Day Year
	inted/Typed Name & Title Tra	ansporter		Month Day Year
	inted/Typed Name & Title Transporter 1 (Acknowledgement of Rec	ensporter eipt of Ma	aterials)	
	inted/Typed Name & Title Tra	ensporter eipt of Ma		Month Day Year  Month Day Year
	inted/Typed Name & Title Transporter 1 (Acknowledgement of Rec	ensporter eipt of Ma	aterials)	
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10	inted/Typed Name & Title  Transporter 1 (Acknowledgement of Red Printed/Typed Name & Title  Address and Telephone No.	eipt of Ma	aterials) nature	
10	inted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.	eipt of Ma eipt of Ma Sign eipt of Ma Sign	aterials) nature aterials) nature	Month Day Year
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11 12	inted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Discrepancy Indication Space	eipt of Ma eipt of Ma Sign  eipt of Ma Sign  posal Site  Certifica  Materials	aterials) nature aterials) nature tion of Receip	Month Day Year  Month Day Year  Month Day Year  t of Asbestos This Manifest
10 11 12 13	inted/Typed Name & Title  Transporter 1 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Transporter 2 (Acknowledgement of Reconstruction Printed/Typed Name & Title  Address and Telephone No.  Discrepancy Indication Space	eipt of Ma eipt of Ma Sign  eipt of Ma Sign  posal Site  Certifica  Materials  Except A	aterials) nature aterials) nature tion of Receip	Month Day Year  Month Day Year  Month Day Year  t of Asbestos This Manifest

#### APPENDIX D

#### INSTRUCTIONS

Waste 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.
- 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.

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

#### APPENDIX D

#### INSTRUCTIONS

## <u>Transporter Section</u> (Items 10 & 11)

10. & 11. 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: The transporter shall retain a copy of this form.

<u>Disposal Site Section</u> (Items 12 & 13)

- 12. 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.
- 13. 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: 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.

#### REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

This work shall be according to Article 669 of the Standard Specifications and the following:

<u>Qualifications</u>. The term environmental firm shall mean an environmental firm that is prequalified in hazardous waste by the Department. 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> Implementation of this Special Provision will likely require the Contractor to subcontract for the execution of certain activities. It will be the Contractor's responsibility to assess the working conditions and adjust anticipated production rates accordingly.

All contaminated materials shall be managed as non-special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances.

Any soil classified as a non-special waste shall be excavated and disposed of as directed by this project or the Engineer.

Any excavation or disposal beyond what is required by this project or the Engineer will be at no additional cost to the Department. The preliminary site investigation (PSI) report, available through the District's Environmental Studies Unit, estimated the excavation quantity of non-special waste at the following location. The information available at the time of plan preparation determined the limits of the contamination and the quantities estimated were based on soil excavation for construction purposes only. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit whichever is less. Any soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department.

- A) The Environmental Firm shall continuously monitor for worker protection and the Contractor shall manage and dispose of all soils excavated within the following areas as classified below.
  - 1. Station 11+15 to Station 11+80 0 to 95 feet RT off 7<sup>th</sup> Street vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, and TCLP Lead.
  - 2. Station 14+00 to Station 15+20 0 to 40 feet RT off 7<sup>th</sup> Street vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, and TCLP Lead.
  - 3. Station 12+50 to Station 13+70 0 to 40 feet RT off Exchange Avenue vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, and TCLP Lead.
  - 4. Station 14+30 to Station 15+30 0 to 40 feet RT off Exchange Avenue vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, and TCLP Lead.
  - 5. Station 15+30 to Station 16+36 0 to 40 feet LT off 7<sup>th</sup> Street vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, and TCLP Lead.
  - 6. Station 11+60 to Station 13+15 0 to 40 feet RT off Exchange Avenue vertically from 0 to 4 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: Dieldrin and Mercury.
  - Station 13+70 to Station 15+00 0 to 40 feet LT off Exchange Avenue vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) – nonspecial waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, and TCLP Lead.
  - 8. Station 15+80 to Station 17+00 0 to 40 feet LT off Exchange Avenue vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, and TCLP Lead.
  - Station 13+00 to Station 24+23 0 to 50 feet LT and RT off Ramp O vertically from 0 to 3 feet (Dump Site, Site 601V1-FA, 8<sup>th</sup> Street NE of Exchange Avenue, Vacant Lot, Site 601Z-4, 700 Block of Winstanley Avenue, and Residential Site, Site 601V1-EY, 1112 North 7<sup>th</sup> Street) non-special waste. Contaminants of concern sampling parameters: PAHs, Antimony, Arsenic, Cadmium, Lead, Mercury, Zinc, and TCLP Lead.

- 10. Station 0+00 to Station 19+20 0 to 40 feet LT and RT off Bowman Access Road vertically from 0 to 6 feet (Residential Site, Site 601V1-EY, 1112 North 7<sup>th</sup> Street, Vacant Lot, 601Z-6, 1200 Block of 8<sup>th</sup> Street, Site 601Z-4, 700 Block of Winstanley Avenue, and Ameren Corporation, Site 1514-K, 1329-1401 North 9<sup>th</sup> Street) non-special waste. Contaminants of concern sampling parameters: PAHs, Antimony, Arsenic, Cadmium, Lead, Mercury, Zinc, and TCLP Lead.
- 11. Station 16+40 to Station 18+00 20 to 240 feet LT off Exchange Avenue vertically from 0 to 3 feet (Dump Site, Site 601V1-FA, 8<sup>th</sup> Street NE of Exchange Avenue, Vacant Lot) non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, TCLP Lead, and PCBs.
- 12. Station 18+50 to Station 23+00 0 to 130 feet LT off Exchange Avenue vertically from 0 to 3 feet non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, TCLP Lead, and PCBs.
- 13. Station 20+00 to Station 23+00 0 to 100 feet RT off Exchange Avenue vertically from 0 to 3 feet non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Lead, Mercury, and TCLP Lead.
- 14. Station 15+00 to Station 17+87 0 to 40 feet LT and RT off CSX Access Road vertically from 0 to 3 feet non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Arsenic, Lead, Mercury, and TCLP Lead.
- 15. Station 0+50 to Station 2+30 0 to 40 feet LT and RT off CSX Access Road Spur vertically from 0 to 3 feet non-special waste. Contaminants of concern sampling parameters: PAHs, Dieldrin, Arsenic, Lead, Mercury, and TCLP Lead.
- 16. Station 12+00 to Station 12+80 20 to 240 feet LT off Exchange Avenue vertically from 0 to 6 feet (Vacant Lot, Site 601Z-2, 1100 North 7<sup>th</sup> Street, Former Automotive Repair Facility, Site 601V1-EZ, 717 Exchange Avenue, and Dump Site, Site 601V1-FA, 8<sup>th</sup> Street NE of Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Antimony, Arsenic, Cadmium, Lead, Mercury, Zinc, and TCLP Lead.
- 17. Station 12+80 to Station 15+30 20 to 240 feet LT off Exchange Avenue vertically from 0 to 3 feet (Vacant Lot, Site 601Z-2, 1100 North 7<sup>th</sup> Street, Former Automotive Repair Facility, Site 601V1-EZ, 717 Exchange Avenue, and Dump Site, Site 601V1-FA, 8<sup>th</sup> Street NE of Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Antimony, Arsenic, Cadmium, Lead, Mercury, Zinc, and TCLP Lead.
- 18. Station 15+30 to Station 16+40 20 to 240 feet LT off Exchange Avenue vertically from 0 to 6 feet (Vacant Lot, Site 601Z-2, 1100 North 7<sup>th</sup> Street, Former Automotive Repair Facility, Site 601V1-EZ, 717 Exchange Avenue, and Dump Site, Site 601V1-FA, 8<sup>th</sup> Street NE of Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: PAHs, Antimony, Arsenic, Cadmium, Lead, Mercury, Zinc, and TCLP Lead.
- B) The Environmental Firm shall continuously monitor for worker protection and the Contractor shall manage any excavated soils within the construction limits of this project as fill. Although the soil concentrations exceed a residential property's Tier 1 soil remediation objective for the ingestion exposure pathway, they can be utilized within the construction limits as fill because the roadway is not considered a residential property. All storm sewer excavated soils can be placed back into the excavated trench as backfill unless trench backfill is specified. If the soils cannot be utilized within the construction limits as fill then they must be managed off-site as a non-special waste. The following areas can be managed within the construction limits as fill.

- 1. Station 11+80 to Station 14+00 0 to 40 feet RT off 7<sup>th</sup> Street vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: Dieldrin.
- 2. Station 15+20 to Station 16+36 0 to 40 feet RT off 7<sup>th</sup> Street vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: Dieldrin.
- 3. Station 11+60 to Station 12+50 0 to 40 feet RT off Exchange Avenue vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: Dieldrin.
- 4. Station 13+70 to Station 14+30 0 to 40 feet RT off Exchange Avenue vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: Dieldrin.
- 5. Station 15+30 to Station 20+00 0 to 40 feet RT off Exchange Avenue vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: Dieldrin.
- 6. Station 13+90 to Station 15+30 0 to 40 feet LT off 7<sup>th</sup> Street vertically from 0 to 3 feet (Bowman Maintenance Yard, Site 601V1-EX, 728 Exchange Avenue) non-special waste. Contaminants of concern sampling parameters: Dieldrin.
- 7. Station 17+00 to Station 18+50 0 to 40 feet LT off Exchange Avenue vertically from 0 to 3 feet non-special waste. Contaminants of concern sampling parameters: Dieldrin.
- 8. Station 19+20 to Station 20+13 0 to 40 feet RT and LT off Bowman Access Road vertically from 0 to 3 feet non-special waste. Contaminants of concern sampling parameters: Mercury.
- Station 12+00 to Station 15+00 0 to 40 feet LT and RT off CSX Access Road vertically from 0 to 3 feet – non-special waste. Contaminants of concern sampling parameters: Mercury.
- 10. Station 2+30 to Station 3+41 0 to 40 feet LT and RT off CSX Access Road Spur vertically from 0 to 3 feet non-special waste. Contaminants of concern sampling parameters: Mercury.

#### **CEMENT (BDE)**

Effective: January 1, 2007 Revised: April 1, 2009

Revise Section 1001 of the Standard Specifications to read:

#### **"SECTION 1001. CEMENT**

**1001.01 Cement Types.** Cement shall be according to the following.

(a) Portland Cement. Acceptance of portland cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland cement shall be according to ASTM C 150, and shall meet the standard physical and chemical requirements. Type I or Type II may be used for cast-in-place, precast, and precast prestressed concrete. Type III may be used according to Article 1020.04, or when approved by the Engineer. All other cements referenced in ASTM C 150 may be used when approved by the Engineer.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. The total of all inorganic processing additions shall be a maximum of 4.0 percent by weight (mass) of the cement. However, a cement kiln dust inorganic processing addition shall be limited to a maximum of 1.0 percent. Organic processing additions shall be limited to grinding aids that improve the flowability of cement, reduce pack set, and improve grinding efficiency. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust.

(b) Portland-Pozzolan Cement. Acceptance of portland-pozzolan cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland-pozzolan cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IP may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The pozzolan constituent for Type IP shall be a maximum of 21 percent of the weight (mass) of the portland-pozzolan cement.

For cast-in-place construction, portland-pozzolan cement shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall be limited to cement kiln dust at a maximum of 1.0 percent.

(c) Portland Blast-Furnace Slag Cement. Acceptance of portland blast-furnace slag cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland blast-furnace slag cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IS portland blast-furnace slag cement may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The blast-furnace slag constituent for Type IS shall be a maximum of 25 percent of the weight (mass) of the portland blast-furnace slag cement.

For cast-in-place construction, portland blast-furnace slag cement shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall be limited to cement kiln dust at a maximum of 1.0 percent.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
  - (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.
  - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, 3200 psi (22,100 kPa) at 6.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.
  - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.
  - (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.
  - (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to AASHTO T 161, Procedure B.
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used only where specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al<sub>2</sub>O<sub>3</sub>), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO<sub>3</sub>), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.
- **1001.02 Uniformity of Color.** Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.
- **1001.03 Mixing Brands and Types.** Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.
- **1001.04 Storage.** Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

# COMPLETION DATE (VIA CALENDAR DAYS) (BDE)

Effective: April 1, 2008

The Contractor shall complete all work on or before the completion date of this contract which will be based upon **450** calendar days.

The completion date will be determined by adding the specified number of calendar days to the date the Contractor begins work, or to the date ten days after execution of the contract, whichever is the earlier, unless a delayed start is granted by the Engineer.

#### **CONCRETE ADMIXTURES (BDE)**

Effective: January 1, 2003 Revised: April 1, 2009

Replace the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. The use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted when approved by the Engineer. Admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Department will maintain an Approved List of Corrosion Inhibitors. Corrosion inhibitor dosage rates shall be according to Article 1020.05(b)(12). Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted when determining an admixture dosage from this list. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity, finely divided mineral sources(s) and quantity, influence of other admixtures, haul time, placement conditions, and other factors as appropriate shall be considered. Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour. When a retarding admixture is required or appropriate for a bridge deck or bridge deck overylay pour, the initial set time shall be delayed until the deflections due to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

When determining water in admixtures for water/cement ratio, the Contractor shall calculate 70 percent of the admixture dosage as water, except a value of 50 percent shall be used for a latex admixture used in bridge deck latex concrete overlays."

Revise Section 1021 of the Standard Specifications to read:

#### "SECTION 1021. CONCRETE ADMIXTURES

1021.01 **General.** Admixtures shall be furnished in liquid form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer.

Delivery shall be accompanied by a ticket which clearly identifies the manufacturer and trade name of the material. Containers shall be readily identifiable as to manufacturer and trade name of the material they contain.

Corrosion inhibitors will be maintained on the Department's Approved List of Corrosion Inhibitors. All other concrete admixture products will be maintained on the Department's Approved List of Concrete Admixtures. For the admixture submittal, a report prepared by an independent laboratory accredited by the AASHTO Materials Reference Laboratory (AMRL) for Portland Cement Concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, for corrosion inhibitors the ASTM G 109 test information specified in ASTM C 1582 is not required to be from and independent lab. All other information in ASTM C 1582 shall be from and independent lab.

Tests shall be conducted using materials and methods specified on a "test" concrete and a "reference" concrete, together with a certification that no changes have been made in the formulation of the material since the performance of the tests. Per the manufacturer's option, the cement content for all required tests shall either be according to applicable specifications or 5.65 cwt/cu yd (335 kg/cu m). Compressive strength test results for six months and one year will not be required.

Prior to the approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to AASHTO T 161, Procedure B. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

The manufacturer shall include in the submittal the following admixture information: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and the manufacturing range for pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM C 494. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to ASTM C 260.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, and 1021.07, the pH allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to ASTM C 494.

When test results are more than seven years old, the manufacturer shall re-submit the infrared spectrophotometer trace and the report prepared by an independent laboratory accredited by AASHTO.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass).

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.

**1021.02Air-Entraining Admixtures.** Air-entraining admixtures shall be according to AASHTO M 154.

**1021.03Retarding and Water-Reducing Admixtures.** The admixture shall be according to the following.

- (a) The retarding admixture shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall be according to AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

**1021.04Accelerating Admixtures.** The admixture shall be according to AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating).

**1021.05Self-Consolidating Admixtures.** The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete mixture that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall be according to AASHTO M 194, Type F.

The viscosity modifying admixture shall be according to ASTM C 494, Type S (specific performance).

**1021.06Rheology-Controlling Admixture.** The rheology-controlling admixture shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. The rheology-controlling admixture shall be according to ASTM C 494, Type S (specific performance).

**1021.07Corrosion Inhibitor.** The corrosion inhibitor shall be according to one of the following.

- (a) Calcium Nitrite. The corrosion inhibitor shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution, and shall comply with the requirements of AASHTO M 194, Type C (accelerating).
- (b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582."

# CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)

Effective: April 1, 2009 Revised: July 1, 2009

<u>Diesel Vehicle Emissions Control</u>. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively (15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall submit copies of monthly summary reports and include certified copies of the ULSD diesel fuel delivery slips for diesel fuel delivered to the jobsite for the reporting time period, noting the quantity of diesel fuel used.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from 1/2 hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

#### **CONSTRUCTION AIR QUALITY - IDLING RESTRICTIONS (BDE)**

Effective: April 1, 2009

Idling Restrictions. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

- 1) The motor vehicle has a gross vehicle weight rating of less than 8000 lb (3630 kg).
- 2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
- 3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
- 4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
- 5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
- 6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
- 7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
- 8) When the motor vehicle idles due to mechanical difficulties over which the operator has
- 9) The outdoor temperature is less than 32 °F (0 °C) or greater than 80 °F (26 °C).

When the outdoor temperature is greater than or equal to 32 °F (0 °C) or less than or equal to 80 °F (26 °C), a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be \$1,000.00 for each deficiency identified.

# **DETERMINATION OF THICKNESS (BDE)**

Effective: April 1, 2009

Revise Articles 353.12 and 353.13 of the Standard Specifications to Articles 353.13 and 353.14 respectively.

Add the following Article to the Standard Specifications:

"353.12 Tolerance in Thickness. The thickness of base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction, bike paths, and individual locations less than 500 ft (150 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness.

The procedure described in Article 407.10(b) will be followed, except the option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 354.09 of the Standard Specifications to read:

"354.09 Tolerance in Thickness. The thickness of base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course widening thickness.

The procedure described in Article 407.10(b) will be followed, except:

- (a) The width of a unit shall be the width of the widening along one edge of the pavement.
- (b) The length of the unit shall be 1000 ft (300 m).
- (c) The option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 355.09 of the Standard Specifications to read:

"355.09 Tolerance in Thickness. The thickness of HMA base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 500 ft (150 m) long, will be evaluated according to Article 407.10(b).

Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness."

Revise Article 356.07 of the Standard Specifications to read:

"356.07 Tolerance in Thickness. The thickness of HMA base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated according to Article 407.10(b) except, the width of a unit shall be the width of the widening along one edge of the pavement and the length of a unit shall be 1000 ft (300 m). Temporary locations are defined as those constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s)and subtract them from the measured core thickness to determine the base course widening thickness."

Revise Article 407.10 of the Standard Specifications to read:

"407.10 Tolerance in Thickness. Determination of pavement thickness shall be performed after the pavement surface tests and corrective action have been completed according to Article 407.09. Pay adjustments made for pavement thickness will be in addition to and independent of those made for pavement smoothness. Pavement pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous pavement shall be evaluated with the following exclusions: temporary pavements; variable width pavements; radius returns; short lengths of contiguous pavements less than 500 ft (125 m) in length; and constant width portions of turn lanes less than 500 ft (125 m) in length. Temporary pavements are defined as pavements constructed and removed under the same contract.

The method described in Article 407.10(a), shall be used except for those pavements constructed in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m). The method described in Article 407.10(b) shall be used in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m).

- (a) Percent Within Limits. The percent within limits (PWL) method shall be as follows.
  - (1) Lots and Sublots. The pavement will be divided into approximately equal lots of not more than 5000 ft (1500 m) in length. When the length of a continuous strip of pavement is 500 ft (1500 m) or greater but less than 5000 ft (1500 m), these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement will be grouped together to form lots approximately 5000 ft (1500 m) in length. Short segments between structures will be measured continuously with the structure segments omitted. Each lot will be subdivided into ten equal sublots. The width of a sublot and lot will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
  - (2) Cores. Cores 2 in. (50 mm) in diameter shall be taken from the pavement by the Contractor, at locations selected by the Engineer.

The exact location for each core will be selected at random, but will result in one core per sublot. Core locations will be specified prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the core lengths. The cores will be measured with a device supplied by the Department immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples shall be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

(3) Deficient Sublot. When the length of the core in a sublot is deficient by more than ten percent of plan thickness, the Contractor may take three additional cores within that sublot at locations selected at random by the Engineer. If the Contractor chooses not to take additional cores, the pavement in that sublot shall be removed and replaced.

When the three additional cores are taken, the length of those cores will be averaged with the original core length. If the average shows the sublot to be deficient by ten percent or less, no additional action is necessary. If the average shows the sublot to be deficient by more than ten percent, the pavement in that sublot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient sublots to remain in place. For deficient sublots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient sublot is removed and replaced, or additional lifts are placed, the corrected sublot shall be retested for thickness. The length of the new core taken in the sublot will be used in determining the PWL for the lot.

When a deficient sublot is left in place, and no additional lift(s) are placed, no payment will be made for the deficient sublot. The length of the original core taken in the sublot will be used in determining the PWL for the lot.

(4) Deficient Lot. After addressing deficient sublots, the PWL for each lot will be determined. When the PWL of a lot is 60 percent or less, the pavement in that lot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient lots to remain in place. For deficient lots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient lot is removed and replaced, or additional lifts are placed, the corrected lot shall be retested for thickness. The PWL for the lot will then be recalculated based upon the new cores; however, the pay factor for the lot shall be a maximum of 100 percent.

When a deficient lot is left in place, and no additional lift(s) are placed, the PWL for the lot will not be recalculated.

(5) Right of Discovery. When the Engineer has reason to believe the random core selection process will not accurately represent the true conditions of the work, he/she may order additional cores. The additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action. The need for, and location of, additional cores will be determined prior to commencement of coring operations.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, more additional cores shall be taken to determine the limits of the deficient pavement and that area shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the sublot. An acceptable core is a core with a length of at least 90 percent of plan thickness.

For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement.

When the additional cores show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

- (6) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are placed, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness.
- (7) Determination of PWL. The PWL for each lot will be determined as follows.

#### Definitions:

*xi* = Individual values (core lengths) under consideration

n = Number of individual values under consideration (10 per lot)

 $\bar{x}$  = Average of the values under consideration

LSL = Lower Specification Limit (98% of plan thickness)

 $Q_L$  = Lower Quality Index

s = Sample Standard Deviation

PWL = Percent Within Limits

Determine  $\bar{x}$  for the lot to the nearest two decimal places.

Determine s for the lot to the nearest three decimal places using:

$$S = \sqrt{\frac{\sum (x_i - \overline{x})^2}{n - 1}} \quad \text{where} \qquad \sum (x_i - \overline{x})^2 = (x_1 - \overline{x})^2 + (x_2 - \overline{x})^2 + \dots + (x_{10} - \overline{x})^2$$

Determine Q<sub>L</sub> for the lot to the nearest two decimal places using:

$$Q_{L} = \frac{\left(\overline{x} - LSL\right)}{S}$$

Determine PWL for the lot using the  $Q_L$  and the following table. For  $Q_L$  values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.

(8) Pay Factors. The pay factor (PF) for each lot will be determined, to the nearest two decimal places, using:

$$PF$$
 (in percent) = 55 + 0.5 (PWL)

If  $\bar{x}$  for a lot is less than the plan thickness, the maximum PF for that lot shall be 100 percent.

(9) Payment. Payment of incentive or disincentive for pay items subject to the PWL method will be calculated using:

Payment = (((TPF/100)-1) x CUP) x (TOTPAVT - DEFPAVT)

TPF = Total Pay Factor CUP = Contract Unit Price

TOTPAVT = Area of Pavement Subject to Coring

DEFPAVT = Area of Deficient Pavement

The TPF for the pavement shall be the average of the PF for all the lots; however, the TPF shall not exceed 102 percent.

Area of Deficient pavement (DEFPAVT) is defined as an area of pavement represented by a sublot deficient by more than ten percent which is left in place with no additional thickness added.

Area of Pavement Subject to Coring (TOTPAVT) is defined as those pavement areas included in lots for pavement thickness determination.

		PE	RCENT W	ITHIN LIN	MITS		
Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)						
0.00	50.00	0.40	65.07	0.80	78.43	1.20	88.76
0.01	50.38	0.41	65.43	0.81	78.72	1.21	88.97
0.02	50.77	0.42	65.79	0.82	79.02	1.22	89.17
0.03	51.15	0.43	66.15	0.83	79.31	1.23	89.38
0.04	51.54	0.44	66.51	0.84	79.61	1.24	89.58
0.05	51.92	0.45	66.87	0.85	79.90	1.25	89.79
0.06	52.30	0.46	67.22	0.86	80.19	1.26	89.99
0.07	52.69	0.47	67.57	0.87	80.47	1.27	90.19
0.08	53.07	0.48	67.93	0.88	80.76	1.28	90.38
0.09	53.46	0.49	68.28	0.89	81.04	1.29	90.58
0.10	53.84	0.50	68.63	0.90	81.33	1.30	90.78
0.11	54.22	0.51	68.98	0.91	81.61	1.31	90.96
0.12	54.60	0.52	69.32	0.92	81.88	1.32	91.15
0.13	54.99	0.53	69.67	0.93	82.16	1.33	91.33
0.14	55.37	0.54	70.01	0.94	82.43	1.34	91.52
0.15	55.75	0.55	70.36	0.95	82.71	1.35	91.70
0.16	56.13	0.56	70.70	0.96	82.97	1.36	91.87
0.17	56.51	0.57	71.04	0.97	83.24	1.37	92.04
0.18	56.89	0.58	71.38	0.98	83.50	1.38	92.22
0.19	57.27	0.59	71.72	0.99	83.77	1.39	92.39
0.20	57.65	0.60	72.06	1.00	84.03	1.40	92.56
0.21	58.03	0.61	72.39	1.01	84.28	1.41	92.72
0.22	58.40	0.62	72.72	1.02	84.53	1.42	92.88
0.23	58.78	0.63	73.06	1.03	84.79	1.43	93.05
0.24	59.15	0.64	73.39	1.04	85.04	1.44	93.21
0.25	59.53	0.65	73.72	1.05	85.29	1.45	93.37
0.26	59.90	0.66	74.04	1.06	85.53	1.46	93.52
0.27	60.28	0.67	74.36	1.07	85.77	1.47	93.67
0.28	60.65	0.68	74.69	1.08	86.02	1.48	93.83
0.29	61.03	0.69	75.01	1.09	86.26	1.49	93.98
0.30	61.40	0.70	75.33	1.10	86.50	1.50	94.13
0.31	61.77	0.71	75.64	1.11	86.73	1.51	94.27
0.32	62.14	0.72	75.96	1.12	86.96	1.52	94.41
0.33	62.51	0.73	76.27	1.13	87.20	1.53	94.54
0.34	62.88	0.74	76.59	1.14	87.43	1.54	94.68
0.35	63.25	0.75	76.90	1.15	87.66	1.55	94.82
0.36	63.61	0.76	77.21	1.16	87.88	1.56	94.95
0.37	63.98	0.77	77.51	1.17	88.10	1.57	95.08
0.38	64.34	0.78	77.82	1.18	88.32	1.58	95.20
0.39	64.71	0.79	78.12	1.19	88.54	1.59	95.33

<sup>\*</sup>For Q<sub>L</sub> values less than zero, subtract the table value from 100 to obtain PWL

	PERCENT WITHIN LIMITS (continued)					
Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)	Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)	Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)	
1.60 1.61 1.62 1.63 1.64	95.46 95.58 95.70 95.81 95.93	2.00 2.01 2.02 2.03 2.04	98.83 98.88 98.92 98.97 99.01	2.40 2.41 2.42 2.43 2.44	99.89 99.90 99.91 99.91 99.92	
1.65 1.66 1.67 1.68 1.69	96.05 96.16 96.27 96.37 96.48	2.05 2.06 2.07 2.08 2.09	99.06 99.10 99.14 99.18 99.22	2.45 2.46 2.47 2.48 2.49	99.93 99.94 99.94 99.95 99.95	
1.70 1.71 1.72 1.73 1.74	96.59 96.69 96.78 96.88 96.97	2.10 2.11 2.12 2.13 2.14	99.26 99.29 99.32 99.36 99.39	2.50 2.51 2.52 2.53 2.54	99.96 99.96 99.97 99.97 99.98	
1.75 1.76 1.77 1.78 1.79	97.07 97.16 97.25 97.33 97.42	2.15 2.16 2.17 2.18 2.19	99.42 99.45 99.48 99.50 99.53	2.55 2.56 2.57 2.58 2.59	99.98 99.98 99.98 99.99	
1.80 1.81 1.82 1.83 1.84	97.51 97.59 97.67 97.75 97.83	2.20 2.21 2.22 2.23 2.22	99.56 99.58 99.61 99.63 99.66	2.60 2.61 2.62 2.63 2.64	99.99 99.99 99.99 100.00 100.00	
1.85 1.86 1.87 1.88 1.89	97.91 97.98 98.05 98.11 98.18	2.25 2.26 2.27 2.28 2.29	99.68 99.70 99.72 99.73 99.75	≥ 2.65	100.00	
1.90 1.91 1.92 1.93 1.94	98.25 98.31 98.37 98.44 98.50	2.30 2.31 2.32 2.33 2.34	99.77 99.78 99.80 99.81 99.83			
1.95 1.96 1.97 1.98 1.99	98.56 98.61 98.67 98.72 98.78	2.35 2.36 2.37 2.38 2.39	99.84 99.85 99.86 99.87 99.88			

<sup>\*</sup>For  $Q_L$  values less than zero, subtract the table value from 100 to obtain PWL

- (b) Minimum Thickness. The minimum thickness method shall be as follows.
  - (1) Length of Units. The length of a unit will be a continuous strip of pavement 500 ft (150 m) in length.

- (2) Width of Units. The width of a unit will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
- (3) Thickness Measurements. Pavement thickness will be based on 2 in. (50 mm) diameter cores.

Cores shall be taken from the pavement by the Contractor at locations selected by the Engineer. When determining the thickness of a unit, one core shall be taken in each unit.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the cores. Core measurements will be determined immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples may be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

- (4) Unit Deficient in Thickness. In considering any portion of the pavement that is deficient, the entire limits of the unit will be used in computing the deficiency or determining the remedial action required.
- (5) Thickness Equals or Exceeds Specified Thickness. When the thickness of a unit equals or exceeds the specified plan thickness, payment will be made at the contract unit price per square yard (square meter) for the specified thickness.
- (6) Thickness Deficient by Ten Percent or Less. When the thickness of a unit is less than the specified plan thickness by ten percent or less, a deficiency deduction will be assessed against payment for the item involved. The deficiency will be a percentage of the contract unit price as given in the following table.

Percent Deficiency (of Plan Thickness)	Percent Deduction (of Contract Unit Price)	
0.0 to 2.0	0	
2.1 to 3.0	20	
3.1 to 4.0	28	
4.1 to 5.0	32	
5.1 to 7.5	43	
7.6 to 10.0	50	

(7) Thickness Deficient by More than Ten Percent. When a core shows the pavement to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient pavement.

No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient pavement. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient pavement shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness. The thickness of the new core will be used to determine the pay factor for the corrected area.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement. In addition, an amount equal to two times the contract cost of the deficient pavement will be deducted from the compensation due the Contractor.

The thickness of the first acceptable core on each side of the core more than ten percent deficient will be used to determine any needed pay adjustments for the remaining areas on each side of the area deficient by more than ten percent. The pay adjustment will be determined according to Article 407.10(b)(6).

(8) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. These additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, the procedures outlined in Article 407.10(b)(7) shall be followed, except the Engineer will determine the additional core locations.

When the additional cores, ordered by the Engineer, show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

(9) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness."

Revise Article 482.06 of the Standard Specifications to read:

"482.06 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. When the contract includes square yards (square meters) as the unit of measurement for HMA shoulder, thickness determinations shall be made according to Article 407.10(b)(3) and the following.

- (a) Length of the Units. The length of a unit shall be a continuous strip of shoulder 2500 ft (750 m) long.
- (b) Width of the Units. The width of the unit shall be the full width of the shoulder.
- (c) Thickness Deficient by More than Ten Percent. When a core shows the shoulder to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient shoulder. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient shoulder. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient shoulder will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient shoulder shall be brought to specified thickness by the addition of the applicable mixture, at no additional cost to the Department and subject to the lift thickness requirements of Article 312.05, or by removal and replacement with a new mixture. However, the surface elevation of the completed shoulder shall not exceed by more than 1/8 in. (3 mm) the surface elevation of the adjacent pavement. When requested in writing by the Contractor, the Engineer may permit in writing such thin shoulder to remain in place. When an area of thin shoulder is left in place, and no additional lift(s) are placed, no payment will be made for the thin shoulder. In addition, an amount equal to two times the contract unit price of the shoulder will be deducted from the compensation due the Contractor.

When an area of deficient shoulder is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

(d) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. When the additional cores, ordered by the Engineer, show the shoulder to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04. When the additional core shows the shoulder to be less than 90 percent of plan thickness, the procedure in (c), above shall be followed."

Revise Article 483.07 of the Standard Specifications to read:

"483.07 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. Thickness determinations shall be made according to Article 482.06 except the option of correcting deficient pavement with additional lift(s) shall not apply."

#### DIGITAL TERRAIN MODELING FOR EARTHWORK CALCULATIONS (BDE)

Effective: April 1, 2007

Revise the first and second paragraphs of Article 202.07(b) of the Standard Specifications to read:

"(b) Measured Quantities. Earth and rock excavation will be measured in cubic yards (cubic meters) in their original positions. The volumes will be computed by the method of average end areas using before and after cross sections; or by the method of digital terrain modeling using before and after total station surveys. The volume of any unstable or unsuitable material removed will be measured for payment in cubic yards (cubic meters).

In rock excavation, the Contractor shall strip ledge rock of overburden so that necessary survey shots for measurement may be taken. Vertical measurements shall extend from the surface of the rock to an elevation not more than 6 in. (150 mm) below the subgrade of the proposed pavement structure, as shown on the plans, or to the bottom of the rock where that point is above the subgrade of the proposed pavement structure. Horizontal measurements shall extend not more than 6 in. (150 mm) beyond the slope lines fixed by the Engineer for the work. Boulders and rocks 1/2 cu yd (0.5 cu m) or more in volume will be measured individually and the volume computed from average dimensions taken in three directions."

Revise the first paragraph of Article 204.07 of the Standard Specifications to read.

"204.07 Method of Measurement. Borrow excavation will be measured in cubic yards (cubic meters) in its original position. The volume will be computed by the method of average end areas using before and after cross sections; or by the method of digital terrain modeling using before and after total station surveys."

Revise the embankment definition of Article 204.07(b) of the Standard Specifications to read:

"Embankment = the volume of fill in its final position computed by the method of average end areas or digital terrain modeling. Both methods will be based upon the existing ground line as shown on the plans, except as noted in (1) and (2) below;"

Revise Article 207.04 of the Standard Specifications to read:

"207.04 Method of Measurement. This work will be measured for payment in tons (metric tons) according to Article 311.08(b), or in cubic yards (cubic meters) compacted in place and the volume computed by the method of average end areas or digital terrain modeling by total station measurement."

Revise the second sentence of the second paragraph of Article 211.07(b) of the Standard Specifications to read:

"The volume will be computed by the method of average end areas or digital terrain modeling by total station measurement."

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

Effective: September 1, 2000 Revised: January 1, 2010

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

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

<u>CONTRACTOR ASSURANCE</u>. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that the Contractor signs with a subcontractor:

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This 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 20.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work.

A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth 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 may 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 web site at www.dot.il.gov.

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

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
  - (1) The names and addresses of DBE firms that will participate in the contract;
  - (2) A description, including pay item numbers, of the work each DBE will perform;
  - (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
  - (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;

- (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
- (6) If the contract goal is not met, evidence of good faith efforts.

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 the good faith efforts of the bidder 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 commits sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not commit 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.
- (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 and 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 why good faith efforts have not been found.

(c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. The request will be forwarded to the Department's Reconsideration Officer. Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of 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 reconsideration. 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 contact. 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 it receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

- (a) 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) The Contractor must notify and obtain written approval from the Department's Bureau of Small Business Enterprises prior to replacing a DBE or making any change in the participation of a DBE. Approval for replacement will be granted only if it is demonstrated that the DBE is unable or unwilling to perform. The Contractor must make every good faith effort to find another certified DBE subcontractor to substitute for the original DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the original DBE, to the extent needed to meet the contract goal.
- (c) Any deviation from the DBE condition-of-award or contract specifications must be approved, in writing, by the Department. 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.

- (d) In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
  - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonably 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) Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted.
- (f) 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.
- (g) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (h) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request.

After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (j) of this part.

- (i) 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.
- (j) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

# DOWEL BARS (BDE)

Effective: April 1, 2007 Revised: January 1, 2008

Revise the fifth and sixth sentences of Article 1006.11(b) of the Standard Specifications to read:

"The bars shall be epoxy coated according to AASHTO M 284, except the thickness of the epoxy shall be 7 to 12 mils (0.18 to 0.30 mm) and patching of the ends will not be required. The epoxy coating applicator shall be certified according to the current Bureau of Materials and Physical Research Policy Memorandum, "Epoxy Coating Plant Certification Procedure". The Department will maintain an approved list."

#### **ENGINEER'S FIELD OFFICE TYPE A (BDE)**

Effective: April 1, 2007 Revised: August 1, 2008

Revise Article 670.02 of the Standard Specifications to read:

"670.02 Engineer's Field Office Type A. Type A field offices shall have a minimum ceiling height of 7 ft (2 m) and a minimum floor space 450 sq ft (42 sq m). The office shall be provided with sufficient heat, natural and artificial light, and air conditioning.

The office shall have an electronic security system that will respond to any breach of exterior doors and windows. Doors and windows shall be equipped with locks. Doors shall also be equipped with dead bolt locks or other secondary locking device.

Windows shall be equipped with exterior screens to allow adequate ventilation. All windows shall be equipped with interior shades, curtains, or blinds. Adequate all-weather parking space shall be available to accommodate a minimum of ten vehicles.

Suitable on-site sanitary facilities meeting Federal, State, and local health department requirements shall be provided, maintained clean and in good working condition, and shall be stocked with lavatory and sanitary supplies at all times.

Sanitary facilities shall include hot and cold potable running water, lavatory and toilet as an integral part of the office where available. Solid waste disposal consisting of two waste baskets and an outside trash container of sufficient size to accommodate a weekly provided pick-up service.

In addition, the following furniture and equipment shall be furnished.

- (a) Four desks with minimum working surface 42 x 30 in. (1.1 m x 750 mm) each and five non-folding chairs with upholstered seats and backs.
- (b) One desk with minimum working surface 48 x 72 in. (1.2 x 1.8 m) with height adjustment of 23 to 30 in. (585 to 750 mm).
- (c) One four-post drafting table with minimum top size of 37 1/2 x 48 in. (950 mm x 1.2 m). The top shall be basswood or equivalent and capable of being tilted through an angle of 50 degrees. An adjustable height drafting stool with upholstered seat and back shall also be provided.
- (d) Two free standing four drawer legal size file cabinet with lock and an underwriters' laboratories insulated file device 350 degrees one hour rating.
- (e) One 6 ft (1.8 m) folding table with six folding chairs.
- (f) One equipment cabinet of minimum inside dimension of 44 in. (1100 mm) high x 24 in. (600 mm) wide x 30 in. (750 mm) deep with lock. The walls shall be of steel with a 3/32 in. (2 mm) minimum thickness with concealed hinges and enclosed lock constructed in such a manner as to prevent entry by force. The cabinet assembly shall be permanently attached to a structural element of the field office in a manner to prevent theft of the entire cabinet.
- (g) One refrigerator with a minimum size of 16 cu ft (0.45 cu m) with a freezer unit.
- (h) One electric desk type tape printing calculator.

- (i) A minimum of two communication paths. The configuration shall include:
  - (1) Internet Connection. An internet service connection using telephone DSL, cable broadband, or CDMA wireless technology. Additionally, an 802.11g/N wireless router shall be provided, which will allow connection by the Engineer and up to four Department staff.
  - (2) Telephone Lines. Three separate telephone lines.
- (j) One plain paper copy machine capable of reproducing prints up to 11 x 17 in. (280 x 432 mm) with an automatic feed tray capable of storing 30 sheets of paper. Letter size and 11 x 17 in. (280 x 432 mm) paper shall be provided.
- (k) One plain paper fax machine with paper.
- (I) Two telephones, with touch tone, where available, and a digital telephone answering machine, for exclusive use by the Engineer.
- (m) One electric water cooler dispenser.
- (n) One first-aid cabinet fully equipped.
- (o) One microwave oven, 1 cu ft (0.03 cu m) minimum capacity.
- (p) One fire-proof safe, 0.5 cu ft (0.01 cu m) minimum capacity.
- (q) One electric paper shredder.
- (r) One post mounted rain gauge, located on the project site for each 5 miles (8 km) of project length."

Revise the first sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"The building or buildings fully equipped as specified will be paid for on a monthly basis until the building or buildings are released by the Engineer."

Revise the last sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"This price shall include all utility costs and shall reflect the salvage value of the building or buildings, equipment, and furniture which become the property of the Contractor after release by the Engineer, except that the Department will pay that portion of the monthly long distance telephone bills that, when combined, exceed \$150."

#### **EQUIPMENT RENTAL RATES (BDE)**

Effective: August 2, 2007 Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

- "(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
  - a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: 0.5 x (FHWA hourly rate - EOC).

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

#### FILTER FABRIC (BDE)

Effective: November 1, 2009 Revised: January 1, 2010

Revise the physical property tables in Article 1080.03 of the Standard Specifications to read:

"Physical Properties	Gradation 4 & 5	Gradation 6 & 7
Weight of Fabric (oz/sq yd), ASTM D 3776 (Mod.)	6.0 min.	8.0 min.
Burst Strength (psi), ASTM D 3786 <sup>1/</sup>	250 min.	300 min.
Trapezoidal Tear Strength (lb), ASTM D 5733 <sup>2/</sup>	60 min.	75 min.
Grab Tensile Strength (lb), ASTM D 4632 <sup>2/</sup>	160 min.	200 min.
Grab Tensile Elongation (%), ASTM D 4632 <sup>2/</sup>	50 max.	50 max.

Physical Properties (Metric)	Gradation 4 & 5	Gradation 6 & 7
Weight of Fabric (g/sq m), ASTM D 3776 (Mod.)	200 min.	270 min.
Burst Strength (kPa), ASTM D 3786 <sup>1/</sup>	1720 min.	2070 min.
Trapezoidal Tear Strength (N), ASTM D 5733 <sup>2/</sup>	265 min.	335 min.
Grab Tensile Strength (N), ASTM D 4632 <sup>2/</sup>	700 min.	900 min.
Grab Tensile Elongation (%), ASTM D 4632 <sup>2/</sup>	50 max.	50 max.

- 1/ Manufacturer's certification of fabric to meet requirements.
- 2/ Test sample shall be tested wet."

#### **HOT-MIX ASPHALT – ANTI-STRIPPING ADDITIVE (BDE)**

Effective: November 1, 2009

Revise the first and second paragraphs of Article 1030.04(c) of the Standard Specifications to read:

"(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283. To be considered acceptable by the Department as a mixture not susceptible to stripping, the conditioned to unconditioned split tensile strength ratio (TSR) shall be equal to or greater than 0.85 for 6 in. (150 mm) specimens. Mixtures, either with or without an additive, with TSRs less than 0.85 for 6 in. (150 mm) specimens will be considered unacceptable. Also, the conditioned tensile strength for mixtures containing an anti-strip additive shall not be lower than the original conditioned tensile strength determined for the same mixture without the anti-strip additive.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option."

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

Effective: January 1, 2010

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

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

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

- "Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 2 in. (50 mm), from each pavement edge. (i.e. for a 4 in. (100 mm) lift the near edge of the density gauge or core barrel shall be within 4 in. (100 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.
- a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

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

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-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 – DROP-OFFS (BDE)**

Effective: January 1, 2010

Revise the third paragraph of Article 701.07 of the Standard Specifications to read:

"At locations where construction operations result in a differential in elevation exceeding 3 in. (75 mm) between the edge of pavement or edge of shoulder within 3 ft (900 mm) of the edge of the pavement and the earth or aggregate shoulders, Type I or II barricades or vertical panels shall be placed at 100 ft (30 m) centers on roadways where the posted speed limit is 45 mph or greater and at 50 ft (15 m) centers on roadways where the posted speed limit is less than 45 mph."

#### **HOT-MIX ASPHALT – PLANT TEST FREQUENCY (BDE)**

Effective: April 1, 2008 Revised: January 1, 2010

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

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

	Day's production ≥ 1200 tons:		
Maximum Specific Gravity of Mixture	1 per half day of production	1 per day	Illinois-Modified AASHTO T 209
	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		

Note 1. The No. 8 (2.36 mm) and No. 30 (600  $\mu$ m) sieves are not required for All Other Mixtures.

Note 2. 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 3. 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 4. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident."

#### HOT-MIX ASPHALT – QC/QA ACCEPTANCE CRITERIA (BDE)

Effective: January 1, 2010

Revise Article 1030.05(f)(3) of the Standard Specifications to read:

"(3) Department assurance tests for voids, field VMA, and density."

#### **HOT-MIX ASPHALT – TRANSPORTATION (BDE)**

Effective: April 1, 2008

Revise Article 1030.08 of the Standard Specifications to read:

"1030.08 Transportation. Vehicles used in transporting HMA shall have clean and tight beds. The beds shall be sprayed with asphalt release agents from the Department's approved list. In lieu of a release agent, the Contractor may use a light spray of water with a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle. After spraying, the bed of the vehicle shall be in a completely raised position and it shall remain in this position until all excess asphalt release agent or water has been drained.

When the air temperature is below 60 °F (15 °C), the bed, including the end, endgate, sides and bottom shall be insulated with fiberboard, plywood or other approved insulating material and shall have a thickness of not less than 3/4 in (20 mm). When the insulation is placed inside the bed, the insulation shall be covered with sheet steel approved by the Engineer. Each vehicle shall be equipped with a cover of canvas or other suitable material meeting the approval of the Engineer which shall be used if any one of the following conditions is present.

- (a) Ambient air temperature is below 60 °F (15 °C).
- (b) The weather is inclement.
- (c) The temperature of the HMA immediately behind the paver screed is below 250 °F (120 °C).

The cover shall extend down over the sides and ends of the bed for a distance of approximately 12 in. (300 mm) and shall be fastened securely. The covering shall be rolled back before the load is dumped into the finishing machine."

### **IMPACT ATTENUATORS, TEMPORARY (BDE)**

Effective: November 1, 2003 Revised: January 1, 2007

<u>Description</u>. This work shall consist of furnishing, installing, maintaining, and removing temporary impact attenuators of the category and test level specified.

<u>Materials</u>. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

Item	Article/Section
(a) Fine Aggregate (Note 1)	003.01
(b) Steel Posts, Structural Shapes, and Plates	1006.04
(c) Rail Elements, End Section Plates, and Splice Plates	1006.25
(d) Bolts, Nuts, Washers and Hardware	1006.25
(e) Hollow Structural Tubing	1006.27(b)
(f) Wood Posts and Wood Blockouts	1007.01, 1007.02, 1007.06
(g) Preservative Treatment	1007.12
(h) Packaged Rapid Hardening Mortar	1018.01

Note 1. Fine aggregate shall be FA 1 or FA 2, Class A quality. The sand shall be unbagged and shall have a maximum moisture content of five percent.

#### **CONSTRUCTION REQUIREMENTS**

<u>General</u>. Impact Attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for the test level specified and shall be on the Department's approved list.

<u>Installation</u>. Regrading of slopes or approaches for the installation shall be as shown on the plans.

Attenuator bases, when required by the manufacturer, shall be constructed on a prepared subgrade according to the manufacturer's specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage.

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

When water filled attenuators are used between November 1 and April 15, they shall contain anti-freeze according to the manufacturer's recommendations.

<u>Markings</u>. Sand module impact attenuators shall be striped with alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes. There shall be at least two of each stripe on each module.

Other types of impact attenuators shall have a terminal marker applied to their nose and reflectors along their sides.

<u>Maintenance</u>. All maintenance of the impact attenuators shall be the responsibility of the Contractor until removal is directed by the Engineer.

<u>Relocate</u>. When relocation of temporary impact attenuators is specified, they shall be removed, relocated and reinstalled at the new location. The reinstallation requirements shall be the same as those for a new installation.

<u>Removal</u>. When the Engineer determines the temporary impact attenuators are no longer required, the installation shall be dismantled with all hardware becoming the property of the Contractor.

Surplus material shall be disposed of according to Article 202.03. Anti-freeze, when present, shall be disposed of/recycled according to local ordinances.

When impact attenuators have been anchored to the pavement, the anchor holes shall be repaired with rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

<u>Method of Measurement</u>. This work will be measured for payment as each, where each is defined as one complete installation.

Basis of Payment. This work will be paid for at the contract unit price per each for IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, RESETTABLE); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, WIDE); or IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) of the test level specified.

Relocation of the devices will be paid for at the contract unit price per each for IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE); IMPACT ATTENUATORS, RELOCATE (SEVERE USE); or IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE); of the test level specified.

Regrading of slopes or approaches will be paid for according to Section 202 and/or Section 204 of the Standard Specifications.

#### LIQUIDATED DAMAGES (BDE)

Effective: April 1, 2009

Revise the table in Article 108.09 of the Standard Specifications to read:

"Schedule of Deductions for Each Day of Overrun in Contract Time				
Original Contract Amount Daily Charges				
From More Than	To and Calendar Work Including Day Day			
\$ 0 100,000 500,000 1,000,000 3,000,000 5,000,000	\$ 100,000 500,000 1,000,000 3,000,000 5,000,000 10,000,000	\$ 375 625 1,025 1,125 1,425 1,700	\$ 500 875 1,425 1,550 1,950 2,350	
10,000,000	And over	3,325	4,650"	

## MENTOR-PROTÉGÉ PROGRAM (BDE)

Effective: June 1, 2007

<u>Eligibility</u>. This contract is eligible for the Department's Mentor-Protégé Program for those bidders with an approved Mentor-Protégé Development Plan.

In order for a Mentor-Protégé relationship to be recognized as part of this contract, the Protégé shall be used as a subcontractor and a Mentor-Protégé Agreement for Contract Assistance and Training shall be fully executed and approved. The Mentor-Protégé Agreement for Contract Assistance and Training shall be completed on the form provided by the Department and submitted with the DBE Utilization Plan for approval by the Department. If approved, the Mentor-Protégé Agreement for Contract Assistance and Training shall become part of the contract. In the event the Mentor-Protégé Agreement for Contract Assistance and Training is not approved, the contract shall be performed in accordance with the DBE Utilization Plan exclusive of the Agreement.

<u>DBE Goal Reduction</u>. The DBE participation goal set for this contract may, at the discretion of the Department, be reduced according to the Mentor-Protégé Program Guidelines when the Protégé is used as a subcontractor. When submitting the DBE Utilization Plan, the bidder shall indicate whether the Protégé will be used as a subcontractor and to what extent.

<u>Reimbursement of Mentor Expenses</u>. The direct and indirect expenses of the Mentor, as detailed in the approved Mentor-Protégé Agreement for Contract Assistance and Training will be reimbursed by the Department.

#### METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008 Revised: April 1, 2009

Add the following to Article 503.02 of the Standard Specifications:

Add the following to Article 504.02 of the Standard Specifications:

"(j) Metal Hardware Cast into Concrete .......1006.13"

Revise Article 1006.13 of the Standard Specifications to read:

"1006.13 Metal Hardware Cast into Concrete. Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3, 5, or 7.

The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

Insert Diameter	Proof Load		
5/8 in. (16 mm)	6600 lb (29.4 kN)		
3/4 in. (19 mm)	6600 lb (29.4 kN)		
1 in. (25 mm)	9240 lb (41.1 kN)"		

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007 Revised: November 1, 2009

Revise Article 105.03(a) of the Standard Specifications to read:

"(a) National Pollutant Discharge Elimination System (NPDES) / Erosion and Sediment Control Deficiency Deduction When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, or the Contractor's activities represents a violation of the Department's NPDES permits, the Engineer will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the work effort required. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the Department's NPDES permits. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or portion of a calendar day until the deficiency is corrected to the satisfaction of the Engineer. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The base value of the daily monetary deduction is \$1000.00 and will be applied to each location for which a deficiency exists.

The value of the deficiency deduction assessed for each infraction will be determined by multiplying the base value by a Gravity Adjustment Factor provided in Table A. Except for failure to participate in a required jobsite inspection of the project prior to initiating earthmoving operations which will be based on the total acreage of planned disturbance at the following multipliers: <5 Acres: 1; 5-10 Acres: 2; >10-25 Acres: 3; >25 Acres: 5. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day multiplied by a Gravity Adjustment Factor.

Table A				
Deficiency Deduction	n Gravity A	djustment F	actors	
Types of Violations	Soil Dist	urbed an	d Not P	ermanently
	Stabilized	At Time of	Violation	•
	< 5	5 - 10	>10 - 25	> 25
	Acres	Acres	Acres	Acres
Failure to Install or Properly	0.1 - 0.5	0.2 - 1.0	0.5 - 2.5	1.0 - 5
Maintain BMP				
Careless Destruction of BMP	0.2 - 1	0.5 - 2.5	1.0 - 5.	1.0 - 5
Intrusion into Protected Resource	1.0 - 5	1.0 - 5	2.0 - 10	2.0 - 10
Failure to properly manage	0.2 - 1	0.2 - 1	0.5 - 2.5	1.0 - 5
Chemicals, Concrete Washouts or				
Residuals, Litter or other Wastes				
Improper Vehicle and Equipment	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5
Maintenance, Fueling or Cleaning				
Failure to Provide or Update	0.2 - 1	0.5 - 2.5	1.0 - 5	1.0 - 5
Written or Graphic Plans Required				
by SWPPP				
Failure to comply with Other	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5"
Provisions of the NPDES Permit				

#### PARTIAL EXIT RAMP CLOSURE FOR FREEWAY/EXPRESSWAY (BDE)

Effective: January 1, 2009

Description. This work shall consist of furnishing and installing traffic control for the partial closure of exit ramps on a freeway/expressway. Work shall be according to Section 701 except as modified herein.

Add the following after the fourth paragraph of Article 701.07 of the Standard Specifications:

"Drop-offs at the edge of pavement greater than 1 1/2 in. (40 mm) caused by the Contractor's operations will be allowed only on one side of the ramp at a time."

Delete the third paragraph of Article 701.17(e)(1) of the Standard Specifications.

Delete the third paragraph of Article 701.18(e)(3) of the Standard Specifications.

Revise the first sentence of Article 701.19(c) of the Standard Specifications to read:

"Traffic control and protection required under Standards 701201, 701206, 701306, 701326, 701336, 701406, 701421, 701456, 701501, 701502, 701601, 701602, 701606, 701701 and 701801 will be measured for payment on a lump sum basis."

Add the following to the first paragraph of Article 701.20(b) of the Standard Specifications:

"TRAFFIC CONTROL AND PROTECTION STANDARD 701456;"

#### PAVEMENT MARKING REMOVAL (BDE)

Effective: April 1, 2009

Add the following to the end of the first paragraph of Article 783.03(a) of the Standard Specifications:

"The use of grinders will not be allowed on new surface courses."

#### **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."

#### PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

#### PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: November 1, 2008

Revise the first sentence of Article 701.12 of the Standard Specifications to read:

"All personnel on foot, excluding flaggers, within the highway right-of-way shall wear a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 2 garments."

#### POLYUREA PAVEMENT MARKING (BDE)

Effective: April 1, 2004 Revised: January 1, 2009

<u>Description</u>. This work shall consist of furnishing and applying pavement marking lines.

The type of polyurea pavement marking applied will be determined by the type of reflective media used.

Polyurea Pavement Marking Type I shall use glass beads as a reflective media. Polyurea Pavement Marking Type II shall use a combination of composite reflective elements and glass beads as a reflective media.

Polyurea-based liquid pavement markings shall only be applied by Contractors on the list of Approved Polyurea Contractors maintained by the Engineer of Operations and in effect on the date of advertisement for bids.

Materials. Materials shall meet the following requirements:

- (a) Polyurea Pavement Marking. The polyurea pavement marking material shall consist of 100 percent solid two part system formulated and designed to provide a simple volumetric mixing ratio of two components (must be two or three volumes of Part A to one volume of Part B). No volatile or polluting solvents or fillers will be allowed.
- (b) Pigmentation. The pigment content by weight (mass) of component A shall be determined by low temperature ashing according to ASTM D 3723. The pigment content shall not vary more than ± two percent from the pigment content of the original qualified paint.

White Pigment shall be Titanium Dioxide meeting ASTM D 476 Type II, Rutile.

Yellow Pigment shall be an Organic Yellow and contain no heavy metals.

- (c) Environmental. Upon heating to application temperature, the material shall not exude fumes which are toxic or injurious to persons or property.
- (d) Daylight Reflectance. The daylight directional reflectance of the cured polyurea material (without reflective media) shall be a minimum of 80 percent (white) and 50 percent (yellow) relative to magnesium oxide when tested using a color spectrophotometer with a 45 degrees circumferential /zero degrees geometry, illuminant C, and two degrees observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm. In addition, the color of the yellow polyurea shall visually match Color Number 33538 of Federal Standard 595a with chromaticity limits as follows:

Χ	0.490	0.475	0.485	0.539
Υ	0.470	0.438	0.425	0.456

(e) Weathering Resistance. The polyurea marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness to an aluminum alloy panel (Federal Test Std. No. 141, Method 2013) and allowed to cure for 72 hours at room temperature, shall be subjected to accelerated weathering for 75 hours. The accelerated weathering shall be completed by using the light and water exposure apparatus (fluorescent UV - condensation type) and tested according to ASTM G 53. The cycle shall consist of four hours UV exposure at 122 °F (50 °C) and four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the material shall show no substantial change in color or gloss.

- (f) Dry Time. The polyurea pavement marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness and with the proper saturation of reflective media, shall exhibit a no-tracking time of ten minutes or less when tested according to ASTM D 711.
- (g) Adhesion. The catalyzed polyurea pavement marking materials when applied to a 4 x 4 x 2 in. (100 x 100 x 50 mm) concrete block, shall have a degree of adhesion which results in a 100 percent concrete failure in the performance of this test.

The concrete block shall be brushed on one side and have a minimum strength of 3500 psi (24,100 kPa). A 2 in. (50 mm) square film of the mixed polyurea shall be applied to the brushed surface and allowed to cure for 72 hours at room temperature. A 2 in. (50 mm) square cube shall be affixed to the surface of the polyurea by means of an epoxy glue. After the glue has cured for 24 hours, the polyurea specimen shall be placed on a dynamic testing machine in such a fashion so that the specimen block is in a fixed position and the 2 in. (50 mm) cube (glued to the polyurea surface) is attached to the dynamometer head. Direct upward pressure shall be slowly applied until the polyurea system fails. The location of the break and the amount of concrete failure shall be recorded.

- (h) Hardness. The polyurea pavement marking materials when tested according to ASTM D 2240, shall have a shore D hardness of between 70 and 100. Films shall be cast on a rigid substrate at 14 to 16 mils (0.35 to 0.41 mm) in thickness and allowed to cure at room temperature for 72 hours before testing.
- (i) Abrasion. The abrasion resistance shall be evaluated according to ASTM D 4060 using a Taber Abrader with a 1,000 gram load and CS 17 wheels. The duration of the test shall be 1,000 cycles. The loss shall be calculated by difference and be less than 120 mgs. The tests shall be run on cured samples of polyurea material which have been applied at a film thickness of 14 to 16 mils (0.35 to 0.41 mm) to code S-16 stainless steel plates. The films shall be allowed to cure at room temperature for at least 72 hours and not more than 96 hours before testing.
- (j) Reflective Media. The reflective media shall meet the following requirements:
  - (1) Type I The glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications and the following requirements:

a. First Drop Glass Beads. The first drop glass beads shall be tested by the standard visual method of large glass spheres adopted by the Department. The beads shall have a silane coating and meet the following sieve requirements:

U.S. Standard	Sieve	% Passing
Sieve Number	Size	By Weight (mass)
12	1.70 mm	95-100
14	1.40 mm	75-95
16	1.18 mm	10-47
18	1.00 mm	0-7
20	850 µm	0-5

b.Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B.

- (2) Type II The combination of microcrystalline ceramic elements and glass beads shall meet the following requirements:
- a. First Drop Glass Beads. The first drop glass beads shall meet the following requirements:
  - 1. Composition. The elements shall be composed of a titania opacified ceramic core having clear and or yellow tinted microcrystalline ceramic beads embedded to the outer surface.
  - 2. Index of Refraction. All microcrystalline reflective elements embedded to the outer surface shall have an index of refraction of 1.8 when tested by the immersion method.
  - 3. Acid Resistance. A sample of microcrystalline ceramic beads supplied by the manufacturer, shall show resistance to corrosion of their surface after exposure to a one percent solution (by weight (mass)) of sulfuric acid. Adding 0.2 oz (5.7 ml) of concentrated acid into the water shall make the one percent acid solution. This test shall be performed by taking a 1 x 2 in. (25 x 50 mm) sample and adhering it to the bottom of a glass tray and placing just enough acid solution to completely immerse the sample. The tray shall be covered with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. The acid solution shall be decanted (do not rinse, touch, or otherwise disturb the bead surfaces) and the sample dried while adhered to the glass tray in a 150 °F (66 °C) oven for approximately 15 minutes. Microscope examination (20X) shall show no white (corroded) layer on the entire surface.
  - b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B or the following manufacturer's specification:
    - 1. Sieve Analysis. The glass beads shall meet the following sieve requirements:

U.S. Standard	Sieve	% Passing
Sieve Number	Size	By Weight (mass)
20	850 μm	100
30	600 μm	75-95
50	300 μm	15-35
100	150 μm	0-5

The manufacturer of the glass beads shall certify that the treatment of the glass beads meets the requirements of the polyurea manufacturer.

- 2. Imperfections. The surface of the glass beads shall be free of pits and scratches. The glass beads shall be spherical in shape and shall contain a maximum of 20 percent by weight (mass) of irregular shapes when tested by the standard method using a vibratile inclined glass plate as adopted by the Department.
- 3. Index of Refraction. The index of refraction of the glass beads shall be a minimum of 1.50 when tested by the immersion method at 77 °F (25 °C).
- (k) Packaging. Microcrystalline ceramic reflective elements and glass beads shall be delivered in approved moisture proof bags or weather resistant bulk boxes. Each carton shall be legibly marked with the manufacturer, specifications and type, lot number, and the month and year the microcrystalline ceramic reflective elements and/or glass beads were packaged. The letters and numbers used in the stencils shall be a minimum of 1/2 in. (12.7 mm) in height.
  - (1) Moisture Proof Bags. Moisture proof bags shall consist of at least five ply paper construction unless otherwise specified. Each bag shall contain 50 lb (22.7 kg) net.
  - (2) Bulk Weather Resistance Boxes. Bulk weather resistance boxes shall conform to Federal Specification PPP-8-640D Class II or latest revision. Boxes are to be weather resistant, triple wall, fluted, corrugated-fiber board. Cartons shall be strapped with two metal straps. Straps shall surround the outside perimeter of the carton. The first strap shall be located approximately 2 in. (50 mm) from the bottom of the carton and the second strap shall be placed approximately in the middle of the carton. All cartons shall be shrink wrapped for protection from moisture. Cartons shall be lined with a minimum 4 mil polyester bag and meet Interstate Commerce Commission requirements. Cartons shall be approximately 38 x 38 in. (1 x 1 m), contain 2000 lb (910 kg) of microcrystalline ceramic reflective elements and/or glass beads and be supported on a wooden pallet with fiber straps.
- (I) Packaging. The material shall be shipped to the job site in substantial containers and shall be plainly marked with the manufacturer's name and address, the name and color of the material, date of manufacture, and batch number.
- (m) Verification. Prior to approval and use of the polyurea pavement marking materials, the manufacturer shall submit a notarized certification of an independent laboratory, together with the results of all tests, stating these materials meet the requirements as set forth herein.

The certification test report shall state the lot tested, manufacturer's name, brand name of polyurea and date of manufacture. The certification shall be accompanied by one 1 pt (1/2 L) samples each of Part A and Part B. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B.

After approval by the Department, certification by the polyurea manufacturer shall be submitted for each batch used. New independent laboratory certified test results and samples for testing by the Department shall be submitted any time the manufacturing process or paint formulation is changed. All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer.

- (n) Acceptance samples. Acceptance samples shall consist of one 1 pt (1/2 L) samples of Part A and Part B, of each lot of paint. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B. The samples shall be submitted to the Department for testing, together with a manufacturer's certification. The certification shall state the formulation for the lot represented is essentially identical to that used for qualification testing. All, acceptance samples will be taken by a representative of the Department. The polyurea pavement marking materials shall not be used until tests are completed and they have met the requirements as set forth herein.
- (o) Material Retainage. The manufacturer shall retain the test sample for a minimum of 18 months.

Equipment. The polyurea pavement marking compounds shall be applied through equipment specifically designed to apply two component liquid materials, glass beads and/or reflective elements in a continuous and skip-line pattern. The two-component liquid materials shall be applied after being accurately metered and then mixed with a static mix tube or airless impingement mixing guns. The static mixing tube or impingement mixing guns shall accommodate plural component material systems that have a volumetric ratio of 2 to 1 or 3 to 1. This equipment shall produce the required amount of heat at the mixing head and gun tip and maintain those temperatures within the tolerances specified. The guns shall have the capacity to deliver materials from approximately 1.5 to 3 gal/min (5.7 to 11.4 L/min) to compensate for a typical range of application speeds of 6 to 8 mph (10 to 13 km/h). The accessories such as spray tip, mix chamber, and rod diameter shall be selected according to the manufacturer's specifications to achieve proper mixing and an acceptable spray pattern. The application equipment shall be maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. This equipment shall also have as an integral part of the gun carriage, a high pressure air spray capable of cleaning the pavement immediately prior to making application.

The equipment shall be capable of spraying both yellow and white polyurea, according to the manufacturer's recommended proportions and be mounted on a truck of sufficient size and stability with an adequate power source to produce lines of uniform dimensions and prevent application failure. The truck shall have at least two polyurea tanks each of 110 gal (415 L) minimum capacity and be equipped with hydraulic systems and agitators. It shall be capable of placing stripes on the left and right sides and placing two lines on a three-line system simultaneously with either line in a solid or intermittent pattern, in yellow or white, and applying the appropriate reflective media according to manufacturer's recommendations. All guns shall be in full view of operations at all times. The equipment shall have a metering device to register the accumulated installed quantities for each gun, each day.

Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and polyurea application techniques. Certification of equipment shall be provided at the pre-construction conference.

The mobile applicator shall include the following features:

- (a) Material Reservoirs. The applicator shall provide individual material reservoirs, or space for the storage of Part A and Part B of the resin composition.
- (b) Heating Equipment. The applicator shall be equipped with heating equipment of sufficient capacity to maintain the individual resin components at the manufacturer's recommended temperature of ±5 °F (±2.8 °C) for spray application.
- (c) Dispensing Equipment. The applicator shall be equipped with glass bead and/or reflective element dispensing equipment. The applicator shall be capable of applying the glass beads and/or reflective elements at a rate and combination indicated by the manufacturer.
- (d) Volumetric Usage. The applicator shall be equipped with metering devices or pressure gauges on the proportioning pumps as well as stroke counters to monitor volumetric usage. Metering devices or pressure gauges and stroke counters shall be visible to the Engineer.
- (e) Pavement Marking Placement. The applicator shall be equipped with all the necessary spray equipment, mixers, compressors and other appurtenances to allow for the placement of reflectorized pavement markings in a simultaneous sequence of operations.

The Contractor shall provide an accurate temperature-measuring device(s) that shall be capable of measuring the pavement temperature prior to application of the material, the material temperature at the gun tip and the material temperature prior to mixing.

#### CONSTRUCTION REQUIREMENTS

<u>General</u>. The pavement shall be cleaned by a method approved by the Engineer to remove all dirt, grease, glaze, or any other material that would reduce the adhesion of the markings with minimum or no damage to the pavement surface. New portland cement concrete pavements shall be air-blast-cleaned to remove all latents.

Widths, lengths, and shapes of the cleaned surface shall be of sufficient size to include the full area of the specified pavement marking to be placed.

The cleaning operation shall be a continuous moving operation process with minimum interruption to traffic.

Markings shall be applied to the cleaned surfaces on the same calendar day. If this cannot be accomplished, the surface shall be re-cleaned prior to applying the markings. No markings shall be applied until the Engineer approves the cleaning.

The pavement markings shall be applied to the cleaned road surface, during conditions of dry weather and subsequently dry pavement surfaces at a minimum uniform wet thickness of 15 mils (0.4 mm) according to the manufacturer's installation instructions. On new hot-mix asphalt (HMA) surfaces the pavement markings shall be applied at a minimum uniform wet thickness of 20 mils (0.5 mm). The application of and combination of reflective media (glass beads and/or reflective elements) shall be applied at a rate specified by the manufacturer. At the time of installation the pavement surface temperature and the ambient temperature shall be above 40 °F (4 °C) and rising. The pavement markings shall not be applied if the pavement shows any visible signs of moisture or it is anticipated that damage causing moisture, such as rain showers, may occur during the installation and set periods. The Engineer will determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

Using the application equipment, the pavement markings shall be applied in the following manner, as a simultaneous operation:

- (a) The surface shall be air-blasted to remove any dirt and residue.
- (b) The resin shall be mixed and heated according to manufacturer's recommendations and sprayed onto the pavement surface.

The edge of the center line or lane line shall be offset a minimum distance of 2 in. (50 mm) from a longitudinal crack or joint. Edge lines shall be approximately 2 in. (50 mm) from the edge of pavement. The finished center and lane lines shall be straight, with the lateral deviation of any 10 ft (3 m) line not to exceed 1 in. (25 mm).

<u>Notification</u>. The Contractor shall notify the Engineer 72 hours prior to the placement of the markings in order that he/she can be present during the operation. At the time of notification, the Contractor shall provide the Engineer the manufacturer and lot numbers of polyurea and reflective media that will be used.

<u>Inspection</u>. The polyurea pavement markings will be inspected following installation according to Article 780.10 of the Standard Specifications, except, no later than December 15, and inspected following a winter performance period that extends 180 days from December 15.

Method of Measurement. This work will be measured for payment as follows:

- (a) Contract Quantities. The requirements for the use of contract quantities shall be according to Article 202.07(a).
- (b) Measured Quantities. Lines will be measured for payment in place in feet (meters). Double yellow lines will be measured as two separate lines.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for POLYUREA PAVEMENT MARKING TYPE I – LINE of the line width specified or for POLYUREA PAVEMENT MARKING TYPE II – LINE of the line width specified.

#### PRECAST CONCRETE HANDLING HOLES (BDE)

Effective: January 1, 2007

Add the following to Article 540.02 of the Standard Specifications:

"(g) Handling Hole Plugs

1042.16"

Add the following paragraph after the sixth paragraph of Article 540.06 of the Standard Specifications:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Article 542.02 of the Standard Specifications:

"(ee) Handling Hole Plugs

1042.16"

Revise the fifth paragraph of Article 542.04(d) of the Standard Specifications to read:

"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 550.02 of the Standard Specifications:

"(o) Handling Hole Plugs

1042.16"

Replace the fourth sentence of the fifth paragraph of Article 550.06 of the Standard Specifications with the following:

"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 602.02 of the Standard Specifications:

"(p) Handling Hole Plugs

1042.16(a)"

Replace the fifth sentence of the first paragraph of Article 602.07 of the Standard Specifications with the following:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Section 1042 of the Standard Specifications:

"1042.16 Handling Hole Plugs. Plugs for handling holes in precast concrete products shall be as follows.

- (a) Precast Concrete Plug. The precast concrete plug shall have a tapered shape and shall have a minimum compressive strength of 3000 psi (20,700 kPa) at 28 days.
- (b) Polyethylene Plug. The polyethylene plug shall have a "mushroom" shape with a flat round top and a stem with three different size ribs. The plug shall fit snuggly and cover the handling hole.

The plug shall be according to the following.

Mechanical Properties	Test Method	Value (min.)
Flexural Modulus	ASTM D 790	3300 psi (22,750 kPa)
Tensile Strength (Break)	ASTM D 638	1600 psi (11,030 kPa)
Tensile Strength (Yield)	ASTM D 638	1200 psi (8270 kPa)

Thermal Properties	Test Method	Value (min.)
Brittle Temperature	ASTM D 746	-49 °F (-45 °C)
Vicat Softening Point	ASTM D 1525	194 °F (90 °C)"

# PUBLIC CONVENIENCE AND SAFETY (BDE)

Effective: January 1, 2000

Add the following paragraph after the fourth paragraph of Article 107.09 of the Standard Specifications.

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

#### 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
CSX Transportation, Inc. 500 Water Street, J-301 Jacksonville, FL 32202	None	5 mph/Yard Limit
DOT/AAR No.: N/A RR Division: St. Louis	RR Mile Post: Cone Ya RR Sub-Division: N/A	rd

For Freight/Passenger Information Contact: Hal Gibson, Train Master

Phone: (904) 359-1048

For Insurance Information Contact: Hal Gibson, Train Master

Phone: (904) 359-1048

<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.

# CSXT SPECIAL PROVISIONS AND INSURANCE REQUIREMENTS (FOR INFORMATION ONLY)

## Special Provisions

#### **DEFINITIONS:**

As used in these Special Provisions, all capitalized terms shall have the meanings ascribed to them by the Agreement, and the following terms shall have the meanings ascribed to them below:

"CSXT" shall mean CSX Transportation, Inc., its successors and assigns.

"CSXT Representative" shall mean the authorized representative of CSX Transportation, Inc.

"Agreement" shall mean the Agreement between CSXT and Agency dated as of \_\_\_\_\_, as amended from time to time.

"Agency" shall mean the State of Illinois, acting by and through its Department of Transportation.

"Agency Representative" shall mean the authorized representative of the Illinois Department of Transportation.

"Contractor" shall mean Agency's contractor.

"Work" shall mean the work on any Improvement.

#### I. AUTHORITY OF CSXT ENGINEER

The CSXT Representative shall have final authority in all matters affecting the safe maintenance of CSXT operations and CSXT property, and his or her approval shall be obtained by the Agency or its Contractor for methods of construction to avoid interference with CSXT operations and CSXT property and all other matters contemplated by the Agreement and these Special Provisions.

#### II. INTERFERENCE WITH CSXT OPERATIONS

A. Agency or its Contractor shall arrange and conduct its work so that there will be no interference with CSXT operations, including train, signal, telephone and telegraphic services, or damage to CSXT's property, or to poles, wires, and other facilities of tenants on CSXT's Property or right-of-way. Agency or its Contractor shall store materials so as to prevent trespassers from causing damage to trains, or CSXT Property. Whenever Work is likely to affect the operations or safety of trains, the method of doing such Work shall first be submitted to the CSXT Representative for approval, but such approval shall not relieve Agency or its Contractor from liability in connection with such Work.

- B. If conditions arising from or in connection with the Project require that immediate and unusual provisions be made to protect train operation or CSXT's property, Agency or its Contractor shall make such provision. If the CSXT Representative determines that such provision is insufficient, CSXT may, at the expense of Agency or its Contractor, require or provide such provision as may be deemed necessary, or cause the Work to cease immediately.
- III. NOTICE OF STARTING WORK. Agency or its Contractor shall not commence any work on CSXT Property or rights-of-way until it has complied with the following conditions:
  - A. Notify CSXT in writing of the date that it intends to commence Work on the Project. Such notice must be received by CSXT at least ten business days in advance of the date Agency or its Contractor proposes to begin Work on CSXT property. The notice must refer to this Agreement by date. If flagging service is required, such notice shall be submitted at least thirty (30) business days in advance of the date scheduled to commence the Work.
  - B. Obtain authorization from the CSXT Representative to begin Work on CSXT property, such authorization to include an outline of specific conditions with which it must comply.
  - C. Obtain from CSXT the names, addresses and telephone numbers of CSXT's personnel who must receive notice under provisions in the Agreement. Where more than one individual is designated, the area of responsibility of each shall be specified.

#### IV. WORK FOR THE BENEFIT OF THE CONTRACTOR

- A. No temporary or permanent changes to wire lines or other facilities (other than third party fiber optic cable transmission systems) on CSXT property that are considered necessary to the Work are anticipated or shown on the Plans. If any such changes are, or become, necessary in the opinion of CSXT or Agency, such changes will be covered by appropriate revisions to the Plans and by preparation of a force account estimate. Such force account estimate may be initiated by either CSXT or Agency, but must be approved by both CSXT and Agency. Agency or Contractor shall be responsible for arranging for the relocation of the third party fiber optic cable transmission systems, at no cost or expense to CSXT.
- B. Should Agency or Contractor desire any changes in addition to the above, then it shall make separate arrangements with CSXT for such changes to be accomplished at the Agency or Contractor's expense.

#### V. HAUL ACROSS RAILROAD

A. If Agency or Contractor desires access across CSXT property or tracks at other than an existing and open public road crossing in or incident to construction of the Project, the Agency or Contractor must first obtain the permission of CSXT and shall execute a license agreement or right of entry satisfactory to CSXT, wherein Agency or Contractor agrees to bear all costs and liabilities related to such access.

B. Agency and Contractor shall not cross CSXT's property and tracks with vehicles or equipment of any kind or character, except at such crossing or crossings as may be permitted pursuant to this section.

#### VI. COOPERATION AND DELAYS

- A. Agency or Contractor shall arrange a schedule with CSXT for accomplishing stage construction involving work by CSXT. In arranging its schedule, Agency or Contractor shall ascertain, from CSXT, the lead time required for assembling crews and materials and shall make due allowance therefore.
- B. Agency or Contractor may not charge any costs or submit any claims against CSXT for hindrance or delay caused by railroad traffic; work done by CSXT or other delay incident to or necessary for safe maintenance of railroad traffic; or for any delays due to compliance with these Special Provisions.
- C. Agency and Contractor shall cooperate with others participating in the construction of the Project to the end that all work may be carried on to the best advantage.
- D. Agency and Contractor understand and agree that CSXT does not assume any responsibility for work performed by others in connection the Project. Agency and Contractor further understand and agree that they shall have no claim whatsoever against CSXT for any inconvenience, delay or additional cost incurred by Agency or Contractor on account of operations by others.

#### VII. STORAGE OF MATERIALS AND EQUIPMENT

Agency and Contractor shall not store their materials or equipment on CSXT's property or where they may potentially interfere with CSXT's operations, unless Agency or Contractor has received CSXT Representative's prior written permission. Agency and Contractor understand and agree that CSXT will not be liable for any damage to such materials and equipment from any cause and that CSXT may move, or require Agency or Contractor to move, such material and equipment at Agency's or Contractor's sole expense. To minimize the possibility of damage to the railroad tracks resulting from the unauthorized use of equipment, all grading or other construction equipment that is left parked near the tracks unattended by watchmen shall be immobilized to the extent feasible so that it cannot be moved by unauthorized persons.

### VIII. CONSTRUCTION PROCEDURES

#### A. General

- 1. Construction work on CSXT property shall be subject to CSXT's inspection and approval.
- 2. Construction work on CSXT property shall be in accord with CSXT's written outline of specific conditions and with these Special Provisions.
- Contractor shall observe the terms and rules of the CSXT Safe Way manual, which Agency and Contractor shall be required to obtain from CSXT, and in accord with any other instructions furnished by CSXT or CSXT's Representative.

#### B. Blasting

- 1. Agency or Contractor shall obtain CSXT Representative's and Agency Representative's prior written approval for use of explosives on or adjacent to CSXT property. If permission for use of explosives is granted, Agency or Contractor must comply with the following:
  - Blasting shall be done with light charges under the direct supervision of a responsible officer or employee of Agency or Contractor.
  - b. Electric detonating fuses shall not be used because of the possibility of premature explosions resulting from operation of two-way train radios.
  - c. No blasting shall be done without the presence of an authorized representative of CSXT. At least 10 days' advance notice to CSXT Representative is required to arrange for the presence of an authorized CSXT representative and any flagging that CSXT may require.
  - d. Agency or Contractor must have at the Project site adequate equipment, labor and materials, and allow sufficient time, to (i) clean up (at Agency's expense) debris resulting from the blasting without any delay to trains; and (ii) correct (at Agency's expense) any track misalignment or other damage to CSXT's property resulting from the blasting, as directed by CSXT Representative, without delay to trains. If Agency's or Contractor's actions result in delay of any trains, including Amtrak passenger trains, Agency shall bear the entire cost thereof.
  - e. Agency and Contractor shall not store explosives on CSXT property.

#### 2. CSXT Representative will:

- a. Determine the approximate location of trains and advise Agency or Contractor of the approximate amount of time available for the blasting operation and clean-up.
- b. Have the authority to order discontinuance of blasting if, in his or her opinion, blasting is too hazardous or is not in accord with these Special Provisions.

#### IX. MAINTENANCE OF DITCHES ADJACENT TO CSXT TRACKS

Agency or Contractor shall maintain all ditches and drainage structures free of silt or other obstructions that may result from their operations. Agency or Contractor shall provide erosion control measures during construction and use methods that accord with applicable state standard specifications for road and bridge construction, including either

(1) silt fence; (2) hay or straw barrier; (3) berm or temporary ditches; (4) sediment basin; (5) aggregate checks; and (6) channel lining. All such maintenance and repair of damages due to Agency's or Contractor's operations shall be performed at Agency's expense.

#### X. FLAGGING / INSPECTION SERVICE

- A. CSXT has sole authority to determine the need for flagging required to protect its operations and property. In general, flagging protection will be required whenever Agency or Contractor or their equipment are, or are likely to be, working within fifty (50) feet of live track or other track clearances specified by CSXT, or over tracks.
- B. Agency shall reimburse CSXT directly for all costs of flagging that is required on account of construction within CSXT property shown in the Plans, or that is covered by an approved plan revision, supplemental agreement or change order.
- C. Agency or Contractor shall give a minimum of 10 days' advance notice to CSXT Representative for anticipated need for flagging service. No work shall be undertaken until the flag person(s) is/are at the job site. If it is necessary for CSXT to advertise a flagging job for bid, it may take up to 90-days to obtain this service, and CSXT shall not be liable for the cost of delays attributable to obtaining such service.
- D. CSXT shall have the right to assign an individual to the site of the Project to perform inspection service whenever, in the opinion of CSXT Representative, such inspection may be necessary. Agency shall reimburse CSXT for the costs incurred by CSXT for such inspection service. Inspection service shall not relieve Agency or Contractor from liability for its Work.
- E. CSXT shall render invoices for, and Agency shall pay for, the actual pay rate of the flagpersons and inspectors used, plus standard additives, whether that amount is above or below the rate provided in the Estimate. If the rate of pay that is to be used for inspector or flagging service is changed before the work is started or during the progress of the work, whether by law or agreement between CSXT and its employees, or if the tax rates on labor are changed, bills will be rendered by CSXT and paid by Agency using the new rates. Agency and Contractor shall perform their operations that require flagging protection or inspection service in such a manner and sequence that the cost of such will be as economical as possible.

#### XI. UTILITY FACILITIES ON CSXT PROPERTY

Agency shall arrange, upon approval from CSXT, to have any utility facilities on or over CSXT Property changed as may be necessary to provide clearances for the proposed trackage.

#### XII. CLEAN-UP

Agency or Contractor, upon completion of the Project, shall remove from CSXT's Property any temporary grade crossings, any temporary erosion control measures used to control drainage, all machinery, equipment, surplus materials, falsework, rubbish, or temporary buildings belonging to Agency or Contractor. Agency or Contractor, upon completion of the Project, shall leave CSXT Property in neat condition, satisfactory to CSXT Representative.

#### XIII. FAILURE TO COMPLY

If Contractor, or Agency to the extent Agency is performing Work, violates or fails to comply with any of the requirements of these Special Provisions, (a) CSXT may require Contractor and/or Agency to vacate CSXT Property; (b) CSXT may withhold monies due Contractor; and (c) CSXT may cure such failure and Contractor shall reimburse CSXT for the cost of curing such failure.

#### **❖** INSURANCE REQUIREMENTS

#### I. Insurance Policies:

Agency and Contractor, if and to the extent that either is performing work on or about CSXT's property, shall procure and maintain the following insurance policies:

- Commercial General Liability coverage at their sole cost and expense with limits of not less than \$5,000,000 in combined single limits for bodily injury and/or property damage per occurrence, and such policies shall name CSXT as an additional named insured.
- 2. Statutory Worker's Compensation and Employers Liability Insurance with limits of not less than \$1,000,000, which insurance must contain a waiver of subrogation against CSXT and its affiliates.
- 3. Commercial automobile liability insurance with limits of not less than \$500,000 combined single limit for bodily injury and/or property damage per occurrence, and such policies shall name CSXT as an additional named insured.
- 4. Railroad protective liability insurance with limits of not less than \$5,000,000 combined single limit for bodily injury and/or property damage per occurrence and an aggregate annual limit of \$10,000,000, which insurance shall satisfy the following additional requirements:
- a. The insurer must be financially stable and rated B+ or better in Best's Insurance Reports.
  - b. The Railroad Protective Insurance Policy must be on the ISO/RIMA Form of Railroad Protective Insurance Insurance Services Office (ISO) Form CG 00 35.

- c. CSX Transportation must be named as the named insured on the Railroad Protective Insurance Policy.
- d. Name and Address of Contractor and Agency must be shown on the Declarations page.
  - e. Description of operations must appear on the Declarations page and must match the Project description, including project or contract identification numbers.
  - f. Authorized endorsements must include the Pollution Exclusion Amendment CG 28 31, unless using form CG 00 35 version 96 and later.
  - g. Authorized endorsements may include:
    - (i). Broad Form Nuclear Exclusion IL 00 21
    - (ii) 30-day Advance Notice of Non-renewal or cancellation
    - (iii) Required State Cancellation Endorsement
    - (iv) Quick Reference or Index CL/IL 240
  - h. Authorized endorsements may not include:
    - (i) A Pollution Exclusion Endorsement except CG 28 31
    - (ii) A Punitive or Exemplary Damages Exclusion
    - (iii) A "Common Policy Conditions" Endorsement
    - (iv) Any endorsement that is not named in Section 4 (f) or (g) above.
    - (v) Policies that contain any type of deductible
  - 5. Such additional or different insurance as CSXT may require.

## II. Additional Terms

1. Contractor must submit its original insurance policies and two copies and all notices and correspondence regarding the insurance policies to:

Walter D. Tyler, CPCU, ARM CSX Transportation, Inc. Risk Management 301 West Bay Street BellSouth Tower Jacksonville, FL 32202

2. Neither Agency nor Contractor may begin work on the Project until it has received CSXT's written approval of the required insurance policies.

#### RAISED REFLECTIVE PAVEMENT MARKERS (BDE)

Effective: November 1, 2009

Revise the first sentence of the second paragraph of Article 781.03 of the Standard Specifications to read:

"The pavement shall be cut to match the bottom contour of the marker using a concrete saw fitted with 18 and 20 in. (450 and 500 mm) diameter blades."

#### RAMP CLOSURE FOR FREEWAY/EXPRESSWAY (BDE)

Effective: January 1, 2009

Description. This work shall consist of furnishing and installing traffic control for the closure of ramps on a freeway/expressway. Work shall be according to Section 701 except as modified herein.

Delete the third paragraph of Article 701.17(e)(1) of the Standard Specifications.

Add the following to Article 701.18 of the Standard Specifications:

"(k) Standard 701451. Only one interchange at a time may have ramps closed and only one exit ramp and one entrance ramp may be closed at a time.

The Contractor shall furnish a portable changeable message sign to be placed on the mainline in advance of the ramp closure. The exact placement and display shall be as shown in the plans or as directed by the Engineer."

Revise the first sentence of Article 701.19(c) of the Standard Specifications to read:

"Traffic control and protection required under Standards 701201, 701206, 701306, 701326, 701336, 701406, 701421, 701451, 701501, 701502, 701601, 701602, 701606, 701701 and 701801 will be measured for payment on a lump sum basis."

Add the following to the first paragraph of Article 701.20(b) of the Standard Specifications:

"TRAFFIC CONTROL AND PROTECTION STANDARD 701451;"

#### RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007 Revised: January 1, 2010

In Article 1030.02(g), delete the last sentence of the first paragraph in (Note 2).

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

**1031.01 Description.** Reclaimed asphalt pavement (RAP) is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded 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.

**1031.02 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 to provide verification of the quality of the RAP to clarify appropriate stockpile.

- (a) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be 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 in the coarse fraction shall pass one sieve size larger than the maximum sieve size specified for the mix the RAP will be used in.
- (b) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent 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.
- (c) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed 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 or other expansive material as determined by the Department.
- (d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low ESAL), or equivalent 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 or other expansive material as determined by the Department.
- (e) 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.

**1031.03 Testing.** When used in HMA, the RAP/FRAP shall be sampled and tested either during or after 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).

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

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

Evaluation of 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 % <sup>1/</sup>	± 0.5 %
G <sub>mm</sub>	± 0.03	

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

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content test results fall outside the appropriate 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)".

#### 1031.04 Quality Designation of Aggregate in RAP/FRAP.

- (a) 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 (High ESAL)/HMA (High ESAL), or HMA (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
  - (2) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
  - (3) RAP from Class I, Superpave (High ESAL), or 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) The aggregate quality of FRAP shall be determined as follows.

Fractionated stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 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."

**1031.05 Use of RAP/FRAP in HMA.** The use of RAP/FRAP shall be a Contractor's option when constructing HMA in all contracts. The use of RAP/FRAP in HMA shall be as follows.

- (a) 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.
- (b) Steel Slag Stockpiles. RAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) surface mixtures only.
- (c) 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.

- (d) 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.
- (e) 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.
- (f) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table below for a given N Design.

HMA Mixtures 1/, 3/	Maximum % RAP				
Ndesign	Binder/Leveling Surface Poly Binder Mod				
30	30	30	10		
50	25	15	10		
70	15 / 25 <sup>2/</sup>	10 / 15 <sup>2/</sup>	10		
90	10	10	10		
105	10	10	10		

Max RAP Percentage

- 1/ For HMA shoulder and stabilized subbase (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.
- 2/ Value of Max % RAP if homogeneous RAP stockpile of IL-9.5 RAP is utilized.
- 3/ When RAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent RAP 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 grades shall be reduced as follows:

#### Overlays:

When WMA contains between 20 and 30 percent RAP the high temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

#### Full Depth:

When WMA contains between 20 and 30 percent RAP, the low temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

(g) When the Contractor chooses the FRAP option, the percentage of FRAP shall not exceed the amounts indicated in the table below for a given N Design.

# Max FRAP Percentage

HMA Mixtures 11, 21	Maximum % FRAP				
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified		
30	35	35	10		
50	30	25	10		
70	25	20	10		
90	20	15	10		
105	10	10	10		

- 1/ For HMA shoulder and stabilized subbase (HMA) N30, the amount of FRAP shall not exceed 50 percent of the mixture.
- 2/ When FRAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent FRAP 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 grades shall be reduced as follows:

#### Overlays:

When WMA contains between 20 and 30 percent FRAP the high temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

#### Full Depth:

When WMA contains between 20 and 30 percent FRAP, the low temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

**1031.06 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP material meeting the above detailed requirements.

RAP/FRAP designs shall be submitted for volumetric 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.

**1031.07 HMA Production.** The coarse aggregate in all RAP 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.

HMA plants utilizing RAP/FRAP shall be capable of automatically recording and printing the following information.

- (a) Dryer Drum Plants.
  - (1) Date, month, year, and time to the nearest minute for each print.
  - (2) HMA mix number assigned by the Department.
  - (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
  - (4) Accumulated dry weight of RAP/FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
  - (5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
  - (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
  - (7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
  - (8) 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.)
- (b) Batch Plants.
  - (1) Date, month, year, and time to the nearest minute for each print.
  - (2) HMA mix number assigned by the Department.
  - (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
  - (4) Mineral filler weight to the nearest pound (kilogram).

- (5) RAP/FRAP weight to the nearest pound (kilogram).
- (6) Virgin asphalt binder weight to the nearest pound (kilogram).
- (7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

**1031.08 RAP in Aggregate Surface Course and Aggregate Shoulders.** The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply.
- (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."

# REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007 Revised: November 1, 2008

Revise the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

"At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration, and to the daytime and nighttime color requirements of ASTM D 4956.

Initial Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material						
Observation Entrance Angle Fluorescent Angle (deg.) (deg.) White Orange Orange						
0.2	-4	365	160	150		
0.2 +30 175 80 70						
0.5	-4	245	100	95		
0.5	+30	100	50	40"		

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

"Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

"The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

#### **REINFORCEMENT BARS - STORAGE AND PROTECTION (BDE)**

Effective: August 1, 2008 Revised: April 1, 2009

Revise Article 508.03 of the Standard Specifications to read:

"508.03 Storage and Protection. Reinforcement bars shall be stored off the ground using platforms, skids, or other supports; and shall be protected from mechanical injury and from deterioration by exposure. Epoxy coated bars shall be stored on wooden or padded steel cribbing and all systems for handling shall have padded contact areas. The bars or bundles shall not be dragged or dropped.

When epoxy coated bars are stored in a manner where they will be exposed to the weather more than 60 days prior to use, they shall be protected from deterioration such as that caused by sunlight, salt spray, and weather exposure. The protection shall consist of covering with opaque polyethylene sheeting or other suitable opaque material. The covering shall be secured and allow for air circulation around the bars to minimize condensation under the cover.

Covering of the epoxy coated bars will not be required when the bars are installed and tied, or when they are partially incorporated into the concrete."

#### SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)

Effective: November 1, 2005 Revised: January 1, 2009

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

<u>Usage</u>. Self-consolidating concrete may be used for cast-in-place concrete construction items involving Class MS, DS, and SI concrete.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. Article 1020.04 of the Standard Specifications shall apply, except as follows:

- (a) The cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m). The cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used.
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>Test Methods</u>. Illinois Test Procedures SCC-1, SCC-2, SCC-3, SCC-4, SCC-5, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

<u>Mix Design Submittal</u>. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

A J-ring value shall be submitted if a lower mix design maximum will apply. An L-box blocking ratio shall be submitted if a higher mix design minimum will apply. The Contractor shall also indicate applicable construction items for the mix design.

Trial mixture information will be required by the Engineer. A trial mixture is a batch of concrete tested by the Contractor to verify the Contractor's mix design will meet specification requirements. Trial mixture information shall include test results as specified in the "Portland Cement Concrete Level III Technician" course manual.

Test results shall also include slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index. For the trial mixture, the slump flow shall be near the midpoint of the proposed slump flow target range.

<u>Trial Batch</u>. A minimum 2 cu yd (1.5 cu m) trial batch shall be produced, and the self-consolidating concrete admixture dosage proposed by the Contractor shall be used. The slump flow shall be within 1.0 in. (25 mm) of the maximum slump flow range specified by the Contractor, and the air content shall be within the top half of the allowable specification range.

The trial batch shall be scheduled a minimum of 21 calendar days prior to anticipated use and shall be performed in the presence of the Engineer.

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

A new trial batch will be required whenever there is a change in the source of any component material, proportions beyond normal field adjustments, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

<u>Mixing Portland Cement Concrete</u>. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

<u>Falsework and Forms</u>. In addition to Articles 503.05 and 503.06 of the Standard Specifications, the Contractor shall ensure the design of the falsework and forms is adequate for the additional form pressure caused by the fluid concrete. Forms shall be tight to prevent leakage of fluid concrete.

When the form height for placing the self-consolidating concrete is greater than 10.0 ft (3.0 m), direct monitoring of form pressure shall be performed according to Illinois Test Procedure SCC-10. The monitoring requirement is a minimum, and the Contractor shall remain responsible for adequate design of the falsework and forms.

A minimum of one sensor will be required below each point of concrete placement to measure the maximum pressure. The first sensor below the point of concrete placement shall be approximately 12 in. (300 mm) above the base of the formwork. Additional sensors shall be installed above the bottom sensor when the form height is greater than 10.0 ft (3.0 m) above the bottom sensor. The additional sensors shall be installed at a maximum vertical spacing of 10.0 ft (3.0 m). The Contractor shall record the formwork pressure during concrete placement. This information shall be used by the Contractor to prevent the placement rate from exceeding the maximum formwork pressure allowed, to monitor the thixotropic change in the concrete during the pour, and to make appropriate adjustments to the mix design. This information shall be provided to the Engineer during the pour.

<u>Placing and Consolidating</u>. Concrete placement and consolidation shall be according to Article 503.07 of the Standard Specifications, except as follows:

Revise the third paragraph of Article 503.07 of the Standard Specifications to read:

"Open troughs and chutes shall extend as nearly as practicable to the point of deposit. The drop distance of concrete shall not exceed 5 ft (1.5 m). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted."

Delete the seventh, eighth, ninth, and tenth paragraphs of Article 503.07 of the Standard Specifications.

Add to the end of the eleventh paragraph of Article 503.07 of the Standard Specifications the following:

"Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer."

<u>Quality Control by Contractor at Plant</u>. The specified test frequencies for aggregate gradation, aggregate moisture, air content, unit weight/yield, and temperature shall be performed as indicated in the contract.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and hardened visual stability index test will not be required to be performed at the plant.

<u>Quality Control by Contractor at Jobsite</u>. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 50 cu yd (40 cu m) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite.

The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 300 cu yd (230 cu m) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

If mix foaming or other potential detrimental material is observed during placement or at the completion of the pour, the material shall be removed while the concrete is still plastic.

<u>Quality Assurance by Engineer at Plant</u>. For air content and aggregate gradation, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

<u>Quality Assurance by Engineer at Jobsite</u>. For air content and strength, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 1.5 in. (40 mm) for slump flow and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 1.5 in. (40 mm) for the J-ring value and ten percent for the L-box blocking ratio.

For each hardened visual stability index test performed by the Contractor, the cut cylinders shall be presented to the Engineer for determination of the rating. The Engineer reserves the right to conduct quality assurance split sample testing. A limit of precision will not apply to the hardened visual stability index.

#### SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004 Revised: January 1, 2007

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

<u>Usage</u>. Self-consolidating concrete may be used for precast concrete products.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. The mix design criteria shall be as follows:

- (a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m).
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements of Article 1020.04 of the Standard Specifications shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>Placing and Consolidating</u>. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer.

Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

<u>Mix Design Approval</u>. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

#### SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

# TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002 Revised: January 1, 2010

Add the following to Article 280.02 of the Standard Specifications to read:

"(k) Filter Fabric ......1080.03"

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

"Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer."

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

"The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor's operations, or for the Contractor's convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer's written approval."

Revise Article 280.04(a) of the Standard Specifications to read:

"(a) Temporary Ditch Checks. This system consists of the construction of temporary ditch checks to prevent siltation, erosion, or scour of ditches and drainage ways. Temporary ditch checks shall be constructed with rolled excelsior, products from the Department's approved list, or with aggregate placed on filter fabric when specified. Filter fabric shall be installed according to the requirements of Section 282.

Riprap shall be placed according to Article 281.04. Manufactured ditch checks shall be installed according to the manufacturer's specifications. Spacing of ditch checks shall be such that the low point in the center of one ditch check is at the same elevation as the base of the ditch check immediately upstream. Temporary ditch checks shall be sufficiently long enough that the top of the device in the middle of the ditch is lower than the bottom of the terminating ends of the ditch side slopes."

Revise the last sentence of the first paragraph of Article 280.04(g) of the Standard Specifications to read:

"The temporary mulch cover shall be according to either Article 251.03 or 251.04 except for any reference to seeding."

Revise Article 280.07(b) of the Standard Specifications to read:

"(b) Temporary Ditch Checks. This work will be measured for payment along the long axis of the device in place in feet (meters) except for aggregate ditch checks which will be measured for payment in tons (metric tons). Payment will not be made for aggregate in excess of 108 percent of the amount specified by the Engineer."

Revise Article 280.07(f) of the Standard Specifications to read:

"(f) Temporary Mulch. This work will be measured for payment according to Article 251.05(b)."

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

"Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment."

Revise Article 280.08(b) of the Standard Specifications to read:

"(b) Temporary Ditch Checks. This work will be paid for at the contract unit price per foot (meter) for TEMPORARY DITCH CHECKS except for aggregate ditch checks which will be paid for at the contract unit price per ton (metric ton) for AGGREGATE DITCH CHECKS."

Revise Article 280.08(f) of the Standard Specifications to read:

"(f) Temporary Mulch. Temporary Mulch will be paid for according to Article 251.06."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

Revise the second sentence of the first paragraph of Article 1081.015(e) of the Standard Specifications to read:

"The upstream facing of the aggregate ditch check shall be constructed of gradation CA 3. The remainder of the ditch check shall be constructed of gradation RR 3."

# TRAFFIC BARRIER TERMINAL, TYPE 6 (BDE)

Effective: January 1, 2010

Delete the fourth paragraph of Article 631.07 of the Standard Specifications.

## BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006 Revised: April 1, 2009

<u>Description</u>. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and pavement preservation type surface treatments. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

 $CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$ 

Where: CA = Cost Adjustment, \$.

BPI<sub>P</sub> = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI<sub>L</sub> = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).

 $^{\circ}$ AC $_{\vee}$  = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the  $^{\circ}$ AC $_{\vee}$  will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC $_{\vee}$  and undiluted emulsified asphalt will be considered to be 65% AC $_{\vee}$ .

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = A x D x ( $G_{mb}$  x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x ( $G_{mb}$  x 24.99) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different  $G_{mb}$  and %  $AC_{V.}$ 

For bituminous materials measured in gallons: Q, tons =  $V \times 8.33$  lb/gal x SG / 2000 For bituminous materials measured in liters: Q, metric tons =  $V \times 1.0$  kg/L x SG / 1000

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

G<sub>mb</sub> = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

<u>Basis of Payment</u>. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI<sub>L</sub> and BPI<sub>P</sub> in excess of five percent, as calculated by:

Percent Difference =  $\{(BPI_L - BPI_P) \div BPI_L\} \times 100$ 

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

# **RETURN WITH BID**

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# OPTION FOR BITUMINOUS MATERIALS COST ADJUSTMENTS

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No	).:										
Company N	ame:										 
Contractor's	s Optio	<u>n</u> :									
Is your comp	any opt	ing to in	clude this	s spe	cial pro	vision	as par	t of the	contra	ict?	
	Yes			No							
Signature:									Date:		

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

Effective: April 1, 2009 Revised: July 1, 2009

<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.

General. 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 work added by adjusted unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Added work paid for by time and materials 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	Factor	Units
A - Earthwork	1.68	liters / cu m
B – Subbase and Aggregate Base courses	2.58	liters / metric ton
C – HMA Bases, Pavements and Shoulders	4.37	liters / metric ton
D – PCC Bases, Pavements and Shoulders	12.52	liters / cu m
	. — . — .	

#### (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

Method of Adjustment. Fuel cost adjustments will be computed as follows.

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

Where: CA = Cost Adjustment, \$

FPI<sub>P</sub> = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)

FPI<sub>L</sub> = Fuel Price Index, as published by the Department for the month prior to the letting, \$/qal (\$/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.

Progress Payments. 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.

Final Quantities. Upon completion of the work and determination of final pay quantities, an adjustment will be prepared to reconcile any differences between estimated quantities previously paid and the final quantities. The value for the balancing adjustment will be based on a weighted average of FPI<sub>P</sub> and Q only for those months requiring the cost adjustment. The cost adjustment will be applicable to the final measured quantities of all applicable pay items.

<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 =  $\{(FPI_L - FPI_P) \div FPI_L\} \times 100$ 

#### 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 following categories of work?	on as pa	rt of the contract plans	for the
Category A Earthwork.	Yes		
Category B Subbases and Aggregate Base Courses	Yes		
Category C HMA Bases, Pavements and Shoulders	Yes		
Category D PCC Bases, Pavements and Shoulders	Yes		
Category E Structures	Yes		
Signature:		Date:	

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

Effective: April 2, 2004 Revised: April 1, 2009

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

<u>Types of Steel Products</u>. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in has a contract value of \$10,000 or greater.

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

Q = quantity of steel incorporated into the work, in lb (kg)

D = price factor, in dollars per lb (kg)

 $D = MPI_M - MPI_L$ 

Where:  $MPI_M =$  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<sub>L</sub> = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

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

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

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the  $MPI_M$  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

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 a following items of work?	s part of the	contract plans for the
Metal Piling	Yes	
Structural Steel	Yes	
Reinforcing Steel	Yes	
Dowel Bars, Tie Bars and Mesh Reinforcement	Yes	
Guardrail	Yes	
Steel Traffic Signal and Light Poles, Towers and Mast Arms	Yes	
Metal Railings (excluding wire fence)	Yes	
Frames and Grates	Yes	
Signaturo	Data	

# Illinois Department of Transportation PROJECT LABOR AGREEMENT

This Project Labor Agreement ("PLA") is entered into this \_\_\_\_\_\_ day of \_\_\_\_\_\_, by and between the Illinois Department of Transportation ("IDOT" or "Department") in its proprietary capacity, and each relevant Illinois AFL-CIO Building Trades Council made signatory hereto by the Illinois AFL-CIO Statewide Project Labor Agreement Committee on behalf of itself and each of its affiliated members (individually and collectively, the "Union"). This PLA shall apply to Construction Work (as defined herein) to be performed by IDOT's Prime Contractor and each of its relevant subcontractors of whatever tier ("Subcontractor" or "Subcontractors") on Contract 76C55 (hereinafter, the "Project").

# **ARTICLE 1 - INTENT AND PURPOSES**

- 1.1. This PLA is entered into in furtherance of Illinois Executive Order No. 2003-13. It is mutually understood and agreed that the terms and conditions of this PLA are intended to promote the public interest in obtaining timely and economical completion of the Project by encouraging productive and efficient construction operations; by establishing a spirit of harmony and cooperation among the parties; and by providing for peaceful and prompt settlement of any and all labor grievances or jurisdictional disputes of any kind without strikes, lockouts, slowdowns, delays or other disruptions to the prosecution of the work.
- 1.2. As a condition of the award of the contract for performance of work on the Project, IDOT's Prime Contractor and each of its Subcontractors shall be required to sign a "Contractor Letter of Assent", in the form attached hereto as Exhibit A, prior to commencing Construction Work on the Project. Each Union affiliate and separate local representing workers engaged in Construction Work on the Project in accordance with this PLA are bound to this agreement by the Illinois AFL-CIO Statewide Project Labor Agreement Committee which is the central committee established with full authority to negotiate and sign PLAs with the State on behalf of all respective crafts. Upon their signing the Letter of Assent, the Prime Contractor, each Subcontractor, and the individual Unions shall thereafter be deemed a party to this PLA. No party signatory to this PLA shall, contract or subcontract, nor permit any other person, firm, company or entity to contract or subcontract for the performance of Construction Work for the Project to any person, firm, company or entity that does not agree in writing to become bound by the terms of this PLA prior to commencing such work.
- 1.3. It is understood that the Prime Contractor(s) and each Subcontractor will be considered and accepted by the Unions as separate employers for the purposes of collective bargaining, and it is further agreed that the employees working under this PLA shall constitute a bargaining unit separate and distinct from all others. The Parties hereto also agree that this PLA shall be applicable solely with respect to this Project, and shall have no bearing on the interpretation of any other collective bargaining agreement or as to the recognition of any bargaining unit other than for the specific purposes of this Project.

- 1.4. In the event of a variance or conflict, whether explicit or implicit, between the terms and conditions of this PLA and the provisions of any other applicable national, area, or local collective bargaining agreement, the terms and conditions of this PLA shall supersede and control. For any work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, the National Agreement of the International Union of Elevator Constructors, and for any instrument calibration work and loop checking performed under the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, the preceding sentence shall apply only with respect to Articles I, II, V, VI, and VII.
- 1.5. Subject to the provisions of paragraph 1.4 of this Article, it is the parties' intent to respect the provisions of any other collective bargaining agreements that may now or hereafter pertain, whether between the Prime Contractor and one or more of the Unions or between a Subcontractor and one or more of the Unions. Accordingly, except and to the extent of any contrary provision set forth in this PLA, the Prime Contractor and each of its Subcontractors agrees to be bound and abide by the terms of the following in order of precedence: (a) the applicable collective bargaining agreement between the Prime Contractor and one or more of the Unions made signatory hereto; (b) the applicable collective bargaining agreement between a Subcontractor and one or more of the Unions made signatory hereto; or (c) the current applicable area collective bargaining agreement for the relevant Union that is the agreement certified by the Illinois Department of Labor for purposes of establishing the Prevailing Wage applicable to the Project. The Union will provide copies of the applicable collective bargaining agreements pursuant to part (c) of the preceding sentence to the Prime Contractor. Assignments by the Contractors amongst the trades shall be consistent with area practices; in the event of unresolved disagreements as to the propriety of such assignments, the provisions of Article VI shall apply.
- 1.6. Subject to the limitations of paragraphs 1.4 and 1.5 of this Article, the terms of each applicable collective bargaining agreement as determined in accordance with paragraph 1.5 are incorporated herein by reference, and the terms of this PLA shall be deemed incorporated into such other applicable collective bargaining agreements only for purposes of their application to the Project.
- 1.7. To the extent necessary to comply with the requirements of any fringe benefit fund to which the Prime Contractor or Subcontractor is required to contribute under the terms of an applicable collective bargaining agreement pursuant to the preceding paragraph, the Prime Contractor or Subcontractor shall execute all "Participation Agreements" as may be reasonably required by the Union to accomplish such purpose; provided, however, that such Participation Agreements shall, when applicable to the Prime Contractor or Subcontractor solely as a result of this PLA, be amended as reasonably necessary to reflect such fact. Upon written notice from any applicable fringe benefit fund, IDOT will withhold from the Prime Contractor payment of any delinquencies arising from this Project.

1.8. In the event that the applicable collective bargaining agreement between a Prime Contractor and the Union or between the Subcontractor and the Union expires prior to the completion of this Project, the expired applicable contract's terms will be maintained until a new applicable collective bargaining agreement is ratified. The wages and fringe benefits included in any new applicable collective bargaining agreement will apply on and after the effective date of the newly negotiated collective bargaining agreement, except to the extent wage and fringe benefit retroactivity is specifically agreed upon by the relevant bargaining parties.

# ARTICLE II - APPLICABILITY, RECOGNITION, AND COMMITMENTS

- 2.1 The term Construction Work as used herein shall include all "construction, prosecution, completion, or repair" work performed by a "laborer or mechanic" at the "site of the work" for the purpose of "building" the specific structures and improvements that constitute the Project. Terms appearing within quotation marks in the preceding sentence shall have the meaning ascribed to them pursuant to 29 CFR Part 5.
- 2.2 By executing the Letters of Assent, Prime Contractor and each of its Subcontractors recognizes the Unions signatory to this PLA as the sole and exclusive bargaining representatives for their craft employees employed on the jobsite for this Project. Unions who are signatory to this PLA will have recognition on the Project for their craft.
- 2.3 The Prime Contractor and each of its Subcontractors retains and shall be permitted to exercise full and exclusive authority and responsibility for the management of its operations, except as expressly limited by the terms of this PLA or by the terms and conditions of the applicable collective bargaining agreement.
- 2.4 Except to the extent contrary to an express provision of the relevant collective bargaining agreement, equipment or materials used in the Project may be pre-assembled or pre-fabricated, and there shall be no refusal by the Union to handle, transport, install, or connect such equipment or materials. Equipment or materials delivered to the job-site will be unloaded and handled promptly without regard to potential jurisdictional disputes; any such disputes shall be handled in accordance with the provisions of this PLA.
- 2.5 Unions commit to furnishing qualified and skilled craft persons as required by the Prime Contractor and its Subcontractors in fulfillment of their obligations to complete the Project. In order to promote the long-term development of a skilled and knowledgeable work force, the parties are encouraged to utilize apprentices to the maximum extent permitted by the applicable collective bargaining agreement.
- 2.6 The parties are mutually committed to promoting a safe working environment for all personnel at the job site. It shall be the responsibility of each employer to which this PLA applies to provide and maintain safe working conditions for its employees, and to comply with all applicable federal, state, and local health and safety laws and regulations.

- 2.7 The use or furnishing of alcohol or drugs and the conduct of any other illegal activity at the job-site is strictly prohibited. The parties shall take every practical measure consistent with the terms of applicable collective bargaining agreements to ensure that the job-site is free of alcohol and drugs.
- 2.8 All parties to this PLA agree that they shall not discriminate against any employee based on race, creed, color, national origin, union activity, age, or gender as required by all applicable federal, state, and local laws.
- 2.9 The Parties hereto agree that engineering consultants and materials testing employees, to the extent subject to the terms of this PLA, shall be fully expected to objectively and responsibly perform their duties and obligations owed to the Department without regard to the potential union affiliation of such employees or of other employees on the Project.

### **ARTICLE III - ADMINISTRATION OF AGREEMENT**

- 3.1 In order to assure that all parties have a clear understanding of the PLA and to promote harmony, a post-award pre-job conference will be held among the Prime Contractor, all Subcontractors and Union representatives prior to the start of any Construction Work on the Project. No later than the conclusion of such pre-job conference, the parties shall, among other matters, provide to one another contact information for their respective representatives (including name, address, phone number, facsimile number, e-mail). Nothing herein shall be construed to limit the right of the Department to discuss or explain the purpose and intent of this PLA with prospective bidders or other interested parties prior to or following its award of the job.
- 3.2 Representatives of the Prime Contractor and the Unions shall meet as often as reasonably necessary following award until completion of the Project to assure the effective implementation of this PLA.
- 3.3 Not less than once per month, Prime Contractor and all Subcontractors shall make available in writing to the Unions a Project status report that shall include, though not necessarily be limited to, planned activities for the next 30 day period and estimated numbers of employees by craft required for the next 30 day period. The purpose of this Project status report is to promote effective workforce planning and to facilitate resolution of any potential jurisdictional or other problems.
- 3.4 Not later than the earlier of (a) five business days following the pre-job conference, or (b) commencement of Construction Work, the Unions and Prime Contractor (on behalf of itself and all its subcontractors of whatever tier) shall confer and jointly designate a slate of three (3) permanent arbitrators (each a "Permanent Arbitrator") for the purpose of hearing disputes pursuant to Articles V and VII of this PLA. The slate of Permanent Arbitrators shall be selected from among the following individuals: Jack P. Cerone, Thomas F. Gibbons, Thomas G. Pagan, Robert Perkovich, Byron Yaffee, and Glenn A. Zipp. In the event that the Unions and Prime Contractor are not able to agree on a full slate of three Permanent Arbitrators, the Department, after consultation with the Unions and Prime Contractor, shall designate such additional Permanent Arbitrators as may be necessary to establish the full slate.

A single Permanent Arbitrator shall be selected from the slate of three on a rotating basis to adjudicate each arbitrable matter as it arises. In the event a Permanent Arbitrator is not available to adjudicate a particular matter in the order of rotation, the arbitration assignment shall pass to the next available Permanent Arbitrator.

### **ARTICLE IV - HOURS OF WORK AND GENERAL CONDITIONS**

- 4.1 The standard work day for Construction Work on the Project shall be an established consecutive eight (8) hour period between the hours of 7:00 a.m. and 5:00 p.m. with one-half hour designated as unpaid period for lunch. The standard work week shall be five (5) consecutive days of work commencing on Monday. Starting time shall be established at the pre-job conference, and shall be applicable to all craft employees on the Project unless otherwise expressly agreed in writing. In the event Project site or other job conditions dictate a change in the established starting time and/or a staggered lunch period for portions of the Project or for specific crafts, the Prime Contractor, relevant Subcontractors and business managers of the specific crafts involved shall confer and mutually agree to such changes as appropriate. If proposed work schedule changes cannot be mutually agreed upon between the parties, the hours fixed at the time of the pre-job meeting shall prevail.
- 4.2 Shift work may be established and directed by the Prime Contractor or relevant Subcontractor as reasonably necessary or appropriate to fulfill the terms of its contract with the Department. If used, shift hours, rates and conditions shall be as provided in the applicable collective bargaining agreement.
- 4.3 The parties agree that chronic and/or unexcused absenteeism is undesirable and must be controlled in accordance with procedures established by the applicable collective bargaining agreement. Any employee disciplined for absenteeism in accordance with such procedures shall be suspended from all work on the Project for not less than the maximum period permitted under the applicable collective bargaining agreement.
- 4.4 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, employment begins and ends at the Project site; employees shall be at their place of work at the starting time; and employees shall remain at their place of work until quitting time.
- 4.5 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, there shall be no limit on production by workmen, no restrictions on the full use of tools or equipment, and no restrictions on efficient use of manpower or techniques of construction other than as may be required by safety regulations.

- 4.6 The parties recognize that specialized or unusual equipment may be installed on the Project. In such cases, the Union recognizes the right of the Prime Contractor or Subcontractor to involve the equipment supplier or vendor's personnel in supervising the setting up of the equipment, making modifications and final alignment, and performing similar activities that may be reasonably necessary prior to and during the start-up procedure in order to protect factory warranties. The Prime Contractor or Subcontractor shall notify the Union representatives in advance of any work at the job-site by such vendor personnel in order to promote a harmonious relationship between the equipment vendor's personnel and other Project employees.
- 4.7 For the purpose of promoting full and effective implementation of this PLA, authorized Union representatives shall have access to the Project job-site during scheduled work hours. Such access shall be conditioned upon adherence to all reasonable visitor and security rules of general applicability that may be established for the Project site at the pre-job conference or from time to time thereafter.

# ARTICLE V - GRIEVANCE AND ARBITRATION PROCEDURES

- 5.1 Except as provided in Articles VI or VII, it is specifically agreed among the parties that any grievance or dispute arising out of the interpretation or application of this PLA shall be settled by means of the expedited arbitration process set forth in Paragraph 5.2 below. No such grievance or dispute shall be recognized unless called to the attention of the Prime Contractor and relevant Subcontractor by the Union or to the Union by the Prime Contractor or relevant Subcontractor within five (5) working days after the alleged violation was committed or discovered by the grieving party.
- 5.2 Grievances shall be settled according to the following procedure:
  - 5.2.A. Step 1. The dispute shall be referred to the Steward of the craft union involved and a representative of the Prime Contractor and relevant Subcontractor at the job-site.
  - 5.2.B. Step 2. In the event that the Steward and the contractors' representatives at the job-site cannot reach agreement within two (2) working days after a meeting is arranged and held, the matter shall be referred to the Union Business Manager and to executive representatives of the Prime Contractor and relevant Subcontractor.
  - 5.2.C. Step 3. In the event the dispute is not resolved within five (5) working days after completion of Step 2, the relevant parties shall request a Permanent Arbitrator as determined in accordance with paragraph 3.4 of this PLA, who shall, within ten (10) working days, hear the grievance and make a written decision. Such decisions shall be final and binding on all parties. The parties shall each pay the expense of their own representative. The expense of the Permanent Arbitrator shall be divided equally between (1) the Prime Contractor and/or relevant Subcontractor, and (2) the involved Union.

- 5.3 Any failure of a party to comply fully with such final and binding decision of the Permanent Arbitrator may result in removal of the non-complying party from the site, in a holdback from the Prime Contractor or Subcontractor of any amounts awarded, or in such other relief as the Department may reasonably determine is necessary to promote final resolution of the dispute.
- 5.4 In the event any dispute or grievance should arise, the parties expressly agree that it shall be resolved without occurrence of any strike, work stoppage, slow-down or other prohibited activities as provided in Article VII of this PLA. Individuals or parties violating this section shall be subject to immediate discharge or other discipline.

# **ARTICLE VI - JURISDICTIONAL DISPUTES**

- 6.1 As used in this Agreement, the term "jurisdictional dispute" shall be defined as any dispute, difference or disagreement involving the assignment of particular work to one class or craft of employees rather than to a different class or craft of employees, regardless of that Contractor's contractual relationship to any other employer, contractor, or organization on the site.
- 6.2 It is agreed by and between the parties to this Agreement that any and all jurisdictional disputes shall be resolved in the following manner; each of the steps hereinafter listed shall be initiated by the parties in sequence as set forth:
  - (a) Negotiation by and between the Local Business Representative of the disputing Union and Employer shall take place within two (2) business days. Business days are defined as Monday through Friday excluding contract holidays. Such negotiations shall be pursued until it is apparent that the dispute cannot be resolved at the local level.
  - (b) The International Representatives of the disputing Union shall meet or confer and attempt to resolve said dispute. This meeting shall take place within two (2) business days. Business days are defined as Monday through Friday excluding contract holidays.
  - (c) The parties to the Jurisdictional Dispute shall submit the dispute directly to an Arbitrator after complying with paragraph (2b) above. The parties shall meet with the Arbitrator within three (3) business days. Business days are defined as Monday through Friday excluding contract holidays. An Arbitrator will be selected based on availability from the slate of permanent Arbitrators. The Arbitrator's bench decision will be given the day of the hearing and will be final and legally binding on this project only. The Arbitrator's bench decision will be implemented without delay. The cost of Arbitration will be shared equally by the disputing parties. Any party to the dispute can require that a "long form" written decision be provided from the Arbitrator, however the cost of the "long form" written decision will be the responsibility of the party making the request.

#### Notes:

- A jurisdictional dispute may be submitted based upon a pre-job assignment.
- If any party to the jurisdictional disputes does not fully comply with the steps and time limits with each step, then the party in non-compliance will lose by "automatic default".
- Time limits at any step can be extended if all parties to the jurisdictional dispute mutually agree in writing.
- All parties to a jurisdictional dispute can mutually agree to waive the time limits in steps (a) and (b) and proceed directly to an expedited arbitration hearing.
- (d) In rendering his decision, the Arbitrator shall determine:
  - (1) First whether a previous agreement of record or applicable agreement, including a disclaimer agreement, between the National or International Unions to the dispute governs;
  - (2) Only if the Arbitrator finds that the dispute is not covered by an appropriate or applicable agreement of record or agreement between the crafts to the dispute, he shall then consider whether there is a previous decision of record governing the case;
  - (3) If the Arbitrator finds that a previous decision of record governs the case, the Arbitrator shall apply the decision of record in rendering his decision except under the following circumstances. After notice to the other parties to the dispute prior to the hearing that it intends to challenge the decision of record, if a trade challenging the decision of record is able to demonstrate that the recognized and established prevailing practice in the locality of the work has been contrary to the applicable decision of record, and that historically in that locality the work in dispute has not been performed by the other craft or crafts, the Arbitrator may rely on such prevailing practice rather than the decision of record. If the craft relying on the decision of record demonstrates that it has performed the work in dispute in the locality of the job, then the Arbitrator shall apply the decision of record in rendering his decision. If the Arbitrator finds that a craft has improperly obtained the prevailing practice in the locality through raiding, the undercutting of wagers or by the use of vertical agreements, the Arbitrator shall rely on the decision of record rather than the prevailing practice in the locality.
  - (4) If no decision of record is applicable, the Arbitrator shall then consider the established trade practice in the industry and prevailing practice in the locality; and

(5) Only if none of the above criteria is found to exist, the Arbitrator shall then consider that because efficiency, cost or continuity and good management are essential to the well being of the industry, the interest of the consumer or the past practice of the employer shall not be ignored.

The Arbitrator shall set forth the basis for his decision and shall explain his findings regarding the applicability of the above criteria. If lower-ranked criteria are relied upon, the Arbitrator shall explain why the higher-ranked criteria were not deemed applicable. The Arbitrator's decision shall only apply to the job in dispute.

- (6) Agreements of record are applicable only to the party's signatory to such agreements. Decisions of record are applicable to all trades.
- (7) The Arbitrator is not authorized to award back pay or any other damages for a mis-assignment of work. Nor may any party bring an independent action for back pay or any other damages, based upon a decision of an Arbitrator.
- 6.3 The signatory parties to this Agreement agree that jurisdictional disputes cannot and shall not interfere with the efficient and continuous operations required for the successful application of this Agreement. In the event a dispute arises, the Contractor's assignment shall be followed until the dispute is resolved.
- 6.4 Equipment or material delivered to the job site will be unloaded promptly without regard to jurisdictional disputes which will be handled as per the provisions of this Agreement. The Contractor will supply the Union with delivery schedules, allowing as much time as possible to insure the appropriate crafts will be available to unload the materials or equipment.
- 6.5 All signatory affiliates agree that upon request, a representative shall be assigned without delay to attempt a settlement in the event of a question on assignments.

#### **ARTICLE VII - WORK STOPPAGES AND LOCKOUTS**

7.1 During the term of this PLA, no Union or any of its members, officers, stewards, employees, agents or representatives shall instigate, support, sanction, maintain, or participate in any strike, picketing, walkout, work stoppage, slow down or other activity that interferes with the routine and timely prosecution of work at the Project site or at any other contractor's or supplier's facility that is necessary to performance of work at the Project site. Hand billing at the Project site during the designated lunch period and before commencement or following conclusion of the established standard workday shall not, in itself, be deemed an activity that interferes with the routine and timely prosecution of work on the Project.

- 7.2 Should any activity prohibited by paragraph 7.1 of this Article occur, the Union shall undertake all steps reasonably necessary to promptly end such prohibited activities. No Union complying with its obligations under this Article shall be liable for acts of employees for which it has no responsibility or for the unauthorized acts of employees it represents. Any employee who participates in or encourages any activity prohibited by paragraph 7.1 shall be immediately suspended from all work on the Project for a period equal to the greater of (a) 60 days; or (b) the maximum disciplinary period allowed under the applicable collective bargaining agreement for engaging in comparable unauthorized or prohibited activity.
- 7.3 During the term of this PLA, the Prime Contractor and its Subcontractors shall not engage in any lockout at the Project site of employees covered by this Agreement.
- 7.4 Upon notification of violations of this Article, the principal officer or officers of the local area Building and Construction Trades Council, and the Illinois AFL-CIO Statewide Project Labor Agreement Committee as appropriate, will immediately instruct, order and use their best efforts to cause the affiliated union or unions to cease any violations of this Article. A Trades Council and the Committee otherwise in compliance with the obligations under this paragraph shall not be liable for unauthorized acts of its affiliates.
- 7.5 In the event that activities in violation of this Article are not immediately halted through the efforts of the parties, any aggrieved party may invoke the special arbitration provisions set forth in paragraph 7.6 of this Article.
- 7.6 Upon written notice to the other involved parties by the most expeditious means available, any aggrieved party may institute the following special arbitration procedure when a breach of this Article is alleged:
  - 7.6.A The party invoking this procedure shall notify the individual designated as the Permanent Arbitrator pursuant to Article III of the nature of the alleged violation; such notice shall be by the most expeditious means possible. The initiating party may also furnish such additional factual information as may be reasonably necessary for the Permanent Arbitrator to understand the relevant circumstances. Copies of any written materials provided to the arbitrator shall also be contemporaneously provided by the most expeditious means possible to the party alleged to be in violation and to all other involved parties.
  - 7.6.B Upon receipt of said notice the Permanent Arbitrator shall set and hold a hearing within twenty-four (24) hours if it is contended the violation is ongoing, but not before twenty-four (24) hours after the written notice to all parties involved as required above.
  - 7.6.C The Permanent Arbitrator shall notify the parties by facsimile or any other effective written means, of the place and time chosen by the Permanent Arbitrator for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Permanent Arbitrator.

- 7.6.D The sole issue at the hearing shall be whether a violation of this Article has, in fact, occurred. An Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Permanent Arbitrator may order cessation of the violation of this Article, and such Award shall be served on all parties by hand or registered mail upon issuance.
- 7.6.E Such Award may be enforced by any court of competent jurisdiction upon the filing of the Award and such other relevant documents as may be required. Facsimile or other hardcopy written notice of the filing of such enforcement proceedings shall be given to the other relevant parties. In a proceeding to obtain a temporary order enforcing the Permanent Arbitrator's Award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Permanent Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail.
- 7.7 Individuals found to have violated the provisions of this Article are subject to immediate termination. In addition, IDOT reserves the right to terminate this PLA as to any party found to have violated the provisions of this Article.
- 7.8 Any rights created by statue or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by parties to whom they accrue.
- 7.9 The fees and expenses of the Permanent Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

#### <u>ARTICLE VIII – MISCELLANEOUS</u>

- 8.1 If any Article or provision of this PLA shall be declared invalid, inoperative or unenforceable by operation of law or by final non-appealable order of any tribunal of competent jurisdiction, such provision shall be deemed severed or limited, but only to the extent required to render the remaining provisions of this PLA enforceable consistent with the intent of the parties. The remainder of this PLA or the application of such Article or provision to persons or circumstances other than those as to which it has been held invalid, inoperative or unenforceable shall not be affected thereby.
- 8.2 The term of this PLA shall commence as of and from the date of the notice of award to the Prime Contractor and shall end upon final acceptance by IDOT of all work on the Project by the parties hereto.

- 8.3 This PLA may not be changed or modified except by the subsequent written agreement of the parties. All parties represent that they have the full legal authority to enter into this PLA. This PLA may be executed by the parties in one or more counterparts.
- 8.4 Any liability arising out of this PLA shall be several and not joint. IDOT shall not be liable to any person or other party for any violation of this PLA by any other party, and no Contractor or Union shall be liable for any violation of this PLA by any other Contractor or Union.
- 8.5 The failure or refusal of a party to exercise its rights hereunder in one or more instances shall not be deemed a waiver of any such rights in respect of a separate instance of the same or similar nature.

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# **Execution Page**

<u>Illinois Department of Transportation</u>	
Christine M. Reed, P.E., Director of Highways	
Ann Schneider, Director Finance & Administration	
Ellen Schanzle-Haskins, Chief Counsel	
Gary Hannig, Secretary	(Date)
Illinois AFL-CIO Statewide Project Labor Agreement Committ	ee, representing the local unions listed below:
	(Date)
List Union Locals:	

# \*\* RETURN WITH BID \*\*

Exhibit A – Contractor Letter of Assent							
(Date)							
To All Parties:							
In accordance with the terms and conditions of the contract for Construction Work on [Contract 76C55], this Letter of Assent hereby confirms that the undersigned Prime Contractor or Subcontractor agrees to be bound by the terms and conditions of the Project Labor Agreement established and entered into by the Illinois Department of Transportation in connection with said Project.							
It is the understanding and intent of the undersigned party that this Project Labor Agreement shall pertain only to the identified Project. In the event it is necessary for the undersigned party to become signatory to a collective bargaining agreement to which it is not otherwise a party in order that it may lawfully make certain required contributions to applicable fringe benefit funds, the undersigned party hereby expressly conditions its acceptance of and limits its participation in such collective bargaining agreement to its work on the Project.							
(Authorized Company Officer)							
(Company)							
** RETURN WITH BID **							

# **EARTH EXCAVATION (SPECIAL)**

This work shall consist of the excavation and re-compaction of previously placed un-compacted soil at locations previously excavated for archaeological investigations (pits) according to Sections 202 and 205 of the Standard Specifications, except as modified herein.

The un-compacted soil shall be removed to the lines and estimated depths as directed in this specification:

- 1. Bowman Access Roadway, STA. 3+85.00 to 4+45.00, 0' to 18' RT, 2.60' deep
- 2. Bowman Access Roadway, STA. 7+45.00 to 7+90.00, 0' to 18' RT, 2.30' deep
- 3. Bowman Access Roadway, STA. 8+45.00 to 8+90.00, 0' to 18' RT, 2.00' deep
- 4. Bowman Access Roadway, STA. 9+40.00 to 11+00.00, 0' to 18' RT, 2.30' deep

#### Depths of Excavation:

- 1. The average estimated depths of excavation for the archaeology pits are identified above.
- 2. The final depths of excavation for un-compacted soil will be determined in the field at the time of construction, and shall extend no deeper than the top surface of undisturbed earth beneath the un-compacted soil. Narrow isolated strips of un-compacted soil less than 3' in width do not require excavation and re-compaction unless directed by the Engineer.
- 3. Any EARTH EXCAVATION (SPECIAL) performed deeper than the top surface of the undisturbed earth beneath the un-compacted soil shall not be paid.
- 4. The Contractor shall notify the Engineer if any excavation of un-compacted soils is determined to be in excess of 3' deeper than those elevations shown on the plans.

#### Horizontal Limits of Excavation:

- 1. The horizontal limits of EARTH EXCAVATION (SPECIAL) for these pits shall be limited to those areas beneath the proposed pavement and areas within 4' of the edge of the proposed improvement.
- 2. The Contractor shall stake out the limits of the EARTH EXCAVATION (SPECIAL) prior to commencement of excavation activities per the plans, the Station/Offset description provided in this Special Provision, and to the satisfaction of the Engineer.
- 3. Any EARTH EXCAVATION (SPECIAL) performed outside the staked limits and as noted in the plans and this specification shall not be paid unless directed by the Engineer.

### Backfill and Re-compaction of Excavation:

- 1. The Contractor shall notify the Engineer upon completion of the excavation of un-compacted soil at each pit location prior to commencement of backfilling at each location.
- 2. The excavated un-compacted soil shall then be utilized for backfill at the same excavation pit location and compacted according to Section 205 up to the existing surrounding elevation.
- 3. If additional backfill is required to compact to surrounding existing grade, suitable material from other locations on-site shall be utilized. If surplus excavated material remains after the area is backfilled to final proposed grade, the surplus excavated material shall be disposed of according to Article 202.03.

#### Method Of Measurement

EARTH EXCAVATION (SPECIAL) in these archaeological investigation pits shall be measured and paid as the quantity of soil excavated and subsequently backfilled and re-compacted up to the existing surrounding elevation in cubic yards. Length, width, and depth measurement of the pit shall be made and volume of pit calculated before backfilling and re-compaction begins.

#### Basis Of Payment.

This work will be paid for at the contract unit price per cubic yard for EARTH EXCAVATION (SPECIAL).

If additional suitable material is required to fill archeological pits to the existing surrounding grade, it shall be measured and paid for separately as EARTH EXCAVATION. There will be no extra payment made for the placement and compaction of this EARTH EXCAVATION into the pits.

### ILLINOIS DEPARTMENT OF LABOR

# PREVAILING WAGES FOR ST. CLAIR COUNTY EFFECTIVE FEBRUARY 2010

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at <a href="http://www.state.il.us/agency/idol/">http://www.state.il.us/agency/idol/</a> or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.

# Saint Clair County Prevailing Wage for February 2010

Trade Name		TYP (	_		FRMAN					Pensn	Vac	Trng
A CDECOROG A DEL CENT	==		=		27 650							
ASBESTOS ABT-GEN ASBESTOS ABT-MEC		BLD BLD		27.150	27.650 27.610		1.5 1.5	2.0	5.350 5.250	8.850	0.000	0.800
BOILERMAKER		BLD			34.000		1.5		6.820	11.43		0.250
BRICK MASON		BLD			30.080		1.5	2.0		9.430		0.500
CARPENTER		ALL			33.980		1.5	2.0		5.250		0.350
CEMENT MASON		ALL			30.250		1.5	2.0		10.00		
CERAMIC TILE FNSHER		BLD		24.660	0.000		1.5	2.0		4.880		
ELECTRIC PWR EOMT OP		ALL		34.000	0.000		2.0		5.170			0.260
ELECTRIC PWR GRNDMAN		ALL		25.380	0.000		2.0			7.110		0.190
ELECTRIC PWR LINEMAN		ALL		39.090	40.980	1.5	2.0	2.0	5.940	10.95	0.000	0.290
ELECTRIC PWR TRK DRV		ALL		27.750	0.000	1.5	2.0		4.220	7.770	0.000	0.210
ELECTRICIAN		ALL		36.020	38.180	1.5	1.5	2.0	5.940	7.380	0.000	0.540
ELECTRONIC SYS TECH		BLD		29.120	30.870	1.5	1.5	2.0	2.800	6.870	0.000	0.250
ELEVATOR CONSTRUCTOR		BLD		40.945	46.060	2.0	2.0	2.0	10.03	9.460	2.460	0.000
FLOOR LAYER		BLD		28.430	29.180	1.5	1.5	2.0	5.800	5.250	0.000	0.350
GLAZIER		BLD		31.460	0.000		2.0		9.020			0.310
HT/FROST INSULATOR		BLD		34.760	35.760		1.5	2.0		9.860		0.500
IRON WORKER		ALL		29.350	30.850		1.5		6.360			0.420
LABORER	N	ALL		26.650	27.150		1.5		5.350			
LABORER	S	ALL			25.400		1.5		5.450			
MACHINIST		BLD		42.770	44.770		1.5		7.750			
MARBLE FINISHERS		BLD		23.370	0.000		1.5	2.0		4.400		0.410
MARBLE MASON		BLD			30.080		1.5	2.0		9.430		0.500
MILLWRIGHT		ALL	1		33.980		1.5	2.0		5.250	0.000	
OPERATING ENGINEER OPERATING ENGINEER				29.870	34.000 34.000	1.5	1.5 1.5	2.0	7.800			1.000
OPERATING ENGINEER OPERATING ENGINEER			3		34.000		1.5	2.0		13.75		
OPERATING ENGINEER					34.000		1.5	2.0	7.800		0.000	
OPERATING ENGINEER			5		34.000		1.5		7.800		0.000	
OPERATING ENGINEER			6	31.550		1.5	1.5		7.800			1.000
OPERATING ENGINEER			7	31.850	34.000		1.5	2.0	7.800			1.000
OPERATING ENGINEER		BLD	8	32.130	34.000	1.5	1.5	2.0	7.800	13.75	0.000	1.000
OPERATING ENGINEER		BLD	9	33.000	34.000	1.5	1.5	2.0	7.800	13.75	0.000	1.000
OPERATING ENGINEER		HWY :	1	29.500	32.500	1.5	1.5	2.0	7.800	13.75	0.000	1.000
OPERATING ENGINEER		HWY :	2	28.370	32.500	1.5	1.5	2.0	7.800	13.75	0.000	1.000
OPERATING ENGINEER		HWY	3	23.890	32.500	1.5	1.5	2.0	7.800	13.75	0.000	1.000
OPERATING ENGINEER					32.500				7.800			
OPERATING ENGINEER					32.500				7.800			
OPERATING ENGINEER					32.500				7.800			
OPERATING ENGINEER					32.500				7.800			
OPERATING ENGINEER					32.500				7.800			
OPERATING ENGINEER			9		32.500				7.800 4.850			
PAINTER PAINTER		BLD HWY			31.400				4.850			
PAINTER OVER 30FT		BLD			31.200				4.850			
PAINTER OVER SOFT		BLD			31.200				4.850			
PAINTER PWR EQMT		HWY			32.400				4.850			
PILEDRIVER		ALL			33.980				5.800			
PIPEFITTER	NW	BLD			32.000				5.940			
PIPEFITTER		BLD			36.250		1.5	2.0	6.900	4.950	0.000	0.525
PLASTERER		BLD			31.000				7.250			
PLUMBER	NW	BLD		33.250	35.750	1.5	1.5	2.0	5.700	6.100	0.000	0.400
PLUMBER	SE	BLD		33.750	36.250	1.5	1.5	2.0	6.900	4.950	0.000	0.525
ROOFER		BLD			30.000				7.150			
SHEETMETAL WORKER		ALL			29.580				6.350			
SPRINKLER FITTER		BLD			40.230				7.550			
TERRAZZO FINISHER		BLD		31.240	0.000				5.550			
TERRAZZO MASON		$_{ m BLD}$		32.530	32.830	1.5	⊥.5	2.0	5.550	4.480	0.000	0.070

TRUCK	DRIVER	ALL 1	28.605	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	ALL 2	29.005	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	ALL 3	29.205	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	ALL 4	29.455	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	ALL 5	30.205	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	0&C 1	22.880	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	0&C 2	23.200	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	O&C 3	23.360	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	0&C 4	23.560	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250
TRUCK	DRIVER	0&C 5	24.160	0.000	1.5	1.5	2.0	9.050	4.200	0.000	0.250

#### Legend:

M-F>8 (Overtime is required for any hour greater than 8 worked each day, Monday through Friday.

OSA (Overtime is required for every hour worked on Saturday)

OSH (Overtime is required for every hour worked on Sunday and Holidays)

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

# **Explanations**

ST. CLAIR COUNTY

LABORERS (NORTH) - The area bounded by Route 159 to a point south of Fairview Heights and west-southwest to Route 3 at Monroe County line.

PLUMBERS & PIPEFITTERS (SOUTHEAST) - That part of the county bordered by Rt. 50 on the North and West including Belleville.

PLUMBERS (NORTHWEST) - Towns of Aloraton, Brooklyn, Cahokia, Caseyville, Centreville, Dupo, East Carondelet, E. St. Louis, Fairview Heights, French Village, National City, O'Fallon, Sauget, and Washington Park.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial/Decoration Day, Fourth of July, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration such as the day after Thanksgiving for Veterans Day. If in doubt, please check with IDOL.

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

#### CERAMIC TILE FINISHER AND MARBLE FINISHER

The handling, at the building site, of all sand, cement, tile, marble or stone and all other materials that may be used and installed by [a] tile layer or marble mason. In addition, the grouting, cleaning, sealing, and mixing on the job site, and all other work as required in assisting the setter. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

#### ELECTRONIC SYSTEMS TECHNICIAN

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

#### OPERATING ENGINEER - BUILDING

GROUP I. Cranes, Dragline, Shovels, Skimmer Scoops, Clamshells or Derrick Boats, Pile Drivers, Crane-Type Backhoes, Asphalt Plant Operators, Concrete Plant Operators, Dredges, Asphalt Spreading Machines, All Locomotives, Cable Ways or Tower Machines, Hoists, Hydraulic Backhoes, Ditching Machines or Backfiller, Cherrypickers, Overhead Cranes, Roller - Steam or Gas, Concrete Pavers, Excavators, Concrete Breakers, Concrete Pumps, Bulk Cement Plants, Cement Pumps, Derrick-Type Drills, Boat Operators, Motor Graders or Pushcats, Scoops or Tournapulls, Bulldozers, Endloaders or Fork Lifts, Power Blade or Elevating Graders, Winch Cats, Boom or Winch Trucks or Boom Tractors, Pipe Wrapping or Painting Machines, Asphalt Plant Engineer, Journeyman Lubricating Engineer, Drills (other than Derrick Type), Mud Jacks, or Well Drilling Machines, Boring Machines or Track Jacks, Mixers, Conveyors (Two), Air Compressors (Two), Water Pumps regardless of size (Two), Welding Machines (Two), Siphons or Jets (Two), Winch Heads or Apparatuses (Two), Light Plants (Two), All Tractors regardless of size (straight tractor only), Fireman on Stationary Boilers, Automatic Elevators, Form Grading Machines, Finishing Machines, Power Sub-Grader or Ribbon Machines, Longitudinal Floats, Distributor Operators on Trucks, Winch Heads or Apparatuses (One), Mobil Track air and heaters (two to five), Heavy Equipment Greaser, Relief Operator, Assistant Master Mechanic and Heavy Duty Mechanic, self-propelled concrete saws of all types and sizes with their attachments, gob-hoppers, excavators all sizes, the repair and greasing of all diesel hammers, the operation and set-up of bidwells, water blasters of all sizes and their clutches, hydraulic jacks where used for hoisting, operation of log skidders, iceolators used on and off of pipeline, condor cranes, bow boats, survey boats, bobcats and all their attachments, skid steer loaders and all their attachments, creter cranes, batch plants, operator (all sizes), self propelled roto mills, operation of conveyor systems of any size and any configuration, operation, repair and service of all vibratory hammers, all power pacs and their controls regardless of location, curtains or brush burning machines, stump cutter machines, Nail launchers when mounted on a machine or self-propelled, operation of con-cover machines, and all Operators except those listed below).

GROUP II. Assistant Operators.

GROUP III. Air Compressors (One), Water Pumps, regardless of Size (One), Waterblasters (one), Welding Machine (One), Mixers (One Bag), Conveyor (One), Siphon or Jet (One), Light Plant (One), Heater (One), Immobile Track Air (One), and Self Propelled Walk-Behind Rollers.

GROUP IV. Asphalt Spreader Oilers, Fireman on Whirlies and Heavy Equipment Oilers, Truck Cranes, Dredges, Monigans, Large Cranes - (Over 65-ton rated capacity) Concrete Plant Oiler, Blacktop Plant Oiler, and Creter Crane Oiler (when required).

GROUP V. Oiler.

GROUP VI. Operators on equipment with Booms, including jibs, 100 feet and over, and less than 150 feet long.

GROUP VII. Operators on equipment with Booms, including jibs, 150 feet and over, and less than 200 feet long.

GROUP VIII. Operators on Equipment with Booms, including jibs, 200 feet and over; Tower Cranes; and Whirlie Cranes.

GROUP IX. Master Mechanic

OPERATING ENGINEERS - Highway

GROUP I. Cranes, Dragline, Shovels, Skimmer Scoops, Clamshells or Derrick Boats, Pile Drivers, Crane-Type Backhoes, Asphalt Plant Operators, Concrete Plant Operators, Dredges, Asphalt Spreading Machines, All Locomotives, Cable Ways or Tower Machines, Hoists, Hydraulic Backhoes, Ditching Machines or Backfiller, Cherrypickers, Overhead Cranes, Roller - Steam or Gas, Concrete Pavers, Excavators, Concrete Breakers, Concrete Pumps, Bulk Cement Plants, Cement Pumps, Derrick-Type Drills, Boat Operators, Motor Graders or Pushcats, Scoops or Tournapulls, Bulldozers, Endloaders or Fork Lifts, Power Blade or Elevating Graders, Winch Cats, Boom or Winch Trucks or Boom Tractors, Pipe Wrapping or Painting Machines, Asphalt Plant Engineer, Journeyman Lubricating Engineer, Drills (other than Derrick Type), Mud Jacks, Well Drilling Machines, Boring Machines, Track Jacks, Mixers, Conveyors (Two), Air Compressors (Two), Water Pumps regardless of size (Two), Welding Machines (Two), Siphons or Jets (Two), Winch Heads or Apparatuses (Two), Light Plants (Two), All Tractors regardless of size (straight tractor only), Fireman on Stationary Boilers, Automatic Elevators, Form Grading Machines, Finishing Machines, Power Sub-Grader or Ribbon Machines, Longitudinal Floats, Distributor Operators on Trucks, Winch Heads or Apparatuses (One), Mobil Track air and heaters (two to five), Heavy Equipment Greaser, Relief Operator, Assistant Master Mechanic and Heavy Duty Mechanic, self-propelled concrete saws

of all types and sizes with their attachments, gob-hoppers, excavators all sizes, the repair and greasing of all diesel hammers, the operation and set-up of bidwells, water blasters of all sizes and their clutches, hydraulic jacks where used for hoisting, operation of log skidders, iceolators used on and off of pipeline, condor cranes, bow boats, survey boats, bobcats and all their attachments, skid steer loaders and all their attachments, creter cranes, batch plants, operator (all sizes), self propelled roto mills, operation of conveyor systems of any size and any configuration, operation, repair and service of all vibratory hammers, all power pacs and their controls regardless of location, curtains or brush burning machines, stump cutter machines, Nail launchers when mounted on a machine or self-propelled, operation of con-cover machines, and all Operators (except those listed below).

GROUP II. Assistant Operators.

GROUP III. Air Compressors (One), Water Pumps, regardless of Size (One), Waterblasters (one), Welding Machine (One), Mixers (One Bag), Conveyor (One), Siphon or Jet (One), Light Plant (One), Heater (One), Immobile Track Air (One), and Self Propelled Walk-Behind Rollers.

GROUP IV. Asphalt Spreader Oilers, Fireman on Whirlies and Heavy Equipment Oilers, Truck Cranes, Dredges, Monigans, Large Cranes - (Over 65-ton rated capacity) Concrete Plant Oiler, Blacktop Plant Oiler, and Creter Crane Oiler (when required).

GROUP V. Oiler.

GROUP VI. Operators on equipment with Booms, including jibs, 100 feet and over, and less than 150 feet long.

GROUP VII. Operators on equipment with Booms, including jibs, 150 feet and over, and less than 200 feet long.

GROUP VIII. Operators on Equipment with Booms, including jibs, 200 feet and over; Tower Cranes; and Whirlie Cranes.

GROUP IX. Mechanic

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

- Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vactor trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.
- Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.
- Class 4. Low Boy and Oil Distributors.
- Class 5. Drivers who require special protective clothing while

employed on hazardous waste work.
TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump, service, or oil distributor trucks. The work includes transporting materials and equipment (including but not limited to, oils, aggregate supplies, parts, machinery and tools) to or from the job site; distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

#### TERRAZZO FINISHER

The handling of all materials used for Mosaic and Terrazzo work including preparing, mixing by hand, by mixing machine or transporting of pre-mixed materials and distributing with shovel, rake, hoe, or pail, all kinds of concrete foundations necessary for Mosaic and Terrazzo work, all cement terrazzo, magnesite terrazzo, Do-O-Tex terrazzo, epoxy matrix ter-razzo, exposed aggregate, rustic or rough washed for exterior or interior of buildings placed either by machine or by hand, and any other kind of mixture of plastics composed of chips or granules when mixed with cement, rubber, neoprene, vinyl, magnesium chloride or any other resinous or chemical substances used for seamless flooring systems, and all other building materials, all similar materials and all precast terrazzo work on jobs, all scratch coat used for Mosaic and Terrazzo work and sub-bed, tar paper and wire mesh (2x2 etc.) or lath. The rubbing, grinding, cleaning and finishing of same either by hand or by machine or by terrazzo resurfacing equipment on new or existing floors. When necessary finishers shall be allowed to assist the mechanics to spread sand bed, lay tarpaper and wire mesh (2x2 etc.) or lath. The finishing of cement floors where additional aggregate of stone is added by spreading or sprinkling on top of the finished base, and troweled or rolled into the finish and then the surface is ground by grinding machines.

#### Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.