#### **INSTRUCTIONS**

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

#### **PREQUALIFICATION**

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

#### WHO CAN BID?

Bids will be accepted from only those companies that request and receive written Authorization to Bid from IDOT's Central Bureau of Construction. This does not apply to Small Business Set-Asides.

#### **REQUESTS FOR AUTHORIZATION TO BID**

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

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

**ABOUT AUTHORIZATION TO BID:** Firms that have not received an Authorization to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the department as to the status. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions. These documents must be received three days before the letting date.

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

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

The Internet is the Department's primary way of doing business. The subscription 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 Plans and Contracts Office at (217)782-7806 or <a href="mailto:D&Econtracts@dot.il.gov">D&Econtracts@dot.il.gov</a>

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

#### **BID SUBMITTAL GUIDELINES AND CHECKLIST**

In an effort to eliminate confusion and standardize the bid submission process the Contracts Office has created the following guidelines and checklist for submitting bids.

This information has been compiled from questions received from contractors and from inconsistencies noted on submitted bids. If you have additional questions please refer to the contact information listed below.

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

#### STANDARD GUIDELINES FOR SUBMITTING BIDS

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

Use the following checklist to ensure completeness and the correct order in assembling your bid

☐ Cover page followed by the Pay Items. If you are using special software or CBID to generate your schedule of prices, do not include the blank schedule of prices.
☐ Page 4 (Item 9) – Check "YES" if you will use a subcontractor(s). Include the subcontractor(s) name, address and the dollar amount (if over \$25,000). If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.
☐ <b>After page 4, I</b> nsert your Cost Adjustments for Steel, Bituminous and Fuel (if applicable), and your State Board of Elections certificate of registration.
☐ Page 10 (Paragraph J) – Check "YES" or "NO" whether your company has any business in Iran.
☐ Page 10 (Paragraph K) – List the Union Local Name and number or certified training programs that you have in place. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.
☐ Page 11 (Paragraph L) - Insert a copy of your State Board of Elections certificate of registration after page 4 of the bid proposal. Only include the page that has the date stamp on it. Do not include any other certificates or forms showing that you are an Illinois business.
☐ Page 11 (Paragraph M) – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.
☐ Page 12 (Paragraph C) – This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each Form A that is filled out

Copies of the Forms can be used and only need to be changed when the financial inform certification signature and date must be original for each letting. Do not staple the forms	nation changes. The
If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first with your company information and then sign and date the Not Applicable statement on p	
■ Page 18 (Form B) - If you check "YES" to having other current or pending contracts ithe phrase, "See Affidavit of Availability on file".	t is acceptable to use
☐ Page 20 (Workforce Projection) – Be sure to include the Duration of the Project. It the phrase "Per Contract Specifications".	is acceptable to use
☐ <b>Bid Bond</b> – Submit your bid bond using the current Bid Bond Form provided in the properties of Attorney page should be stapled to the Bid Bond. If you are using an elect your bid bond number on the form and attach the Proof of Insurance printed from the Su	tronic bond, include
☐ <b>Disadvantaged Business Utilization Plan and/or Good Faith Effort</b> – The last item be the DBE Utilization Plan (SBE 2026), DBE Participation Statement (SBE 2025) and so If you have documentation for a Good Faith Effort, it should follow the SBE Forms.	
The Bid Letting is now available in streaming Audio/Video from the IDOT Web Site will be placed on the main page of the current letting on the day of the Letting. The streat 10 AM. The actual reading of the bids does not begin until approximately 10:20 AM.	
Following the Letting, the As-Read Tabulation of Bids will be posted by the end of the da link on the main page of the current letting.	y. You will find the
QUESTIONS: pre-letting up to execution of the contract	
Contractor/Subcontractor pre-qualificationSmall Business, Disadvantaged Business Enterprise (DBE)	217-785-4611 217-785-0230
QUESTIONS: following contract execution	
Including Subcontractor documentation, paymentsRailroad Insurance	217-782-3413 217-785-0275

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

**BIDDERS** 

Proposal Submitted By
Name
Address
City

#### Letting November 18, 2011

#### 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. This does not apply to Small Business Set-Asides.

(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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



Springfield, Illinois 62764

Contract No. 66671 **KENDALL County** Section (5CS,13C,108,109)R Route FAP 326 Project ACNHF-0326(083) **District 3 Construction Funds** 

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

Prepared by Checked by

#### Page intentionally left blank

#### **RETURN WITH BID**



#### **PROPOSAL**

#### TO THE DEPARTMENT OF TRANSPORTATION

**District 3 Construction Funds** 

Proposal of	
xpayer Identification Number (Mandatory)	
for the improvement identified and advertised for bids in the Invitation	on for Bids as:
Contract No. 66671 KENDALL County	
Section (5CS,13C,108,109)R	
Project ACNHF-0326(083) Route FAP 326	

5.04 km of pavement reconstruction, lane additions, storm sewer, traffic signals and other work along IL Route 47 from just north of IL Route 71 continuing northerly to just north of U.S. Route 34 at Yorkville.

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.

#### **RETURN WITH BID**

- 3. ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER. The undersigned further declares that he/she has carefully examined the proposal, plans, specifications, addenda form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this 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>A</u>	mount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount c	of Bid	Proposal <u>Guaranty</u>
Up to		\$5,000	\$150	\$2,000,000	to	\$3,000,000	\$100,000
\$5,000	to	\$10,000	\$300	\$3,000,000	to	\$5,000,000	\$150,000
\$10,000	to	\$50,000	\$1,000	\$5,000,000	to	\$7,500,000	\$250,000
\$50,000	to	\$100,000	\$3,000	\$7,500,000	to	\$10,000,000	\$400,000
\$100,000	to	\$150,000	\$5,000	\$10,000,000	to	\$15,000,000	\$500,000
\$150,000	to	\$250,000	\$7,500	\$15,000,000	to	\$20,000,000	\$600,000
\$250,000	to	\$500,000	\$12,500	\$20,000,000	to	\$25,000,000	\$700,000
\$500,000	to	\$1,000,000	\$25,000	\$25,000,000	to	\$30,000,000	\$800,000
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000	\$900,000
\$1,500,000	to	\$2,000,000	\$75,000	over		\$35,000,000	\$1,000,000

Bank cashier's checks or properly certified checks accompanying 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 guaranties which accompany the individual proposals making up the combination will be considered as also covering the combination bid.

The amount of the proposal guaranty check is \_\_\_\_\_\_\_\_\$( ). If this proposal is accepted and the undersigned 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 proposal guaranty check will be found in the proposal for:									
	Section No									
	County									

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

State Job # - C-93-064-05
PPS NBR - 3-02970-0100
County Name - KENDALL- -

Project Number
ACNHF-0326/083/

Route FAP 326

Code - 93 - - District - 3 - -

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
MXK03460	LANDSCAPE RESTORATION	SQ M	489.000				
MX030063	STORM SEW WM REQ 300	METER	13.000				
MX030199	TEMP PAVEMENT	SQ M	6,138.000				
MX030203	TEMP PAVT REMOVAL	SQ M	6,138.000				
MX032179	SILICONE JT SEAL 25	METER	2.000				
MX032529	SEGMENT CONC BLK WALL	SQ M	28.700				
MX032821	WATER SERV CONN 30	EACH	1.000				
MX032822	WATER SERV CONN 50	EACH	2.000				
MX032842	BOX CULVERT REMOV	METER	106.000				
MX033775	WATER SERV CONN 25MM	EACH	21.000				
MX033830	TRENCH DRAIN 100	METER	40.000				
MX033832	CONCRETE COLOR ADDITIVE	СИ М	239.000				
MX033834	REM REINST BRICK PAVR	SQ M	6.500				
MX356820	TEMP HMA BC WIDE 200	SQ M	5,904.000				
MX402045	AGG SURF CSE B 200	SQ M	218.000				

State Job # - C-93-064-05
PPS NBR - 3-02970-0100
County Name - KENDALL- -

Project Number
ACNHF-0326/083/

Route FAP 326

Code - 93 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
MX420290	HES PCC DRWY PAVT 200	SQ M	185.000				
MX424005	PCC SIDEWALK SPL	SQ M	289.500				
MX424010	PCC SDWLK SPL RETWALL	SQ M	16.500				
MX440050	ISLAND PAVEMENT REM	SQ M	585.000				
MX440910	TEMP WIDENING REMOVAL	SQ M	5,904.000				
MX440950	HMA SURF REM VAR DP	SQ M	3,989.000				
MX481010	TEMP AGG WEDGE	M TON	10,795.000				
MX503020	ACCESS RAMP	си м	21.200				
MX509035	DECORATIVE FENCE	METER	130.600				
MX509040	DECORATIVE HANDRAIL	METER	40.800				
MX509045	HANDRAIL	METER	61.600				
MX550506	CONNECT EX SEW <= 150	EACH	16.000				
MX550508	CONNECT EX SEWER 200	EACH	9.000				
MX550510	CONNECT EX SEWER 250	EACH	2.000				
MX550511	CONNECT EX SEWER 300	EACH	3.000				

State Job # - C-93-064-05 PPS NBR - 3-02970-0100

3-02970-0100 <u>Project Number</u>
KENDALL- - ACNHF-0326/083/

Route FAP 326

Code - 93 - - District - 3 - -

County Name -

ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
MX550512	SS ABAN 300	METER	50.000				
MX550515	SS ABAN 375	METER	81.000				
MX550518	SS ABAN 450	METER	16.000				
MX550521	SS ABAN 525	METER	40.000				
MX550536	SS ABAN 900	METER	320.000				
MX561068	WM CASING EXTEN 600	METER	18.000				
MX561315	TAP VALVE SLV 300X150	EACH	1.000				
MX561320	TAP VALVE SLV 300X200	EACH	1.000				
MX561704	LINE STOP 100	EACH	3.000				
MX561706	LINE STOP 150	EACH	5.000				
MX561708	LINE STOP 200	EACH	5.000				
MX561712	LINE STOP 300	EACH	4.000				
MX562020		EACH	5.000				
MX562140	WATER SERV CONNECT 40	EACH	4.000				
MX563306		METER	76.500				

C-93-064-05 State Job # -PPS NBR -3-02970-0100 County Name -**KENDALL--**

Code -

93 - -3 - -District -

Section Number -(5CS,13C,108,109)R **Project Number** Route **FAP 326** ACNHF-0326/083/

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
MX563308	SAN SEW PVC DR 18 200	METER	142.000				
MX563310	SAN SEW PVC DR 18 250	METER	10.500				
MX563408	SAN SEW PVC DR 21 200	METER	98.000				
MX563410	SAN SEW PVC DR 21 250	METER	62.000				
MX563412	SAN SEW PVC DR 21 300	METER	45.500				
MX563506	SAN SEW PVC SDR26 150	METER	43.500				
MX563508	SAN SEW PVC SDR26 200	METER	298.500				
MX563920	SAN SEW REPAIR 200	METER	9.500				
MX563950	TELEVISING SAN SEWER	METER	814.000				
MX602100	MAN A 2.4 DIA SPL	EACH	4.000				
MX602345	DROP MAN A SPL	EACH	1.000				
MX602490	SANITARY MANHOLE A	EACH	25.000				
MX604020	FRAMES & LIDS SPL	EACH	6.000				
	CONC CURB TB SPL	METER	125.100				
	CONC ISLAND SPL	SQ M	625.000				

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Project Number
ACNHF-0326/083/

Route FAP 326

Code - 93 - - District - 3 - -

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
MX606360	COMB CC&G TB SPL	METER	9.200				
MX637005	CONCRETE BARRIER WALL	METER	132.000				
MX700005	STEEL SIGN SUPPRT SPL	METER	13.000				
MX780605	URETH PVT MK LTR-SYM	SQ M	398.000				
MX780610	URETH PVT MK LINE 100	METER	17,375.000				
MX780614	URETH PVT MK LINE 150	METER	6,732.000				
MX780616	URETH PVT MK LINE 200	METER	5,160.000				
MX780618	URETH PVT MK LINE 300	METER	2,102.000				
MX780622	URETH PVT MK LINE 600	METER	614.000				
MX783074	GRV RCSD PVT MRKG 178	METER	2,431.000				
MX836021	LT P FDN 750 DIA SPL	METER	126.000				
MX836022	LP FDN 750 D SPL MOD	METER	6.000				
MX871057	FOCC62.5/125 MM24SM24	METER	5,079.000				
MX873025	ELCBL C RAILRD 14 3C	METER	123.000				
MX873030	ELCBL C 20 3C TW SH	METER	5,356.000				

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Project Number
ACNHF-0326/083/

Route FAP 326

Code - 93 - - District - 3 - -

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
MX877020	STL COMB MAA&P 16.76	EACH	1.000				
MX878020	CONC FDN TY C SPL	METER	9.900				
MX878030	CONC FDN TY E 900D	METER	102.000				
MZ001050	AGG SUBGRADE 300	SQ M	95,048.000				
MZ001080	AGG SUBGRADE 600	SQ M	54,432.000				
MZ007430	TEMP SIDEWALK	SQ M	400.000				
MZ016001	DECK SLAB REP (FD-T1)	SQ M	22.000				
MZ016002	DECK SLAB REP (FD-T2)	SQ M	37.000				
MZ023500	FILL EXIST CULVERTS	CU M	31.400				
MZ067000	STEEL CASINGS 150	METER	66.000				
MZ067700	STEEL CASINGS 500	METER	402.000				
MZ067800	STEEL CASINGS 550	METER	39.000				
MZ067900	STEEL CASINGS 600	METER	81.000				
MZ068200	STEEL CASINGS 750	METER	29.000				
MZ068450	STEEL CASINGS 1650	METER	56.000				

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County Name - KENDALL- -

Project Number
ACNHF-0326/083/

Route FAP 326

Code - 93 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
MZ075498	CONC RETAIN WALL REM	METER	161.000				
M2010110	TREE REMOV 6-15	UNIT	1,346.000				
M2010210	TREE REMOV OVER 15	UNIT	1,548.000				
M2011000	TEMPORARY FENCE	METER	24.000				
M2011400	NITROGEN FERT NUTR	KG	1.000				
M2011500	PHOSPHORUS FERT NUTR	KG	1.000				
M2011600	POTASSIUM FERT NUTR	KG	1.000				
M2020010	EARTH EXCAVATION	си м	86,200.000				
M2020020	ROCK EXCAVATION	си м	404.000				
M2020050	EARTH EXC WID	си м	1,181.000				
M2080150	TRENCH BACKFILL	си м	24,153.000				
M2090110	POROUS GRAN BACKFILL	CU M	8.000				
M2113100	TOPSOIL F & P 100	SQ M	65,969.000				
M2113600	TOPSOIL F & P 600	SQ M	1,163.000				
M2130201	EXPLOR TRENCH 2.1	METER	67.000				

State Job # - C-93-064-05
PPS NBR - 3-02970-0100
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Route FAP 326

Code - 93 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M2500100	SEEDING CL 1	НА	6.000				
M2500210	SEEDING CL 2A	НА	0.500				
M2500400	NITROGEN FERT NUTR	KG	648.000				
M2500500	PHOSPHORUS FERT NUTR	KG	648.000				
M2500600	POTASSIUM FERT NUTR	KG	648.000				
M2510630	EROSION CONTR BLANKET	SQ M	64,806.000				
M2800250	TEMP EROS CONTR SEED	KG	713.000				
M2800305	TEMP DITCH CHECKS	METER	273.000				
M2800400	PERIMETER EROS BAR	METER	5,725.000				
M2800800	MULCH METHOD 2	НА	6.500				
M2810109	STONE RIPRAP CL A5	SQ M	219.000				
M2820200	FILTER FABRIC	SQ M	219.000				
M3112010	SUB GRAN MAT C	M TON	459.000				
M3510100	AGG BASE CSE A 100	SQ M	9,158.000				
M3510200	AGG BASE CSE A 200	SQ M	2,266.000				

State Job # - C-93-064-05
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County Name - KENDALL- -

Project Number
ACNHF-0326/083/

Route FAP 326

Code - 93 - - District - 3 - -

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M3511150	AGG BASE CSE B 150	SQ M	11,521.000				
M3540200	PCC BASE CSE W 200	SQ M	94.000				
M3550415	HMA BASE CSE 115	SQ M	2,038.000				
M3560570	HMA BC WID 270	SQ M	783.000				
M4021200	AGGREGATE-TEMP ACCESS	M TON	4,161.000				
M4060100	BIT MATLS PR CT	LITER	10,812.000				
M4060300	AGG PR CT	M TON	19.000				
M4060982	HMA SURF REM BUTT JT	SQ M	146.000				
M4060990	TEMPORARY RAMP	SQ M	976.000				
M4062325	P LEV BIND MM N50	M TON	298.000				
M4063305	HMA SC "C" N30	M TON	1,610.000				
M4063345	HMA SC "D" N90	M TON	449.000				
M4063370	HMA SC "E" N90	M TON	250.000				
M4080100	BIT MATLS PR CT	LITER	3,956.000				
M4080300	AGG PR CT	M TON	4.200				

State Job # - C-93-064-05
PPS NBR - 3-02970-0100
County Name - KENDALL- -

Project Number ACNHF-0326/083/ Route

**FAP 326** 

Code - 93 - - District - 3 - -

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M4080500	INCIDENTAL HMA SURF	M TON	610.000				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
M4202255	PCC PVT 250 JOINTED	SQ M	129,099.000				
M4205100	PAVEMENT FABRIC	SQ M	1,181.000				
M4230150	PCC DRIVEWAY PAVT 150	SQ M	2,125.000				
M4230200	PCC DRIVEWAY PAVT 200	SQ M	5,474.000				
M4240100	PC CONC SIDEWALK 100	SQ M	9,361.000				
M4248000	DETECTABLE WARNINGS	SQ M	299.700				
M4400738	HMA SURF REM 38	SQ M	614.000				
M4402000	PAVEMENT REM	SQ M	102,652.000				
M4402010	DRIVE PAVEMENT REM	SQ M	14,505.000				
M4402020	CURB REM	METER	655.000				
M4402030	GUTTER REM	METER	18.000				
M4402040		METER	5,920.000				
M4402050		SQ M	4,529.000				
M4402420		SQ M	1,290.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M4405000	PAVED DITCH REMOVAL	METER	207.000				
M4422200	PAVT PATCH T2 200	SQ M	29.000				
M4423200	PAVT PATCH T3 200	SQ M	21.000				
M4424200	PAVT PATCH T4 200	SQ M	203.000				
M4427415	CL C PATCH T4 200	SQ M	66.000				
M4428404	CL D PATCH T4 100	SQ M	89.000				
M4428410	CL D PATCH T4 150	SQ M	394.000				
M4428440	CL D PATCH T4 300	SQ M	94.000				
M4430020	STRIP REF CR CON TR	METER	413.000				
M4812150	AGGREGATE SHLDS B 150	SQ M	126.000				
M4820600	HMA SHOULDERS 200	SQ M	138.000				
M4820650		SQ M	439.000				
M5010240	CONC REM	СИМ	11.000				
	PIPE CULVERT REMOV	METER	883.000				
	ROCK EXC STRUCT	CU M	4.000				

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Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M5030290	FORM LINER TEX SURF	SQ M	3.400				
M5030360	CONC SUP-STR	си м	11.100				
M5080205	REINF BARS, EPOXY CTD	KG	970.000				
M5090540	PIPE HANDRAIL	METER	54.200				
M5200225	PREF JT STRIP SEAL	METER	45.000				
M542A100	GRAT-C FL END S 375	EACH	2.000				
M542A110	GRAT-C FL END S 450	EACH	2.000				
M542C656	RCP TEE 1350P 900R	EACH	1.000				
M542E112	PRC FL-END SEC 300	EACH	9.000				
M542E116	PRC FL-END SEC 375	EACH	2.000				
M542E120	PRC FL-END SEC 450	EACH	6.000				
M542F252	CIP RC END SEC 1200	EACH	2.000				
M542H025	P CUL CL A 1 375	METER	20.500				
M542H030	P CUL CL A 1 450	METER	9.500		-		
M5500215	STORM SEW CL B 1 150	METER	6.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M5500300	STORM SEW CL B 1 1200	METER	80.000				
M5505530	SS RG CL A 1 300	METER	2,734.000				
M5505550	SS RG CL A 1 450	METER	442.000				
M5505570	SS RG CL A 1 600	METER	142.500				
M5505590	SS RG CL A 1 750	METER	190.500				
M5505610	SS RG CL A 1 900	METER	59.000				
M5505620	SS RG CL A 1 1050	METER	137.000				
M5505630	SS RG CL A 1 1200	METER	68.000				
M5505640	SS RG CL A 1 1350	METER	243.000				
M5505930	SS RG CL A 2 300	METER	1,255.000				
M5505950	SS RG CL A 2 450	METER	830.000				
M5505970	SS RG CL A 2 600	METER	634.000				
M5505990	SS RG CL A 2 750	METER	514.500				
	SS RG CL A 2 900	METER	858.500				
M5506020	SS RG CL A 2 1050	METER	965.500				

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Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M5506030	SS RG CL A 2 1200	METER	810.000				
M5506040	SS RG CL A 2 1350	METER	185.000				
M5506050	SS RG CL A 2 1500	METER	426.500				
M5506060	SS RG CL A 2 1650	METER	193.000				
M5506330	SS RG CL A 3 300	METER	15.000				
M5506420	SS RG CL A 3 1050	METER	54.500				
M5506430	SS RG CL A 3 1200	METER	424.500				
M5510005	STORM SEWER REM 100	METER	7.000				
M5510010	STORM SEWER REM 150	METER	20.000				
M5510015	STORM SEWER REM 200	METER	54.000				
M5510020	STORM SEWER REM 250	METER	79.000				
M5510025	STORM SEWER REM 300	METER	1,143.000				
M5510035	STORM SEWER REM 375	METER	659.000				
M5510045	STORM SEWER REM 450	METER	406.000				
M5510060	STORM SEWER REM 600	METER	154.000				

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Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M5510070	STORM SEWER REM 750	METER	334.000				
M5510080	STORM SEWER REM 900	METER	463.000				
M5510100	STORM SEWER REM 1350	METER	6.000				
M5610415	D I WATER MAIN 150	METER	3.000				
M5610420	DIWATER MAIN 200	METER	1,654.500				
M5610430	DIWATER MAIN 300	METER	527.000				
M5610635	WATER VALVES 150	EACH	2.000				
M5610640	WATER VALVES 200	EACH	21.000				
M5610650	WATER VALVES 300	EACH	5.000				
M5611205	TAP VALVE & SLVE 100	EACH	5.000				
M5611210	TAP VALVE & SLVE 150	EACH	4.000				
M5611215	TAP VALVE & SLVE 200	EACH	5.000				
M5611225	TAP VALVE & SLVE 300	EACH	3.000				
M5620115	WATER SERV LINE 25	METER	259.000				
	WATER SERV LINE 30	METER	9.500				

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Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M5620130	WATER SERV LINE 40	METER	70.000				
M5620135	WATER SERV LINE 50	METER	34.000				
M6010105	PIPE DRAINS 100	METER	17.500				
M6010110	PIPE DRAINS 150	METER	6.500				
M6010115	PIPE DRAINS 200	METER	87.500				
M6010605	PIPE UNDERDRAINS 100	METER	753.500				
M6010705	PIPE UNDERDRN 100 SP	METER	134.500				
M6020417	CB A 1.5M D T3V F&G	EACH	1.000				
M6020651	CB A 1.8M D T5F CL	EACH	2.000				
M6020701	CB A 2.1M D T1F CL	EACH	1.000				
M6021410	MAN A 1.2D T1F CL	EACH	47.000				
M6021417	MAN A 1.2D T3VF&G	EACH	32.000				
M6021430	MAN A 1.2D T5F CL	EACH	12.000				
M6021440	MAN A 1.2D T8G	EACH	16.000				
M6021457		EACH	5.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M6021470	MAN A 1.2D T20F&G	EACH	2.000				
M6021610	MAN A 1.5D T1F CL	EACH	29.000				
M6021617	MAN A 1.5D T3VF&G	EACH	10.000				
M6021630	MAN A 1.5D T5F CL	EACH	5.000				
M6021640	MAN A 1.5D T8G	EACH	11.000				
M6021657	MAN A 1.5M D T11V F&G	EACH	2.000				
M6021810	MAN A 1.8D T1F CL	EACH	31.000				
M6021830	MAN A 1.8D T5F CL	EACH	5.000				
M6021840	MAN A 1.8D T8G	EACH	5.000				
M6022010	MAN A 2.1D T1F CL	EACH	25.000				
M6022075	MAN A 2.1 DIA T3V F&G	EACH	1.000				
M6022090	MAN A 2.4D T1F CL	EACH	5.000				
M6022111	MAN A 2.4 D T11V F&G	EACH	1.000				
M6022152	MAN A 2.4 DIA T5F CL	EACH	9.000				
	MAN A 2.4 DIA T8 GR	EACH	4.000				

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Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M6022352	MAN A 2.7 DIA T5F CL	EACH	1.000				
M6022388	MAN A 2.7 DIA T8 GR	EACH	3.000				
M6024310	VV TA 1.2MD T1F CL	EACH	21.000				
M6024410	VV TA 1.5MD T1F CL	EACH	18.000				
M6060070	CONC CURB TB	METER	24.500				
M6060500	COMB CC&G TB15.30	METER	19.200				
M6060505	COMB CC&G TB15.30 AEP	METER	31.500				
M6060510	COMB CC&G TB15.30 DOW	METER	2,566.600				
M6060610	COMB CC&G TB15.45 DOW	METER	53.000				
M6060700	COMB CC&G TB15.60	METER	87.900				
M6060705	COMB CC&G TB15.60 AEP	METER	20.600				
M6060710	COMB CC&G TB15.60 DOW	METER	11,311.100				
M6061940	COMB CC&G TM10.30 DOW	METER	21.900				
M6063700	CONC MED TM-5	SQ M	632.000				
M6064110	CONC MED TSB15.30 DOW	SQ M	354.000				

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Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M6064210	CONC MED TSB15.60 DOW	SQ M	995.000				
M6066010	CORRUGATED MED DOW	SQ M	168.000				
M6690200	NON SPL WASTE DISPOSL	CU M	1,573.000				
M7030510	PAVT MARK TAPE T3 L&S	SQ M	422.000				
M7030520	PAVT MARK TAPE T3 100	METER	103,564.000				
M7030540	PAVT MARK TAPE T3 150	METER	1,988.000				
M7030550	PAVT MARK TAPE T3 200	METER	5,878.000				
M7030560	PAVT MARK TAPE T3 300	METER	1,234.000				
M7030580	PAVT MARK TAPE T3 600	METER	1,133.000				
M7031000	WORK ZONE PAVT MK REM	SQ M	13,811.000				
M7040100	TEMP CONC BARRIER	METER	666.000				
M7040200	REL TEMP CONC BARRIER	METER	446.000				
M7200100	SIGN PANEL T1	SQ M	140.820				
M7200200	SIGN PANEL T2	SQ M	70.720				
M7280100	TELES STL SIN SUPPORT	METER	64.300				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
M7300100	WOOD SIN SUPPORT	METER	845.200				
M8100230	CON T 25 PVC	METER	1,464.000				
M8100240	CONT 30 PVC	METER	109.000				
M8100260	CONT 50 PVC	METER	4,834.000				
M8100270	CONT 65 PVC	METER	15.000				
M8100280	CON T 75 PVC	METER	75.000				
M8100300	CON T 100 PVC	METER	454.000				
M8100540	CON T 50 CNC	METER	2,541.000				
M8101020	CON P 25 GALVS	METER	25.000				
M8101050	CON P 50 GALVS	METER	925.000				
M8101070	CON P 75 GALVS	METER	57.000				
M8101090	CON P 100 GALVS	METER	774.000				
M8101850	CON B&P CNC 50	METER	111.000				
M8170020	EC C XLP USE 1C 10	METER	5,578.000				
M8170040		METER	13,811.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
M8190200	TR & BKFIL F ELECT WK	METER	9,235.000				
M8730925	ELCBL C TRACER 14 1C	METER	5,079.000				
M8731210	ELCBL C SIGNAL 14 2C	METER	4,136.000				
M8731220	ELCBL C SIGNAL 14 3C	METER	3,691.000				
M8731240	ELCBL C SIGNAL 14 5C	METER	7,146.000				
M8731250	ELCBL C SIGNAL 14 7C	METER	4,148.000				
M8731300	ELCBL C LEAD 14 1PR	METER	17,710.000				
M8731800	ELCBL C SERV 6 2C	METER	141.000				
M8750510	TS POST GALVS 4.85	EACH	26.000				
M8770725	STL COMB MAA&P 7.31	EACH	2.000				
M8770755	STL COMB MAA&P 10.97	EACH	1.000				
M8770760	STL COMB MAA&P 11.58	EACH	3.000				
M8770765	STL COMB MAA&P 12.19	EACH	1.000				
M8770770	STL COMB MAA&P 12.80	EACH	1.000				
M8770775	STL COMB MAA&P 13.41	EACH	2.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M8770777	STL COMB MAA&P 14.02	EACH	3.000				
M8770779	STL COMB MAA&P 14.63	EACH	5.000				
M8770780	STL COMB MAA&P 15.24	EACH	6.000				
M8770782	STL COMB MAA&P 15.85	EACH	2.000				
M8770784	STL COMB MAA&P 16.46	EACH	1.000				
M8770790	STL COMB MAA&P 18.29	EACH	2.000				
M8770800	STL COMB MAA&P 21.34	EACH	1.000				
M8770803	STL COMB MAA&P 22.56	EACH	1.000				
M8770804	STL COMB MAA&P 22.86	EACH	3.000				
M8780100	CONC FDN TY A	METER	32.900				
M8780150	CONC FDN TY C	METER	1.200				
M8780200	CONC FDN TY D	METER	1.800				
M8780400		METER	6.000				
M8780420	CONC FDN TY E 1060D	METER	57.800				
M8860100		METER	5,839.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
M8950230	REM ELCBL FR CON	METER	250.000				
M8950235	REM & RE ELCBL FR CON	METER	250.000				
XX002856	RE-OPTIMIZE TR SIG SY	L SUM	1.000				
XX004360	SAN SEW BYPASS PUMP	L SUM	1.000				
XX104100	CONN EX MANHOLE	EACH	1.000				
XZ053750	APPR PARAPE RETRO SPL	EACH	2.000				
X0322215	CLEAN BRG SCUP/DWNSPT	EACH	22.000				
X0322719	TEMP DRAINAGE CONNECT	EACH	2.000				
X5030015	OUTLET STRUCTURE	L SUM	1.000				
X5630905	TEMP INVERTED SIPHON	EACH	1.000				
X6020074	INLETS TA T3V F&G	EACH	160.000				
X6020075	INLETS TB T3V F&G	EACH	142.000				
X6021193	TEMP CATCH BASINS	EACH	12.000				
X6024207	MED INLET (604106) SP	EACH	1.000				
X6026050		EACH	21.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
X6026622	VV REMOVED	EACH	21.000				
X6026623	VALVE BOX	EACH	8.000				
X6026632	VALVE BOX REMOVED	EACH	15.000				
X6029001	JUNCTION BOX N1	L SUM	1.000				
X6029002	JUNCTION BOX N2	L SUM	1.000				
X6029003	JUNCTION BOX N3	L SUM	1.000				
X6029004	JUNCTION BOX N4	L SUM	1.000				
X6029005	JUNCTION BOX N5	L SUM	1.000				
X6310218	TRAF BAR TERM T6 SPL	EACH	2.000				
X7010216	TRAF CONT & PROT SPL	L SUM	1.000				
X7011010	TR C-PROT STAGE CONST	L SUM	1.000				
X8000005	WIRELESS LI PED X SYS	L SUM	1.000				
X8130125	REM EX JUNCTION BOX	EACH	7.000				
X8250505	LIGHT CONTROLLER SPL	EACH	9.000				
X8360120	LIGHT POLE FDN SPL	EACH	1.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
X8510200	PAINT TRAF SIG EQUIP	L SUM	1.000				
X8570225	FAC T4 CAB SPL	EACH	8.000				
X8570230	FAC T5 CAB SPL	EACH	2.000				
X8900016	TEMP TRAF SIG INTERCONNECT SYS	EACH	1.000				
X8900017	TEMP TRAF SIG INTERCONNECT SYS	EACH	1.000				
X8900018	TEMP TRAFSIG INTER S3	EACH	1.000				
X8950114	MOD EX CONTR & CAB	EACH	9.000				
Z0007601	BLDG REMOV NO 1	L SUM	1.000				
Z0007602	BLDG REMOV NO 2	L SUM	1.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0016702	DETOUR SIGNING	L SUM	1.000				
Z0026346	NIGHT WORK ZONE LIGHT	L SUM	1.000				
Z0030260	IMP ATTN TEMP FRN TL3	EACH	6.000				
Z0030332	IMP ATTN REL FRN TL3	EACH	8.000				
Z0033047		L SUM	1.000				

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Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0049802	R&D FRIABL ASB BLD 2	L SUM	1.000				
Z0053610	RECONSTRUCT BENCH	EACH	2.000				
Z0073510	TEMP TR SIGNAL TIMING	EACH	12.000				
20101200	TREE ROOT PRUNING	EACH	1.000				
28000500	INLET & PIPE PROTECT	EACH	531.000				
50104400	CONC HDWL REM	EACH	3.000				
56400100	FIRE HYDNTS TO BE MVD	EACH	2.000				
56400300	FIRE HYDNTS TO BE ADJ	EACH	6.000				
56400500	FIRE HYDNTS TO BE REM	EACH	21.000				
56400600	FIRE HYDRANTS	EACH	29.000				
56500600	DOM WAT SER BOX ADJ	EACH	2.000				
56500700	DOM WAT SER BOX REM	EACH	39.000				
60236200	INLETS TA T8G	EACH	41.000				
60236825	INLETS TA T11V F&G	EACH	30.000				

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ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
60237420	INLETS TA T20F&G	EACH	1.000				
60240210	INLETS TB T1F OL	EACH	1.000				
60240215	INLETS TB T1F CL	EACH	7.000				
60240235	INLETS TB T5F CL	EACH	1.000				
60240301	INLETS TB T8G	EACH	13.000				
60240312	INLETS TB T11V F&G	EACH	38.000				
60240324	INLETS TB T20F&G	EACH	1.000				
60265700	VV ADJUST	EACH	16.000				
60266100	VV RECONST	EACH	1.000				
60266600	VALVE BOX ADJ	EACH	8.000				
60500040	REMOV MANHOLES	EACH	72.000				
60500050	REMOV CATCH BAS	EACH	16.000				
60500060	REMOV INLETS	EACH	87.000				
60500105	FILL MANHOLES	EACH	13.000				
63100167		EACH	2.000				

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66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	4.000				
67000400	ENGR FIELD OFFICE A	CAL MO	32.000				
67100100	MOBILIZATION	L SUM	1.000				
70103815	TR CONT SURVEILLANCE	CAL DA	600.000				
70106800	CHANGEABLE MESSAGE SN	CAL MO	120.000				
78100100	RAISED REFL PAVT MKR	EACH	1,993.000				
78200300	PRISMATIC CURB REFL	EACH	372.000				
78200410	GUARDRAIL MKR TYPE A	EACH	2.000				
78201000	TERMINAL MARKER - DA	EACH	2.000				
80400100	ELECT SERV INSTALL	EACH	1.000				
80500010	SERV INSTALL GRND MT	EACH	20.000				
81400700	HANDHOLE PCC	EACH	90.000				
81400720	DBL HANDHOLE PCC	EACH	9.000				
81400730	HANDHOLE C CONC	EACH	17.000				

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82102250	LUM SV HOR MT 250W	EACH	12.000				
82102400	LUM SV HOR MT 400W	EACH	23.000				
82500330	LT CONT PEDM 240V 60	EACH	1.000				
84200500	REM LT UNIT SALV	EACH	17.000				
84200804	REM POLE FDN	EACH	14.000				
84500110	REMOV LIGHTING CONTR	EACH	1.000				
84500120	REMOV ELECT SERV INST	EACH	1.000				
85000200	MAIN EX TR SIG INSTAL	EACH	19.000				
86000100	MASTER CONTROLLER	EACH	2.000				
86200300	UNINTER POWER SUP EXT	EACH	10.000				
86400100	TRANSCEIVER - FIB OPT	EACH	14.000				
87601100	PED P-B POST GALVS T1	EACH	6.000				
87900200	DRILL EX HANDHOLE	EACH	3.000				
88040070	SH P LED 1F 3S BM	EACH	33.000				
88040090	SH P LED 1F 3S MAM	EACH	72.000				

## ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 66671

State Job # - C-93-064-05
PPS NBR - 3-02970-0100
County Name - KENDALL- -

Project Number
ACNHF-0326/083/

Route FAP 326

Code - 93 - - District - 3 - -

Section Number - (5CS,13C,108,109)R

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
88040150	SH P LED 1F 5S BM	EACH	39.000				
88040160	SH P LED 1F 5S MAM	EACH	24.000				
88102810	PED SH P LED 1F BM	EACH	8.000				
88102825	PED SH P LED 1F BM CT	EACH	60.000				
88200410	TS BACKPLATE L F PLAS	EACH	168.000				
88500100	INDUCTIVE LOOP DETECT	EACH	127.000				
88700200	LIGHT DETECTOR	EACH	35.000				
88700300	LIGHT DETECTOR AMP	EACH	9.000				
88800100	PED PUSH-BUTTON	EACH	76.000				
89000100	TEMP TR SIG INSTALL	EACH	9.000				
89502210	MOD EX CONTR CAB	EACH	2.000				
89502375	REMOV EX TS EQUIP	EACH	10.000				
89502380	REMOV EX HANDHOLE	EACH	69.000				
89502385	REMOV EX CONC FDN	EACH	68.000				

CONTRACT NUMBER	66671	
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.

combin combin proport	ation, he/she ation bid sp ion to the bid	RETURN WITH BID  DS. The undersigned further agrees that if awarded the cone will perform the work in accordance with the requirement decified in the schedule below, and that the combination of the submitted for the same. If an error is found to exist in the a combination, the combination bid shall be corrected as present a combination, the combination bid shall be corrected as present as the combination of the combination bid shall be corrected as present as the combination of the combination bid shall be corrected as present as the combination of the combination bid shall be corrected as present as the combination of the combination bid shall be corrected as present as the combination of the combination bid shall be corrected as present as the combination of the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as present as the combination bid shall be corrected as the combination bid shall be considered as the combination bid shall be considered as the combination bid shall be considered as the co	nts of each individual proposal comprising bid shall be prorated against each section gross sum bid for one or more of the individ
	comprisi	combination bid is submitted, the schedule below must bing the combination.  Ite bids are submitted for one or more of the sections cotion bid must be submitted for each alternate.	
		Schedule of Combination Bids	
Combinati No.	on	Sections Included in Combination	Combination Bid Dollars Cents
110.		Occurs included in Combination	Donars Gents
schedu all exte schedu is an e will be The sc	le of prices to sensions and le are approprior in the extended only formated quality.	RICES. The undersigned bidder submits herewith, in according to the items of work for which bids are sought. The unit prisummations have been made. The bidder understands ximate and are provided for the purpose of obtaining a grostension of the unit prices, the unit prices shall govern. Paymor actual quantities of work performed and accepted or materials of work to be done and materials to be furnished materials.	ices bid are in U.S. dollars and cents, and that the quantities appearing in the bid is sum for the comparison of bids. If there nent to the contractor awarded the contract terials furnished according to the contract.
provide	s that a pe	<b>DO BUSINESS IN ILLINOIS.</b> Section 20-43 of the Illinois rson (other than an individual acting as a sole proprietor) te of Illinois prior to submitting the bid.	
. The se	rvices of a	subcontractor will or may be used.	
		/es □ No □	
			han \$25,000, the contract shall include

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

## 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. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances have been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- **C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the chief procurement officer to void the contract, or subcontract, and may result in the suspension or debarment of the bidder or subcontractor.

#### **II. ASSURANCES**

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

#### A. Conflicts of Interest

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.

#### B. 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.

#### C. 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.

#### D. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, State purchasing officers, procurement compliance monitors, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

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.

#### E. 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.

#### F. 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.

#### G. 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**

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

#### A. Bribery

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, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
  - (1) the business has been finally adjudicated not guilty; or
  - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 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, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

#### 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, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

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

#### C. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

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

1. The Illinois Procurement Code provides:

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

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

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

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Procurement Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the chief procurement officer may declare the contract void if this certification is false.

#### F. 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.

#### G. 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.

#### H. 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.

#### I. 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.

#### J. <u>Disclosure of Business Operations in Iran</u>

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.	

#### 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.

NA-FEDERAL		

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. 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

#### M. Lobbyist Disclosure

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

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

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

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

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

	Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with to contract.
Or	
	Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with to contract:
	address of person:ees, compensation, reimbursements and other remuneration paid to said person:

#### **IV. DISCLOSURES**

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

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

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

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$25,000 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, filed with the Procurement Policy Board, and shall be incorporated as a material term of the contract. Furthermore, pursuant to Section 5-5, the Procurement Policy Board may review a proposal, bid, or contract and issue a recommendation to void a contract or reject a proposal or bid based on any violation of the Procurement Code or the existence of a conflict of interest as provided in subsections (b) and (d) of Section 50-35.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 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.

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

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

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. 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.** 

#### C. <u>Disclosure Form Instructions</u>

#### Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 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 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 60% of the annual salary of the Governor? YESNO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? YES NO
4.	Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per bid</u> even if a specific individual would require a yes answer to more than one question.)
	answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or

the bidding entity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is authorized to execute contracts for your organization. **Photocopied or stamped signatures are not acceptable**. The person signing can be, but does not have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.

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

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

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

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

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

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

## ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form A Financial Information & Potential Conflicts of Interest Disclosure

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

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Vendors desiring to enter into a contract with the State of Illinois must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for bids in excess of \$25,000, and for all open-ended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

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

#### DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDI	FOR INDIVIDUAL (type or print information)				
NA	ΛE:				
ADI	DRESS				
Тур	e of ownership/distrib	utable income share	<u> </u>		
stoc		roprietorship	Partnership	other: (explain on separate sheet):	
% оі	\$ value of ownership/o	listributable income sh	are:		

- **2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.
  - (a) State employment, currently or in the previous 3 years, including contractual employment of services. Yes No

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

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

3.	If you are currently appointed to or employed by any agency of the Salary exceeds 60% of the annual salary of the Governor, are you e (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of 100% of the annual salary	ntitled to receive n, partnership, association or
4.	If you are currently appointed to or employed by any agency of the Salary exceeds 60% of the annual salary of the Governor, are you a or minor children entitled to receive (i) more than 15% in aggregate of your firm, partnership, association or corporation, or (ii) an amount salary of the Governor?	nd your spouse of the total distributable income
	mployment of spouse, father, mother, son, or daughter, including conprevious 2 years.	tractual employment for services
If your	answer is yes, please answer each of the following questions.	YesNo
1.	Is your spouse or any minor children currently an officer or employee Board or the Illinois State Toll Highway Authority?	of the Capitol Development YesNo
( ;	Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appointed agency of the State of Illinois, and his/her annual salary exceeds 60 annual salary of the Governor, provide the name of the spouse and/cof the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the salary of the State agency for which he/she is employed annual salary of the	d to or employed by any 0% of the or minor children, the name
; ;	If your spouse or any minor children is/are currently appointed to or estate of Illinois, and his/her annual salary exceeds 60% of the annual are you entitled to receive (i) more than 71/2% of the total distributable firm, partnership, association or corporation, or (ii) an amount in excannual salary of the Governor?	I salary of the Governor, e income of your
;	If your spouse or any minor children are currently appointed to or er State of Illinois, and his/her annual salary exceeds 60% of the annual and your spouse or any minor children entitled to receive (i) more that aggregate of the total distributable income from your firm, partnership (ii) an amount in excess of two times the salary of the Governor?	salary of the Governor, are you an 15% in the
unit of lo	status; the holding of elective office of the State of Illinois, the governocal government authorized by the Constitution of the State of Illinoisurrently or in the previous 3 years.	
	nship to anyone holding elective office currently or in the previous 2 yed	ears; spouse, father, mother, YesNo
America of the S	ive office; the holding of any appointive government office of the State, or any unit of local government authorized by the Constitution of the tate of Illinois, which office entitles the holder to compensation in exceptage of that office currently or in the previous 3 years.	State of Illinois or the statues
(f) Relation son, or d	ship to anyone holding appointive office currently or in the previous 2 aughter.	years; spouse, father, mother, YesNo
(g) Employ	ment, currently or in the previous 3 years, as or by any registered lobb	byist of the State government. YesNo

(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.  Yes No
(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.  YesNo
3. Communication Disclosure.
5. Communication Disclosure.
Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplement for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None on the line below:
Name and address of person(s):

**4. Debarment Disclosure.** For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental

entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below: Name of person(s): Nature of disclosure: APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge. Completed by: Signature of Individual or Authorized Representative Date NOT APPLICABLE STATEMENT Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A. This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page. Signature of Authorized Representative Date

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

## ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Disclosure of the information contained in this Act (30 ILCS 500). This information shall be completed for bids in excess of \$25,000, a	come part of the publicly available o	
DISCLOSURE OF OTHER O	CONTRACTS AND PROCUREMEN	IT RELATED INFORMATION
1. Identifying Other Contracts & Procure has any pending contracts (including leases any other State of Illinois agency: Yes_If "No" is checked, the bidder only needs to	s), bids, proposals, or other ongoing No	procurement relationship with
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:		
THE FOL	LOWING STATEMENT MUST BE	CHECKED
	Signature of Authorized Representative	Date

#### **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.



**TRAINEES** 

Contract No. 66671 KENDALL County Section (5CS,13C,108,109)R Project ACNHF-0326(083) Route FAP 326 District 3 Construction Funds

PART I. IDENTIFIC	ATION																	
Dept. Human Rights	s #						_ Du	ration (	of Proj	ect: _								
Name of Bidder:																		
PART II. WORKFO A. The undersigned which this contract work projection including a projecti	bidder hark is to be	as analyz e perform	ed mir ed, an	d for th d fema	ne locati	ons fro	m whic	ch the b	idder re	cruits	employe	ees, and he	reby	subm	its the foll	owir con	ng workfo	n orce
		TOTA	AL Wo	rkforce	Project	tion for	Contra	act						C	CURRENT	EM	IPLOYE	S
				MINO	ORITY I	=MPI O	YFFS			TRA	AINEES	;			TO BE			
JOB CATEGORIES	EMPL	TAL OYEES		ACK	HISP	ANIC	*OT MIN	HER IOR.	TIC	REN- ES	ON T	HE JOB INEES		EMPL	TAL OYEES		EMPL	RITY DYEES
OFFICIALS	M	F	М	F	М	F	М	F	M	F	М	F		М	F		M	F
(MANAGERS)																		
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
		BLE C							_		Г	FOR	DFP	ARTM	1ENT USE	. UV	JI Y	
		aining Pro	ojectio	n for C	ontract		+0-	THE	-			1 010			00L			
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TRAINING	M	F F	M M	F	M	F	M	F	4									
APPRENTICES	IVI	<u> </u>	IVI	-	IVI		IVI											
ON THE IOD		<b> </b>	<del>                                     </del>	<del>                                     </del>	<b> </b>	<del>                                     </del>	+	+	1									

Note: See instructions on page 2

BC 1256 (Rev. 12/11/08)

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

Contract No. 66671 KENDALL County Section (5CS,13C,108,109)R Project ACNHF-0326(083) Route FAP 326 District 3 Construction Funds

#### PART II. WORKFORCE PROJECTION - continued

B.	B. Included in "Total Employees" under Table A is the total number of <b>new hires</b> that would be employed in the event the undersigned bidder is awarded this contract.					
	The undersigned bidder projects that: (number)	new hires would be				
	The undersigned bidder projects that: (number) recruited from the area in which the contract project is located; and/or (number)					
	new hires would be recruited from the area in which the	ne bidder's principal				
	office or base of operation is located.					
C.	C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed by subcontinuous by subcontinuous projection of numbers of persons to be employed by subcontinuous projection.					
	The undersigned bidder estimates that (number)	persons will				
	be directly employed by the prime contractor and that (number)	persons will be				
	employed by subcontractors.					
PART I	T III. AFFIRMATIVE ACTION PLAN					
A.	A. The undersigned bidder understands and agrees that in the event the foregoing minority and futilization projection included under <b>PART II</b> is determined to be an underutilization of minority in any job category, and in the event that the undersigned bidder is awarded this contract, he/s commencement of work, develop and submit a written Affirmative Action Plan including a spec (geared to the completion stages of the contract) whereby deficiencies in minority and/or femal utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contract the <b>Department of Human Rights</b> .	y persons or women she will, prior to cific timetable ale employee				
B.	B. The undersigned bidder understands and agrees that the minority and female employee utilized submitted herein, and the goals and timetable included under an Affirmative Action Plan if req to be part of the contract specifications.					
Comp	mpany Telephone Number					
	<del></del>					
Addres	dress					
	NOTICE REGARDING SIGNATURE					
	e Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following be completed only if revisions are required.	signature block needs				
Signat	nature:  Title: Da	ate:				
Instructi	ructions: All tables must include subcontractor personnel in addition to prime contractor personnel.					
Table A	e A - Include both the number of employees that would be hired to perform the contract work and the total nu (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "should include all employees including all minorities, apprentices and on-the-job trainees to be employed on	Total Employees" column				
Table B	e B - Include all employees currently employed that will be allocated to the contract work including any apprentice currently employed.	es and on-the-job trainees				
Table C	e C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.					
		DO 1070 (D 10/11/00)				

#### ADDITIONAL FEDERAL REQUIREMENTS

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

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

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

Contract No. 66671 KENDALL County Section (5CS,13C,108,109)R Project ACNHF-0326(083) Route FAP 326 District 3 Construction Funds

#### PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
(IF A CO-PARTNERSHIP)		
(ii / too i / iitti Littoriii )	Dusiness / Idaress	
		Name and Address of All Members of the Firm:
_		
	Corporate Name	
	Ву	Signature of Authorized Representative
(IF A CORPORATION)		
		Typed or printed name and title of Authorized Representative
	Attact	
(III	Allesi	Signature
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE	Business Address	
SECOND PARTY SHOULD SIGN BELOW)		
	Corporate Name	
	Ву	
(IF A JOINT VENTURE)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
		Typod of printed hame and the of that ionized representative
	Attest	
		Signature
	Business Address	
If more than two parties are in the joint venture.	places attach an addit	ional signature shoot

## Illinois Department of Transportation

#### **Return with Bid**

### Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

			item No
			Letting Date
KNOW ALL MEN BY THESE PRESI	ENTS That We		<u></u>
WOW ALL WEIVEN THESE TREST			
as PRINCIPAL, and			
			as SURETY, are
specified in the bid proposal under "	Proposal Guaranty" in effect	t on the date of the Inv	sum of 5 percent of the total bid price, or for the amount vitation for Bids, whichever is the lesser sum, well and truly lives, our heirs, executors, administrators, successors and
	h the Department of Trans		the PRINCIPAL has submitted a bid proposal to the provement designated by the Transportation Bulletin Item
and as specified in the bidding and after award by the Department, the ncluding evidence of the required performance of such contract and failure of the PRINCIPAL to make the to the Department the difference no	contract documents, submit PRINCIPAL shall enter into insurance coverages and por the prompt payment of late required DBE submission at the exceed the penalty here with another party to perform	a DBE Utilization Plar a contract in accorda providing such bond a abor and material furn or to enter into such co peof between the amount	NCIPAL; and if the PRINCIPAL shall, within the time in that is accepted and approved by the Department; and if, ance with the terms of the bidding and contract documents is specified with good and sufficient surety for the faithful hished in the prosecution thereof; or if, in the event of the contract and to give the specified bond, the PRINCIPAL pays int 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	penal sum to the Departme the Department may bring a	nt within fifteen (15) da an action to collect the	y with any requirement as set forth in the preceding ays of written demand therefor. If Surety does not make full amount owed. Surety is liable to the Department for all its in whole or in part.
	, ,	•	aused this instrument to be signed by
		dad CONETT Have of	• •
heir respective officers this	day of		A.D.,
PRINCIPAL		SURET	Y
(Company Na	me)		(Company Name)
Зу		Ву:	
(Signatu	re & Title)		(Signature of Attorney-in-Fact)
	Notary Certif	ication for Principal an	d Surety
STATE OF ILLINOIS,			
County of			
,		, a Notary F	Public in and for said County, do hereby certify that
		and	
	(Insert names of individuals	signing on behalf of P	RINCIPAL & SURETY)
	his day in person and ackno		scribed 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			
<u> </u>			Notary Public
marking the check box next to the S	Signature and Title line below	w, the Principal is ens	file an Electronic Bid Bond. By signing the proposal and suring the identified electronic bid bond has been executed ions of the bid bond as shown above.
Electronic Bid Bond ID#	Company / Bidder N	Name	Signature and Title



#### **DBE Utilization Plan**

#### (1) Policy

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

#### (2) Obligation

Date

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

(3) Pro	ject and Bid Identification			
Comple	te the following information concerning the project and bid:			
Route		Total Bid		<u> </u>
Section		Contract DBE Goal		
Project			(Percent)	(Dollar Amount)
County				
Letting [	Date			
Contrac	t No.			
Letting I	tem No.			
(4) Ass	urance			
	in my capacity as an officer of the undersigned bidder (or bidder my company: (check one)  Meets or exceeds contract award goals and has provided doc Disadvantaged Business Participation percent  Attached are the signed participation statements, forms SBE 2 use of each business participating in this plan and assuring the work of the contract.  Failed to meet contract award goals and has included good fai provided participation as follows:  Disadvantaged Business Participation percent  The contract goals should be accordingly modified or waived. support of this request including good faith effort. Also attache required by the Special Provision evidencing availability and us business will perform a commercially useful function in the wor	umented participation as for 2025, required by the Speciate each business will perform the effort documentation to not act are the signed participation of the contract.	al Provision even a commercianeet the goals arequired by the ion statements, ating in this plant	idencing availability and lly useful function in the and that my company has Special Provision in forms SBE 2025, an and assuring that each
Ву	Company	The "as read" Low Bidder is red Submit only one utilization plan		•
		submitted in accordance with the		
Title		Bureau of Small Business Ente 2300 South Dirksen Parkway	erprises	Local Let Projects Submit forms to the

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

Springfield, Illinois 62764

Local Agency

	of Transportation	С	BE Participation	on Statement		
Subcontract	tor Registration	Letting				
Participation	on Statement	li	tem No.			
(1) Instructi	ions	C	Contract			
be submitte	oust be completed for each disadvantaged business particle of the completed for each disadvantaged business particle of the complete an additional form for the firm for the f	attached to the U				
Pay Item No.	Description	Quantity	Unit Price	Total		
	Payment Items		Total			
has agreed execute a c statement m that comple	ment igned certify that the information included herein is tru to perform a commercially useful function in the work ontract with the prime contractor. The undersigned funcy be made without prior approval from the Departmete and accurate information regarding actual work perovided to the Department.  Signature for Prime Contractor	of the contract ite orther understand ent's Bureau of So formed on this pro	m(s) listed above that no changes t mall Business Ent	and to o this erprises and		
Title	Ti	tle				
Data	<b>D</b>	tle ate				
Contact		DateContact Person				
Phone Phone						
		rm Name				
		ddress				
· <u> </u>		ity/State/Zip				
<u>,</u>		·	E			

WC

#### 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. 66671 KENDALL County Section (5CS,13C,108,109)R Project ACNHF-0326(083) Route FAP 326 District 3 Construction Funds



#### **SUBCONTRACTOR DOCUMENTATION**

Public Acts 96-0795 and 96-0920, enacted substantial changes to the provisions of the Illinois Procurement Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Chief Procurement Officer within 20 calendar days after execution of the subcontract.

The subcontract shall contain the certifications required to be made by subcontractors pursuant to Article 50 of the Illinois Procurement Code. This Notice to Bidders includes a document incorporating all required subcontractor certifications and disclosures for use by the Contractor in compliance with this mandate. The document is entitled <u>State Required Ethical Standards Governing Subcontractors</u>.

#### STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

Article 50 of the 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.

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The chief procurement officer may terminate or void the subcontract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification.

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

#### A. Bribery

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, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
  - (1) the business has been finally adjudicated not guilty; or
  - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 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, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

#### 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, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

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

#### C. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

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

1. The Illinois Procurement Code provides:

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

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

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

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Procurement Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the chief procurement officer may declare the contract void if this certification is false.

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

 Name of Subcontracting Company	
 Authorized Officer	Date

#### SUBCONTRACTOR DISCLOSURES

#### I. DISCLOSURES

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

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

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

1. Section 50-35 of the Illinois Procurement Code provides that all subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, shall be accompanied by disclosure of the financial interests of the subcontractor. This disclosed information for the subcontractor, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the Prime Contractor's contract. Furthermore, pursuant to this Section, the Procurement Policy Board may recommend to allow or void a contract or subcontract based on a potential conflict of interest.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 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.

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

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

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. 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.

#### C. Disclosure Form Instructions

#### Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 200 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 subcontractor is not subject to Federal 10K reporting, the subcontractor must determine if any individuals are required by law to complete a financial disclosure form. To do this, the subcontractor should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by a person that is authorized to execute contracts for the subcontracting company. Note: These questions are for assistance only and are not required to be completed.

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES NO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES NO
	(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)
4.	Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per subcontract</u> even if a specific individual would require a yes answer to more than one question.)

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

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

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

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

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

### ILLINOIS DEPARTMENT OF TRANSPORTATION

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

Subcontractor Name		
Substitution Number		
Legal Address		
•		
City State 7in		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Tolophone Humbol	Linaii / Idai 600	Tax Hamber (il avallable)

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Code (30 ILCS 500). Subcontractors desiring to enter into a subcontract of a State of Illinois contract must disclose the financial information and potential conflict of interest information as specified in this Disclosure Form. This information shall become part of the publicly available contract file. This Form A must be completed for subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, and for all open-ended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

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

#### DISCLOSURE OF FINANCIAL INFORMATION

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

NAME:			
ADDRESS			
Type of own	ership/distributable income share	<b>:</b> :	
Type of own	ership/distributable income share sole proprietorship	e: Partnership	other: (explain on separate sheet

- potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.
- (a) State employment, currently or in the previous 3 years, including contractual employment of services.

  Yes \_\_\_\_No \_\_\_

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

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

\_\_\_\_\_

<ul><li>3. If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are you (i) more than 7 1/2% of the total distributable income of your fir corporation, or (ii) an amount in excess of 100% of the annual sala</li></ul>	entitled to receive m, partnership, association or
4. If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are you or minor children entitled to receive (i) more than 15% in the ag income of your firm, partnership, association or corporation, or (ii) the salary of the Governor?	and your spouse gregate of the total distributable
(b) State employment of spouse, father, mother, son, or daughter, including in the previous 2 years.	• •
If your answer is yes, please answer each of the following questions.	YesNo
<ol> <li>Is your spouse or any minor children currently an officer or employ Board or the Illinois State Toll Highway Authority?</li> </ol>	ree of the Capitol Development YesNo
2. Is your spouse or any minor children currently appointed to or emp of Illinois? If your spouse or minor children is/are currently a agency of the State of Illinois, and his/her annual salary exce annual salary of the Governor, provide the name of your spouse an of the State agency for which he/she is employed and his/her annual minor children is/are currently appointed to or employed and salary exception.	appointed to or employed by any eds 60% of the nd/or minor children, the name
3. If your spouse or any minor children is/are currently appointed to of State of Illinois, and his/her annual salary exceeds 60% of the annuare you entitled to receive (i) more than 71/2% of the total distribut firm, partnership, association or corporation, or (ii) an amount annual salary of the Governor?	ual salary of the Governor, able income of your
4. If your spouse or any minor children are currently appointed to or State of Illinois, and his/her annual salary exceeds 60% of the annuare you and your spouse or minor children entitled to receive (i) aggregate of the total distributable income of your firm, partnersh (ii) an amount in excess of two times the salary of the Governor?	ual salary of the Governor, more than 15 % in the
	YesNo
(c) Elective status; the holding of elective office of the State of Illinois, the government authorized by the Constitution of the State of Illin Illinois currently or in the previous 3 years.	
(d) Relationship to anyone holding elective office currently or in the previous 2 son, or daughter.	2 years; spouse, father, mother, YesNo
(e) Appointive office; the holding of any appointive government office of the S America, or any unit of local government authorized by the Constitution of of the State of Illinois, which office entitles the holder to compensation in the discharge of that office currently or in the previous 3 years.	the State of Illinois or the statutes
(f) Relationship to anyone holding appointive office currently or in the previous son, or daughter.	s 2 years; spouse, father, mother, YesNo
(g) Employment, currently or in the previous 3 years, as or by any registered	lobbyist of the State government. YesNo

(h)	Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, m son, or daughter.  YesNo	other,
(i)	Compensated employment, currently or in the previous 3 years, by any registered election or reel committee registered with the Secretary of State or any county clerk of the State of Illinois, or any position committee registered with either the Secretary of State or the Federal Board of Elections.  YesNo	
(j)	last 2 years by any registered election or re-election committee registered with the Secretary of State county clerk of the State of Illinois, or any political action committee registered with either the Secret State or the Federal Board of Elections.	or any
	YesNo	
3.	Communication Disclosure.	
Se en su	sclose the name and address of each lobbyist and other agent of the bidder or offeror who is not ident ection 2 of this form, who is has communicated, is communicating, or may communicate with any State apployee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly applemented for accuracy throughout the process and throughout the term of the contract. If no person entified, enter "None" on the line below:	e officer or
	Name and address of person(s):	
	·	

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

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

# **RETURN WITH SUBCONTRACT**

# ILLINOIS DEPARTMENT OF TRANSPORTATION

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

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
ILCS 500). This information shall become	part of the publicly available contra 00 or more, from subcontractors	on 50-35 of the Illinois Procurement Act (30 act file. This Form B must be completed for identified in Section 20-120 of the Illinois
DISCLOSURE OF OTHER CONTRA	CTS, SUBCONTRACTS, AND PRO	OCUREMENT RELATED INFORMATION
1. Identifying Other Contracts & Procure any pending contracts, subcontracts, includ any other State of Illinois agency: Ye If "No" is checked, the subcontractor only	ing leases, bids, proposals, or othe s No	r ongoing procurement relationship with
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:		
THE FOLLO	WING STATEMENT MUST BE CH	ECKED
	Signature of Authorized Officer	
	orginature of Authorized Officer	Date

# 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., November 18, 2011. 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. 66671
KENDALL County
Section (5CS,13C,108,109)R
Project ACNHF-0326(083)
Route FAP 326
District 3 Construction Funds

5.04 km of pavement reconstruction, lane additions, storm sewer, traffic signals and other work along IL Route 47 from just north of IL Route 71 continuing northerly to just north of U.S. Route 34 at Yorkville.

- 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

Ann Schneider, Acting Secretary

# INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2011

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 1-1-11)

#### SUPPLEMENTAL SPECIFICATIONS

Std. Sp	pec. Sec.	age No.
201	Clearing, Tree Removal and Protection	1
205	Embankment	2
251	Mulch	3
253	Planting Woody Plants	
280	Temporary Erosion Control	6
406	Hot-Mix Asphalt Binder and Surface Course	7
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# **RECURRING SPECIAL PROVISIONS**

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14		Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-09)	
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#### STATE OF ILLINOIS

#### **SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction" adopted January 1, 2007; the "Standard Specifications for Water and Sewer main Construction in Illinois", July, 2009, Sixth Edition; the Standard Specifications for Sanitary Sewer Construction in the Yorkville-Bristol Sanitary District dated October 9, 2006, the Yorkville Standard Specifications for Improvements dated October 2004 (water and sanitary sewer only), 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 FAP 326 (IL 47), Project ACNHF-0326 (083), Section (5CS, 13C, 108, 109)R, located in Kendall County, Contract 66671 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**

The proposed work is located in Kendall County, Illinois and consists of reconstruction and widening of Illinois Route 47 from north of Illinois Route 71 to 180 m south of Kennedy Drive, Illinois Route 126 to 175 m east of Illinois Route 47, and U.S. Route 34 from 323 m west to 410 m east of Illinois Route 47 within the City of Yorkville.

#### **DESCRIPTION OF PROJECT**

The existing roadways consists of concrete pavement, concrete pavement widened and resurfaced with asphalt, and asphalt and/or aggregate shoulders with curb and gutter and storm sewer. The existing pavement widths vary throughout the project limits, but the roadway generally consists of one travel lane in each direction with a center turn lane and auxiliary turn lanes at various intersections except in the vicinity of the U.S Route 34 intersection where Illinois Route 47 and U.S. Route 34 have two travel lanes in each direction.

The proposed project includes the following:

- Complete reconstruction and widening with new concrete pavement of approximately 5.6 km on the existing alignment.
- Bridge repairs on the Fox River Bridge (Station 20+999 thru Station 21+189).
- The roadway section will generally consist of 19.2 m wide five lane (two travel lanes in each direction and a center turn lane) section of 250 mm concrete pavement with curb and gutter. Auxiliary turn lanes are added at various intersections.
- In the downtown area (Station 20+363.5 to Station 20+933) the five lane sections narrows to 18.2 m and at the approaches to the Fox River Bridge the roadway narrows to four lanes to match the typical section on the bridge.

- New curb and gutter and storm sewers will be constructed throughout the project limits with outlets into the Fox River on both the north and south banks and an outlet on the north bank of Blackberry Creek along U.S. Route 34 (west).
- The proposed section will include sidewalks, either existing or new, on both sides of the roadway. The sidewalks will generally be 1.5 m wide except when they must be placed adjacent to the back of curb where they will be a minimum of 2.0 m wide. A 3.0 m wide multi-use HMA trail will replace sidewalk on one side of the roadway along sections of IL 47 and along IL 126. The limits of the trail are approximately from Station 18+703 to Station 20+080 and Station 21+683 to Station 23+882 along IL 47 and from Station 50+017 at the IL 47 intersection to the school parking lot entrance at Station 50+171. Portions of the 3.0 m wide multi-use trail will be constructed on the north side of US 34 extending from IL 47 westerly to Center Parkway.
- The existing signals at Fountainview Drive, Illinois Route 126, Fox Street, Van Emmon Street, Somonauk Street, Landmark Avenue, U.S. Route 34, Countryside Parkway, and Center Parkway will be replaced. All signals within the project limits and signals from Saravanos Drive to Kennedy Avenue on Illinois Route 47 and from Beecher Road to Countryside parkway on U.S. Route 34 will be interconnected.
- The project includes various relocations and replacements of water and sewer mains. Other utility adjustments/relocations will be required at locations throughout the project.

#### STATUS OF UTILITIES TO BE ADJUSTED:

Effective January 1, 2007;

Revised January 24, 2011

	_		Estimated Date
Name & Address of Utility	<u>Type</u>	<u>Location</u>	Relocation Complete
ComEd, An Exelon Company	Aerial	Throughout, <u>+</u> 100	Conflicts throughout.
Two Lincoln Centre, 8 <sup>th</sup> Floor	electric	poles in conflict	Permit required.
Oakbrook Terrace, IL 60181			
(Job No: H9015AUR)			
Nicor Gas	Underground	Various locations	Conflicts at various
1844 Ferry Road	gas	throughout.	locations.
Naperville, IL 60503			Permit required.
(Job No: SC8074)			
AT&T	Underground	Various locations	Conflicts throughout.
1000 Commerce Dr, Floor 2	Telephone	throughout	Permit required.
Oak Brook, IL 60523	·		·
	Aerial	On ComEd poles,	Work to be performed once
	Telephone	<u>+</u> 10 poles	ComEd poles are placed.
Comcast Cable	Underground	Various locations	Conflicts. Permit required.
688 Industrial Drive	CATV		
Elmhurst, IL 60126			
	Aerial CATV	On ComEd poles,	Work to be performed once
		<u>+</u> 80 poles	ComEd poles are placed.
Yorkville-Bristol Sanitary	Sanitary	42" crossing IL 47	No conflict anticipated.
304 River Street	sewer	Sta. 20 <u>+</u> 935,	
Yorkville, IL 60560		at Hydraulic Ave.	

Illinois Railway 430 West Madison Street Ottawa, IL 61350 815-431-0940	Railroad Crossing	Crossing IL 47 at Hydraulic Ave.	Grade crossing to be reconstructed and signals relocated. Work to be performed by railroad crews during construction.
			Proposed storm sewer to be bored under railroad tracks, included as part of roadway project. Coordinate with railroad for flaggers.
City of Yorkville	Water, Sanitary, Buried FO For traffic Signal Interconnect	Various locations througout	Water and sanitary Included as part of roadway project. New FO cable to be placed as part of roadway project. At some locations using existing conduit.

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

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

\*\* Above utility relocation information reflected as of August 29, 2011, relocation complete dates are unknown at this time due to right of way acquisitions. Per SB 699 (90 day utility relocation law), once the proposed right of way is clear to award the project, a notice will be sent to the utility companies instructing them to have their facilities relocated within 90 days. There is extensive utility relocation required for this project. Utility companies will be working throughout the summer of 2012 to complete their work.

#### **BORROW AND FURNISHED EXCAVATION**

Revised January 1, 2010

In addition to the requirements of Section 204 of the Standard Specifications for suitable materials, the following restrictions shall apply:

- 1. The moisture content of the material as it is incorporated into the embankment shall be between 80% to 110% of AASHTO T99 optimum.
- 2. A 3 ft. (1 m) minimum cover of other suitable material shall be maintained outside of and on top of the embankment.
- 3. If the liquid limit of the material is greater than or equal to 50, the material shall not be used for capping, shall not be placed within 20 feet of any structure, and shall not be placed in locations where it may come into contact with water.
- 4. Embankment capping material (as outlined in #2) shall meet non-frost susceptibility criteria as outlined in the statewide Geotechnical Manual. Materials are considered frost susceptible when the soil contains at least 65% silt and sand content, according to AASHTO T88 and the Plasticity Index is less than 12.

#### **MULCH METHOD 2**

Effective August 1, 1994;

Revised January 1, 2007

Article 251.03 Method 2 Procedure 1 of the Standard Specifications shall be required for this improvement.

#### AGGREGATE SUBGRADE

Effective March 10, 1997,

Revised December 13, 2010

This work shall consist of furnishing, transporting, placing, and compacting granular material to the lines and grades shown on the plans or as directed by the Engineer. This work shall be done according to the applicable portions of Section 207 of the Standard Specifications. Any aggregate (recycled and virgin) containing contaminants deemed unacceptable by the Department will not be approved. The material shall conform to Article 1004.05 of the Standard Specifications except the gradations and materials shall be as follows:

#### Gradation #1:

Material: Crushed Stone, Crushed Slag, Crushed Gravel, and Crushed Concrete

	Option 1	Option 2			
Sieve Size	Percent Passing*	Percent Passing*			
5 inches (125 mm)	100	100			
4 inches (100 mm)	85±15	85±15			
2 inches (50 mm)	60±20	45±25			
1 inch (25 mm)	45±20	10±10			
#4 (4.75 mm )	20±10				
#200 (75 μm)	5±5	2±2			
	Note 1	Note 2			
* A dry gradation will be sufficient to fulfill the -#200 (75 µm) specification.					

Note 1: Geotextile fabric having a minimum weight of 6 ounces and meeting the requirements of Article 1080.02 of the Standard Specifications may be necessary dependent upon subgrade soil conditions. The Engineer shall make the determination if Geotextile utilization is necessary.

Note 2: Geotextile fabric having a minimum weight of 6 ounces and meeting the requirements of Article 1080.02 of the Standard Specifications shall be used as a separation layer.

#### Gradation #2:

Material: Subbase Granular Material, Type C, or RAP

The Subbase Granular Material, Type C shall meet a gradation of CA 6 or CA 10 and a minimum 'D' quality as specified in Section 1004 of the Standard Specifications. RAP shall contain a minimum of Class D quality course aggregates and shall meet the gradation limits as specified in Section 1031 of the Standard Specifications.

Gradation #1 shall be used in the lower 9 inches (230 mm). Gradation #2 shall be used in the upper 3 inches (70 mm) as a capping material.

The material shall be placed in two or more lifts or as directed by the Engineer. Each lift shall be rolled with a vibratory roller meeting the requirements of Article 1101.01 of the Standard Specifications to obtain the desired compaction. Construction equipment not necessary for the completion of the work shall not be allowed on the subgrade until completion of the recommended thickness of the Aggregate Subgrade. Any damage to the compacted Aggregate Subgrade due to the Contractor's activities or operations shall be corrected.

Method of Measurement: Aggregate Subgrade 12" (300 mm) will be measured in place and the area computed in square yards (square meters). The width shall be as shown on the plans.

Basis of Payment: This work will be paid for at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE of the thickness specified. This price shall include the cost of the geotextile fabric.

#### AGGREGATE SURFACE COURSE, TYPE B

Effective January 1, 2007

Add the following to Article 402.07 of the Standard Specifications:

The top layer shall be given a final rolling with a roller meeting the requirements of Article 1101.01.

#### HOT-MIX ASPHALT SURFACE COURSE, CUT OFF DATE

Effective January 1, 2007

Placement of Hot-Mix Asphalt Surface Course will not be permitted after October 15 unless approved, in writing, by the Engineer.

#### PRIMING

Effective July 1, 1990;

Revised September 3, 2009

Bituminous Materials (Prime Coat) used on brick, concrete, or HMA bases shall be RC-70. Polymerized Bituminous Materials (Prime Coat) used on brick, concrete, or HMA bases shall be SS1-hP.

When more than one HMA lift is proposed, additional prime shall be applied for the subsequent lifts at the lesser rate (fog coat) shown on the plans.

#### HOT MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS

Effective: January 1, 2007; Revised: October 1, 2009

<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). This work shall be according to Section 1030 of the Standard Specifications except as follows.

# Quality Control/Quality Assurance (QC/QA): 1030.05(d)(3) Add the following paragraphs:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing along edges of pavement which are unconfined and adjacent to the shoulder shall be located at a distance of 4 inches away from the edge of mat. One value shall be obtained at three locations spaced approximately 10 feet apart with the center location at the specified random station. These values are to be averaged. Longitudinal joint testing along a confined edge or unconfined and not along the shoulder (i.e. the centerline of the roadway) shall be located at a distance equal to the lift thickness, or a minimum of 2 inches away from the edge of the mat. One value shall be obtained at three locations spaced approximately 10 feet apart with the center location at the specified random station. These values are to be averaged.

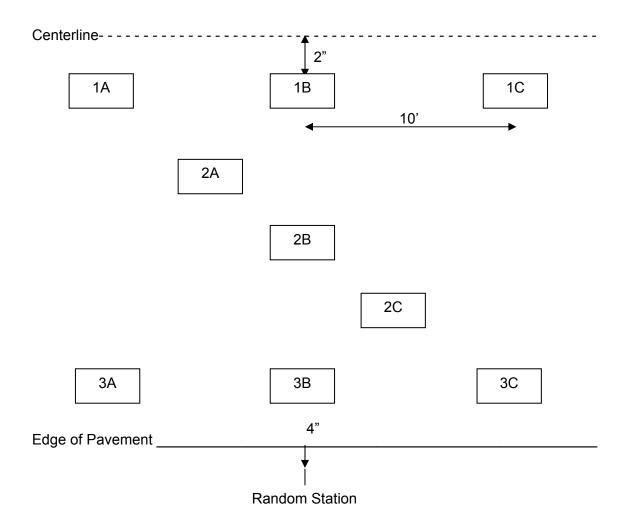
The joint density value shall be determined using either a correlated nuclear gauge or cores. When using a correlated nuclear gauge, one one-minute density readings shall be taken at the given density test site.

In performing the longitudinal joint density testing, the outside two testing locations of the five total testing locations spread across the entire mat specified in the QC/QA document, "Illinois-Modified ASTM D 2950, Standard Test Method for Determination of Density of Bituminous Concrete In-Place by Nuclear Method" shall be omitted, leaving three testing locations that are to be averaged and meet the requirements located in the table in Article 1030.05(d)(4)."

1030.05(d)(4) Replace the density control limits table with the following:

DENSITY CONTROL LIMITS							
Mixture Composition	Parameter	Individual Test	Confined Edge	Unconfined Edge			
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 – 96.0%	92.0 – 96.0%	90.0%			
IL-9.5,IL-9.5L, IL- 12.5	Ndesign < 90	92.5 – 97.4%	92.5 – 97.4%	90.0%			
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 – 96.0%	93.0 – 96.0%	90.0%			
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 – 97.4%	93.0 – 97.4%	90.0%			
SMA	Ndesign = 50 & 80	93.5 – 97.4%	93.5 – 97.4%	91.0%			
All Other	Ndesign = 30	93.0 - 97.4%	93.0 - 97.4%	90.0%			

#### **Diagram of Testing Locations**



#### AGGREGATE SHOULDERS TYPE B

Effective July 1, 1990;

Revised January 1, 2007

The aggregate shoulder shall be constructed according to Section 481 of the Standard Specifications. The shoulder shall be constructed in two lifts. The first lift shall be placed and compacted flush with the top of the adjacent HMA shoulder or leveling binder. Placement of the HMA surface course will not be allowed until the first lift of aggregate shoulder is constructed.

# AGGREGATE SHOULDERS, TYPE B - RAP

Effective February 23, 1998;

Revised March 1, 2007

The use of reclaimed asphalt pavement (RAP) as Aggregate Shoulders, Type B or Aggregate Wedge Shoulder, Type B is not allowed on this project.

Remove Note 1 from Article 481.02(b) RAP Material.

# **HOT-MIX ASPHALT – START-UP PROCEDURES (DISTRICT 3)**

Effective January 12, 2010

This special provision modifies the start-up procedures for hot-mix asphalt placement. In addition, the Hot-Mix Asphalt QC/QA Start-Up Procedures Appendix B4 D. <u>Start-Up Methods</u> and G. <u>Nuclear/Core Correlation</u> of the Manual of Test Procedures for Materials shall be revised accordingly.

Replace Article 1030.06 (a) High ESAL Mixture and Low ESAL Mixture of the Standard Specifications with the following:

(a) High ESAL Mixture and Low ESAL Mixture. During the mixture start-up the Contractor shall follow the QC/QA document "Hot-Mix Asphalt QC/QA Start-Up Procedures" with the following modifications.

At the start of HMA production, QC/QA mixture start-up will be required for all situations specified by the Engineer.

The final determination for test strip procedures shall be discussed at the Resident Engineer's pre-laydown meeting.

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

In the field, slight adjustments to the JMF or minor changes in cold-feed/hot-bin blends may be necessary to obtain the desired air voids, density, uniformity, and constructability. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows:

Parameter	Adjustment	
½ in. (12.5 mm)	± 5.0%	
No. 4 (4.75 mm)	± 4.0%	
No. 8 (2.36 mm)	±3.0%	
No. 30 (600 µm)	*	
No. 200 (75 µm)	*	
Asphalt Binder Content	± 0.3%	

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

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

A test strip consisting of 350 tons shall be constructed in one continuous lift during the first day of production. The test strip area shall be located on a relatively flat portion of the roadway. Descending/ascending grades, ramps, super elevations, etc. shall be avoided. After 350 tons has been produced for the purpose of constructing a test strip, plant production shall cease until the following has been completed.

A test strip shall consist of two growth curve areas, a normal rolling pattern location, and one set of plant samples. After the Contractor has produced and placed approximately 150 tons of mix, paving shall cease and the first growth curve shall be constructed. After completion of the first growth curve, paving shall resume until the Contractor has produced and placed an additional 100 tons of mix. At this time paving shall cease and the second growth curve shall be constructed. The Contractor shall use normal rolling procedures for all portions of the test strip except for the growth curve areas which shall be compacted solely with a vibratory roller as directed by the QC Manager. After completion of the second growth curve, paving shall resume until the Contractor has produced and placed an additional 100 tons of mix. At this time paving shall cease and the normal rolling pattern location shall be constructed.

One set of plant samples, as specified in Article 1030.05(d)(2)f. HMA Sampling of the Standard Specifications, shall be taken between the two growth curve areas.

Upon completion of the growth curves, normal rolling pattern location, and plant tests, the Engineer will determine if the test strip is acceptable. If the Contractor or Engineer deems the test strip unacceptable, corrective action shall be taken and a new test strip shall be constructed.

If the test strip is deemed acceptable by the Engineer, production and paving can resume for the remainder of the first production day on the condition cores will be used for density acceptance. All core holes shall be filled with non-shrink grout.

A nuclear/core correlation, if required by the Engineer, shall follow the QC/QA document "Standard Test Method for Correlating Nuclear Gauge Densities with Core Densities" and shall be performed by the Contractor during the first production day. Three locations shall be selected from the first acceptable test strip. Two sites shall be located on the two growth curve locations and one site on the normal rolling pattern location. All core holes shall be filled with non-shrink grout.

The next day's production shall not resume until all test results, including an acceptable nuclear/core correlation (if required), are available and an AJMF is agreed upon by the Contractor and Engineer.

#### PREPARATION OF BASE

Effective February 8, 2010

Revised July 16, 2010

Add the following to Article 406.05(a) of the Standard Specifications:

Fine particulate shall be removed from all milled pavement by sweeping, vacuuming, or another method approved by the Engineer and then by air blasting prior to the placement of prime coat.

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

Preparation of base will not be paid for separately, but shall be included in the cost of the HMA pay items.

#### STORM SEWERS. RUBBER GASKET

Effective January 1, 1997;

Revised January 1, 2009

Storm Sewer, Rubber Gasket shall be used at locations where the water main or water service line is less than 18 inches (457 mm) above the top of the storm sewer.

This work shall consist of constructing storm sewers of the required inside diameter with the necessary fittings according to Section 550 of the Standard Specifications and the following additions or exceptions.

At locations shown on the plans, the Contractor shall furnish and install a reinforced concrete pipe, of the diameter and type indicated, with rubber gasket joints which conform to ASTM Specification C361.

The joint shall be approved by the Illinois Environmental Protection Agency for storm sewer lines crossing below water mains.

Method of Measurement. This work will be measured for payment according to Article 550.09 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for STORM SEWERS, RUBBER GASKET, CLASS A, of the type, and diameter specified.

#### STORM SEWER (WATER MAIN REQUIREMENTS)

Effective July 1, 1990;

Revised January 1, 2009

This work shall consist of constructing storm sewers meeting water main requirements.

Storm Sewer (Water Main Requirements) shall be used at locations where lateral separation between the sewer and water main or water service line is less than 10 feet (3.1 m) and the water main invert is less than 18 inches (457 mm) above the storm sewer crown. Also, Storm Sewer (Water Main Requirements) shall be used where the sewer crosses above the water main or water service line with 18 inches (457 mm) minimum vertical separation.

The storm sewer shall be constructed of

Ductile iron pipe, Class 52 with bell and rubber gasket joint or

Concrete pressure pipe conforming to the latest AWWA Standard C300, C301, C303 or

Plastic pipe meeting the material requirements of Section 40. Pipe for Water Mains and Service Connections of the Standard Specifications for Water and Sewer Main Construction in Illinois and Section 550 of the Standard Specifications.

This work shall be done according to the applicable portions of Sections 550 and 561 of the Standard Specifications.

Method of Measurement. This work will be measured for payment according to Article 550.09 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for STORM SEWER (WATER MAIN REQUIREMENTS), of the diameter specified.

#### UNPUBLISHED TELEPHONE NUMBERS FOR ENGINEER'S FIELD OFFICE

Effective March 21, 2002;

Revised January 1, 2007

Add the following sentence to the end of Paragraphs 670.02(i) and 670.04(e):

All of the telephone lines provided shall have unpublished numbers.

#### **CELLULAR PHONES**

Effective March 1, 2007

Add the following to Article 670.02 of the Standard Specifications:

(o) Three (3) cellular phones for the exclusive use of the Engineer.

Each cellular phone shall be compatible with the current Department cellular phone network and shall have the following:

- A minimum of 500 anytime minutes per month,
- Free unlimited mobile to mobile minutes,
- Free incoming calls.
- Free Nationwide long distance,
- No roaming charges for calls within the continental United States,
- Free walkie-talkie minutes,
- Free off-network walkie-talkie service,
- Voice Mail, and
- Speaker Phone

#### TRAFFIC CONTROL PLAN

Revised August 15, 2005;

Revised October 5, 2010

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 Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards herein and in the plans.

Special attention is called to the following sections of the Standard Specifications, the Highway Standards, and the special provisions relating to traffic control:

#### Standard Specifications:

Section 701 - Work Zone Traffic Control and Protection

Section 703 - Work Zone Pavement Marking Section 704 - Temporary Concrete Barrier

Section 781 - Raised Reflective Pavement Markers

Section 783 - Pavement Marking and Marker Removal

#### ERRATA Standard Specifications for Road and Bridge Construction

#### Supplemental Specifications:

Section 701 - Work Zone Traffic Control and Protection

Section 783 - Pavement Marking and Marker Removal

Section 862 - Uninterruptable Power Supply

Section 1106 – Work Zone Traffic Control Devices

#### Highway Standards:

701001	701006	701301	701326	701501	701502
701601	701602	701606	701701	701801	701901
704001					

In addition, the following also relate to traffic control for this project:

#### RECURRING SPECIAL PROVISIONS

Night Time Inspection of Roadway Lighting

#### SPECIAL PROVISIONS

Automated Flagger Assistance Device (BDE)

Changeable Message Sign

Contractor Access

**Equipment Illumination** 

Impact Attenuators, Temporary (BDE)

Nighttime Work Zone Lighting (BDE)

Pavement Marking Removal/Work Zone Pavement Marking Removal

Post Mounting of Signs (BDE)

Traffic Control Surveillance (BDE)

#### CONTRACTOR ACCESS

Revised August 15, 2005;

Revised January 1, 2008

At road closure locations where Type III barricades are installed in a manner that will not allow contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be altered, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. "Road Closed" signs (R11-2), supplemented by "Except Authorized Vehicles" signs (R3-I101), shall be mounted on both the near right and the far left barricade(s). At the end of each work day, the barricades shall be returned to their in-line positions. This work will not be paid for separately, but shall be included in the associated traffic control pay items.

Additional barricades, drums or cones, required by the Engineer to control traffic when relocation for contractor access is used, will not be paid for separately, but shall be included in the associated traffic control pay items.

#### **EQUIPMENT ILLUMINATION**

Revised January 26, 1998;

Revised January 1, 2007

The Contractor shall equip all machinery and vehicles with a flashing amber dome light, installed so the illumination is visible from all directions.

#### PAVEMENT MARKING REMOVAL/WORK ZONE PAVEMENT MARKING REMOVAL

Effective August 15, 2005;

Revised January 1, 2009

All permanent and work zone pavement markings shall be removed according to Article 1101.12 Water Blaster with Vacuum Recovery and the applicable portions of Sections 703 and 783 of the Standard Specifications and as described herein. Pavement marking tape type III may be peeled or burned off, however, all remnants or burn marks shall be hydro-blasted.

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

For the high pressure water spray, the pressure at the nozzle shall be approximately 25,000 psi (172,000 kPa) with maximum flow rate of 15 gal/min (56 L/min). The nozzle shall be in close proximity to the pavement surface.

#### **GROOVING FOR RECESSED PAVEMENT MARKING**

Effective February 8, 2010

<u>Description</u>. This work shall consist of the grooving of an existing pavement surface in preparation for the application recessed pavement marking lines.

Equipment. The grooving equipment shall be equipped with a free-floating cutting or grinding head. The grinding or cutting head shall be equipped with diamond saw blades, steel star cutters and/or carbide tipped star cutters. A grinder head configuration may be used on hot-mix asphalt (HMA) surfaces to achieve a rough surface texture in the bottom of the groove. Diamond saw blades shall be used on the cutting head when a smooth surface in the bottom of the groove is required by the Engineer, or contract specifications, or pavement marking material manufacturer's recommendations.

#### **Construction Requirements**

Pavement Grooving Methods. The grooves for recessed pavement markings shall be constructed using the following methods.

- a) Wet Saw Blade Operation. When water is required or used to cool the saw blades, such as during a continuous edge line grooving operation, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for 24 hours prior to the application of the pavement markings following a wet saw blade operation.
- b) Dry Saw Blade Operation. If the grooving is done with dry saw blades, the groove shall be flushed with high-pressure air to remove debris and dust generated during the cutting operation.

Pavement Grooving. Grooves shall be cut into the pavement prior to the application of the pavement marking. The grooves shall be cut such that the width is 1 in. (25 mm) wider than that of the line to be placed. Grooves for letters and symbols shall be cut in a shape so that the entire marking will fit. The position of the edge of the grooves shall be a minimum of 2 in. (50 mm) from the edge of concrete joints or HMA paving seams along edge or centerlines. The depth of the groove shall not be less than the manufacturer's recommendations for the marking material specified, but shall be installed to a minimum depth of 100 mils (2.54 mm) +/- 10 mils for pavement marking tapes and 40 mils (1.02 mm) +/- 10 mils for liquid markings.

On new HMA surfaces. the Engineer shall determine if the new HMA has achieved the necessary strength and hardness to support grooving prior to the start of a grooving operation. Some HMA mixes may require 14 or more days to achieve adequate hardness to support a grooving operation. On existing HMA surfaces some existing HMA pavements may not be strong enough to support a grooving operation. For existing HMA pavements, the Engineer shall determine if the existing HMA has the necessary strength and hardness to support grooving prior to the start of a grooving operation.

Cleaning. Immediately prior to the application of the pavement markings the groove shall be cleaned with high-pressure air blast.

<u>Method of Measurement</u>. This work will be measured for payment in place, in feet (meter) of the payement marking lines applied and accepted, for the groove width specified.

Grooving for letters, numbers and symbols will be measured in square feet (square meters) as specified in the plans.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified and per square foot (square meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS, NUMBERS, AND SYMBOLS.

#### MAILBOX RELOCATE (SPECIAL)

This work shall be in accordance with the applicable portions of Article 107.20 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

Permanent locations of mailboxes impacted by construction activities shall be as shown in the plans or as directed by the engineer. Multiple mailboxes to be installed at one location shall be mounted on individual posts. Installations shall meet the requirements of the United States Postal Service and shall be approved by the engineer prior to installation.

# **EARTH EXCAVATION (WIDENING)**

This work shall be in accordance with the applicable portions of Section 202 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This item shall consist of the excavation of aggregate shoulders and/or earth required for installation of the 200 mm temporary HMA widening as shown on the staging plans.

After installation of the HMA widening, the excavated material, or alternative material approved by the Engineer shall be placed along the edge of the widening at a 1:2 or flatter slope and compacted to the satisfaction of the Engineer.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for EARTH EXCAVATION (WIDENING).

#### TEMPORARY PAVEMENT

This work shall be in accordance with the applicable portions of Section 355 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This item shall consist of installation and maintenance of 200 mm temporary HMA pavement, as shown on the staging plans.

The material used shall meet the requirements in the plans for HMA Base Course (IL 19.0).

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for TEMPORARY PAVEMENT.

Subsequent removal of the temporary pavement shall be paid for at the contract unit price per square meter for TEMPORARY PAVEMENT REMOVAL.

#### **TEMPORARY WIDENING**

This work shall be in accordance with the applicable portions of Section 356 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This item shall consist of installation and maintenance of 200 mm temporary HMA widening as shown on the staging plans.

The material used shall meet the requirements in the plans for HMA Base Course (IL 19.0).

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for TEMPORARY WIDENING.

Subsequent removal of the temporary widening shall be paid for at the contract unit price per square meter for TEMPORARY WIDENING REMOVAL.

#### AGGREGATE FOR TEMPORARY ACCESS

This work consists of providing temporary access to all private and commercial properties within the limits of this project. The Contractor shall provide access to the above properties at all times in accordance with Article 107.09 of the Standard Specifications, unless an agreement for short-term closures is made in writing by the Contractor with the property owner. A written copy of said agreement shall be provided to the Engineer prior to commencing any work in the area of the short-term closure.

Temporary driveways and sidewalks, if necessary, shall be constructed by the Contractor as directed by the Engineer.

Revise Article 402.10 of the Standard Specifications to read:

"402.10 For Temporary Access. The contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances and roads according to Article 402.07 and as directed by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades specified below, except as modified by the plans or as directed by the Engineer.

- (a) Private Entrance. The minimum width shall be 3.6 m (12 ft). The minimum compacted thickness shall be 150 mm (6 in.). The maximum grade shall be ten percent, except as required to match the existing grade.
- (b) Commercial Entrance. The minimum width shall be 7.2 m (24 ft). The minimum compacted thickness shall be 150 mm (6 in.). The maximum grade shall be eight percent, except as required to match the existing grade.
- (c) Road. The minimum width shall be 7.2 m (24 ft). The minimum compacted thickness shall be 230 mm (9 in.). The maximum grade shall be six percent, except as required to meet the grade of any new pavement constructed.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface coarse for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it

When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per metric ton for AGGREGATE FOR TEMPORARY ACCESS.

#### TEMPORARY AGGREGATE WEDGE

This work shall be in accordance with the applicable portions of Section 402 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This item includes installation, maintenance, and removal of a temporary aggregate wedge and vertical panel traffic control devises at all edge drop-offs adjacent to traveled ways, as shown on the staging typical sections. The aggregate wedge will not be required, or may be removed, only when the edge drop-off will be eliminated by other work efforts within 48 hours.

When use of the temporary aggregate wedge is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per metric ton for TEMPORARY AGGREGATE WEDGE.

#### PROTECTION OF NEWLY POURED CONCRETE

The Contractor shall have watchmen at the job site after concrete has been poured until the concrete has cured sufficiently so that no graffiti can be inscribed in the newly poured concrete surfaces. The exposed faces of concrete of any items that are defaced shall be replaced by the contractor at his/her own expense.

No additional compensation will be allowed to the Contractor for complying with this requirement.

#### TEMPORARY SIDEWALK

Where a known pedestrian generator such as a school, neighborhood shopping center, downtown business district, church, or a known handicapped facility such as a nursing home exists, the engineer may direct the contractor to provide temporary sidewalk for overnight or weekend access.

Temporary sidewalk shall be a minimum of 900mm (3 feet) in width. Wider sidewalks may be needed where high pedestrian or handicapped movement exists. If the temporary sidewalk is to remain in place for more than four weeks, it shall be constructed with a minimum of 50mm (2 inches) of Portland cement or hot-mix asphalt at the contractor option. Otherwise, the contractor has the following options:

- 1. 50mm (2 inches) of Portland cement concrete
- 2. 50mm (2 inches) of hot-mix asphalt
- 3. 75mm (3 inches) minimum compacted aggregate (CA 6 gradation or other similar locally available aggregate approved by the engineer)

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter of TEMPORARY SIDEWALK. This price shall include all labor and materials necessary for constructing, maintaining, and removing the temporary sidewalk.

#### REMOVE AND REINSTALL BRICK PAVERS

This work shall be in accordance with the applicable portions of LRS 14, the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

The existing pavers shall be removed and stored offsite until they are to be reinstalled. The pattern to be laid shall be a continuation of the existing pattern.

All labor, equipment, and material necessary to complete this work, including any base and bedding material and cutting, as specified herein shall be paid for at the contract unit price per square meter for REMOVE AND REINSTALL BRICK PAVERS.

#### HIGH-EARLY-STRENGTH PCC DRIVEWAY PAVEMENT

This work shall be in accordance with the applicable portions of Section 423 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

Class PP portland cement concrete shall be used for this item.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for HIGH-EARLY-STRENGTH PCC DRIVEWAY PAVEMENT, of the thickness specified.

#### PORTLAND CEMENT CONCRETE SIDEWALK

This work shall be in accordance with the applicable portions of Section 424 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein. The construction of the curb ramps shall be in accordance with IDOT 42400 series highway standards in revision #21 (effective date January 1, 2012).

Expansion material shall be used when as described in section 424.07. In addition to these locations, 13 mm expansion joints shall be provided along sidewalk abutting existing buildings.

After construction of the sidewalk and curb is complete, the top 9.5 mm ( $^{3}/_{8}$ ") of the joint shall be cleaned of debris and expansion material then filled with a polyurethane sealant for exterior use that meets or exceeds requirements of ASTM C 920, Type S, Grade P, Class 25, Use T.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for PORTLAND CEMENT CONCRETE SIDEWALK, of the thickness specified.

#### PCC SIDEWALK (SPECIAL)

This work shall be in accordance with the applicable portions of Section 424 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

The sidewalk shall be constructed as shown in the plans and shall include the integral curb and thickened slab at the locations to receive decorative handrail.

Expansion material shall be used when as described in section 424.07. In addition to these locations, 13 mm expansion joints shall be provided along sidewalk abutting existing buildings and the concrete barrier wall and other locations as shown in the plans. In addition, 450mm long #13 reinforcement bars shall be placed 450mm on center at construction joints.

After construction of the sidewalk and curb is complete, the top 9.5mm ( $^{3}/_{8}$ ") of the joint shall be cleaned of debris and expansion material then filled with a polyurethane sealant for exterior use that meets or exceeds requirements of ASTM C 920, Type S, Grade P, Class 25, Use T.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for PCC SIDEWALK (SPECIAL).

#### PCC SIDEWALK SPECIAL WITH RETAINING WALL

This work shall be in accordance with the applicable portions of Section 424 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work shall consist of constructing cast in place sidewalk with integral retaining wall and shall include the formwork, Class SI concrete, reinforcement, weep holes and coarse aggregate, and expansion joint. The formwork and reinforcement shall be approved by the Engineer prior to placement of the concrete. Any undermining of the existing sidewalk to remain in place shall be filled with concrete. This additional concrete shall be included in the cost of the PCC SIDEWALK SPECIAL WITH RETAINING WALL.

This item shall be measured for payment according to the vertical area of wall constructed, including the thickness of the sidewalk portion, in square meters as measured by the Engineer.

All labor, equipment, and materials required for this work shall be paid for at the Contract unit price per square meter for PCC SIDEWALK SPECIAL WITH RETAINING WALL.

#### **DETECTABLE WARNINGS**

This work shall consist of installing detectable warnings in compliance with the Americans with Disabilities Act, Accessibility Guidelines (ADAAG). Work shall be in accordance with IDOT series highway standards in revision #213 (effective January 1, 2012). Some locations may require installing the detectable warnings along the curb and gutter radius as shown in the standard.

Once a product is chosen, the Contractor shall provide color options for selection by the Engineer. Once chosen the same product shall be used throughout the project. The curb ramp portions below the detectable warnings will be measured and paid for under the item PORTLAND CEMENT CONCRETE SIDEWALK, of the thickness specified.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for DETECTABLE WARNINGS.

#### REMOVAL OF EXISTING RAISED REFLECTIVE PAVEMENT MARKERS

The removal of existing raised reflective pavement markers shall be included in the cost of PAVEMENT REMOVAL or HOT-MIX ASPHALT SURFACE REMOVAL (VARIABLE DEPTH).

#### **HOT-MIX ASPHALT SURFACE REMOVAL**

This work shall be done in accordance with Section 440 of the Standard Specifications except as herein specified. The various items of surface removal are described as follows:

1. Hot-Mix Asphalt Surface Removal, Variable Depth. In some locations, the hot-mix asphalt surface removal will require line and grade control to insure plan cross slopes and proposed overlay depths are attained, hence the inclusion of "variable depth" for this pay quantity. This item will consist of the removal to the depth required to place the proposed thicknesses of HMA leveling binder and surface from the existing surface elevation at the profile centerline and removal across the existing section at the design cross-slope shown on the plans. All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH.

Sufficient milling or grinding passes shall be made over the existing pavement so that all irregularities and high spots are eliminated from the pavement's surface before it is overlaid with new material. All passes required to achieve removal depths denoted in the plans, in conjunction with other work items, should be anticipated and included in the unit price for the hot-mix asphalt surface removal. The area measured shall be paid for only once regardless of the number of passes needed to remove the material.

These items shall include the removal of any concrete base course that is necessary to achieve the required section and the shaping and compacting of any aggregate base that is exposed during grinding operations.

The equipment and construction methods for this item will conform to Article 440.04 of the Standard Specifications.

The cuttings from the bituminous surface removal shall become the property of the Contractor and their salvage value (RAP) shall be reflected in the contract unit price for the various items of hot-mix asphalt surface removal.

Manholes, valve vaults and other locations exposed by the bituminous surface removal where vehicles will cross which are more than 25mm deep shall be temporarily ramped as directed by the Engineer. The installation and subsequent removal of temporary ramps shall not be paid for separately but shall be considered as included in the various Hot Mix Asphalt Surface Removal pay items.

#### **SAW CUTS**

Saw cuts shall be made in the existing pavement, concrete curb, and sidewalks as designated by the plans or as directed by the Resident Engineer in order to obtain a straight, smooth and uniform joint for matching proposed improvements. All saw cuts shall be FULL-DEPTH. The Resident Engineer will mark the locations of removals with paint and quantities will be measured to those points.

Should the Contractor fail to make the saw cuts prior to removal or otherwise extend removal beyond the marked saw cuts, a new saw cut shall be marked and additional removal and replacement quantities shall be made at the expense of the Contractor. The same shall also hold true when a good sawed edge is destroyed by subsequent vehicular traffic or use of construction equipment.

Saw cuts shall be included in the unit bid price per unit for the pay item that applies, and no additional compensation will be allowed.

#### CONCRETE RETAINING WALL REMOVAL

This work shall consist of the removal and satisfactory disposal of the concrete retaining wall at Station 20+656 to Station 20+817 Lt. as shown in the plans and as directed by the Engineer including the attached railing and adjacent sidewalk and stairs. This work shall be performed in accordance with Section 501 of the Standard Specifications and as specified herein.

The existing materials shall become the property of the Contractor and shall be removed and disposed of according to the requirements of Article 202.03 of the Standard Specifications.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per meter for CONCRETE RETAINING WALL REMOVAL.

#### **BUILDING REMOVAL**

This work shall include the removal and satisfactory disposal of the structure shown on the plans in accordance with all local and state regulations. This shall include removing any foundations to a minimum of one (1) meter below proposed grade or as required for installation of other items of work. The remaining foundation and/or excavation shall be backfilled in accordance with Section 205 and to the satisfaction of the Engineer.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per lump sum for BUILDING REMOVAL NO. 1 or BUILDING REMOVAL NO. 2.

#### REMOVAL OF EXISTING FEATURES

Removal of existing signs, fences, landscape features, etc. that conflict with the proposed work and are not specifically accounted for by a contract pay item shall be removed and disposed of by the Contractor. No additional compensation shall be allowed for this work.

#### **ISLAND PAVEMENT REMOVAL**

This work shall consist of the removal and satisfactory disposal of existing median and island paved surfaces in accordance with Section 440 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work will be measured for payment in square meters of the area to be removed.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per square meter for ISLAND PAVEMENT REMOVAL.

#### PIPE/BOX CULVERT REMOVAL

This work shall consist of the removal and satisfactory disposal of existing pipe culverts of the size and type specified in accordance with Section 501 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work shall also include the removal and disposal of all end treatments including headwalls, wingwalls, slopewalls, flared end sections, metal end sections, railroad ties, sheet metal, riprap, concrete, etc. Any resultant voids shall be filled with suitable backfill material or trench backfill as directed by the Engineer.

This work will be measured for payment in place along the centerline of the existing pipe culvert in meters.

All labor, equipment, and material necessary to complete this work as specified herein, including backfill material as required shall be paid for at the contract unit price per meter for PIPE CULVERT REMOVAL or BOX CULVERT REMOVAL.

#### TEMPORARY DRAINAGE CONNECTION

This work shall be in general accordance with Section 550 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work shall consist of constructing a temporary drainage connection as to not disrupt the existing or proposed flow during construction. Said connections shall be required between the existing drainage systems and proposed drainage system. Locations will include, but are not limited to; areas where the existing flow is disrupted prior to completion of the proposed conveyance system or areas where staged construction will require a temporary connection until completion of a future stage.

Work may include but is not limited to tees, concrete collars, pipes, backfill, excavation, removal, etc.

All labor, equipment, and materials required for this work shall be paid for at the Contract unit price per each for TEMPORARY DRAINAGE CONNECTION at the locations shown on the plans or as directed by the engineer.

#### STORM SEWER TO BE ABANDONED

This work shall consist of cleaning and then filling storm sewer to be abandoned.

The material to fill the storm sewer shall be Controlled Low Strength Material (CLSM) meeting the requirements of Section 1019 of the Standard Specifications.

The inside of the storm sewer shall be cleaned of all unsuitable material and debris before placing the CLSM. The storm sewer shall be completely filled. The method used for filling the storm sewer and containing the CLSM at the ends shall be at the Contractor's option.

The weather and temperature placement requirements of Section 593 of the Standard Specifications shall apply.

This item shall be measured for payment along the centerline of the existing storm sewer to be abandoned in meters.

All labor and materials required to complete this work, including the CLSM, will be paid for at the contract unit price per meter for STORM SEWER TO BE ABANDONED, of the size specified.

#### FILLING EXISTING CULVERTS

This work shall consist of cleaning and then filling culverts to be abandoned.

The material to fill the culvert shall be Controlled Low Strength Material (CLSM) meeting the requirements of Section 1019 of the Standard Specifications.

The inside of the culvert shall be cleaned of all unsuitable material and debris before placing the CLSM. The culvert shall be completely filled. The method used for filling the culvert and containing the CLSM at the ends shall be at the Contractor's option.

The weather and temperature placement requirements of Section 593 of the Standard Specifications shall apply.

This item shall be measured for payment by the volume to be filled based on the measured length along the centerline and the inside diameter (to the nearest 25mm) of the existing culvert to be filled in cubic meters.

All labor and materials required to complete this work, including the CLSM, will be paid for at the contract unit price per cubic meter for FILLING EXISTING CULVERT.

#### **ACCESS RAMP**

This work shall be in general accordance with section 503 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

The plans require the construction of access ramps for access to existing buildings. Specific locations, dimensions, and materials are included in the plans. The contractors will be required to construct the ramp in accordance with Americans with Disabilities Act (ADA) Code of Federal Regulations.

All labor, equipment, and material required for this work, including all expansion material, reinforcement and formwork, shall be paid for at the Contract unit price per cubic meter for ACCESS RAMP. The application of color and/or texture to the structure will be paid for separately.

#### **CONCRETE COLOR ADDITIVE**

This work shall consist of supplying integral color and surface color to Portland Cement Concrete sidewalks, crosswalks, barrier walls, and access ramps as shown in the plans, or as directed by the Engineer.

The contractor shall submit a sample of color options for approval prior to placing any materials.

The color treatment shall be an integral dry colorant. A color similar to U25 Santa Fe Buff by Butterfield Color shall be used for the barrier wall, access ramps, and sidewalk and a color similar to U44 DOT Red by Butterfield Color shall be used for the crosswalks.

The contractor will be required to prepare a 1 sq yd full-scale mock-up sample. Actual job specific materials, colors, methods and workmanship shall be provided by the Contractor. The accepted mock-up will be the standard by which remaining work will be evaluated for technical and aesthetic merit.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per CUBIC METER for CONCRETE COLOR ADDITIVE.

#### FORM LINER TEXTURED SURFACE

This work shall consist of providing, a texture to the exposed vertical faces of the access ramps as shown in the plans, or as directed by the Engineer.

The contractor shall submit a sample of the form liner pattern for approval prior to placing any materials.

The form liners used shall be a dry stack stone pattern similar to the Country Ledge Form Liner by Butterfield Color.

This item shall be measured for payment in square meters of applied surface area.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per square meter for FORM LINER TEXTURED SURFACE.

#### APPROACH PARAPET RETROFIT (SPECIAL)

This work shall be in general accordance with section 503 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work consists of modifications to the existing bridge parapet approaches to accommodate installation of a Type 6 Traffic Barrier Terminal as shown in the plans.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per each for APPROACH PARAPET RETROFIT (SPECIAL).

#### **DECORATIVE FENCE / DECORATIVE HANDRAIL / HANDRAIL**

This work shall be in general accordance with section 509 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work consists of supplying and installing steel decorative fencing, decorative handrail, or handrail with a galvanized finish to the dimensions and in the locations shown in the plans. The fencing and/or handrail shall be fabricated and finished offsite. Locations of splices for long runs shall be approved prior to fabrication.

All handrail shall be constructed and installed in accordance with Americans with Disabilities Act (ADA) Code of Federal Regulations.

This item shall be measured for payment along the centerline of the fence or handrail in meters.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per meter for DECORATIVE FENCE, DECORATIVE HANDRAIL, or HANDRAIL.

#### PIPE HANDRAIL

This work shall be in general accordance with section 509 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work consists of supplying and installing a handrail to the dimensions and in the locations shown in the plans in accordance with Americans with Disabilities Act (ADA) Code of Federal Regulations.

The materials, fabrication, and finish of the Pipe Handrail shall match that of the Decorative Fence and Decorative Handrail.

This item shall be measured for payment along the centerline of the handrail in meters.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per meter for PIPE HANDRAIL.

#### STEEL SIGN SUPPORT, SPECIAL

This work shall be in general accordance with section 509 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work consists of supplying and installing sign supports fabricated to the dimensions and in the locations shown in the plans, including the anchor bolts required for installation.

The materials, fabrication, and finish of the sign support shall match that of the Decorative Fence and Decorative Handrail. The sign supports shall be delivered to the site at the required length, with sign mounting holes drilled prior to finishing. Modifications to the length of the sign supports will not be allowed on site. Installation of sign panels shall be in accordance with Section 720 and shall be paid for at the contract unit price per square meter for the sign type required.

This item shall be measured for payment in meters. The length to be measured shall be the total length of the sign support as installed.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per meter for STEEL SIGN SUPPORT, SPECIAL.

#### SANITARY MANHOLE / DROP MANHOLE, TYPE A

This item consists of constructing a pre-cast concrete manhole, as indicated on the plans or as directed by the Engineer, in conformance with the project specifications. The words "Yorkville-Sanitary" shall be cast into the lid.

Payment shall be on an each basis for the manhole type specified complete and in place, to include manhole, frame and lid, and vacuum testing.

## **SANITARY SEWER**

This item consists of constructing sanitary sewer of the diameter and type specified as indicated on the plans or as directed by the Engineer, in conformance with the project specifications. Payment shall be made per meter of sanitary sewer, complete and in place, to include sewer pipe, fittings, bedding, and haunching, mandrel testing, and shall include sanitary sewer constructed within casing pipe. Measurement for payment shall include the laying length of fittings. Televising shall be paid for separately.

# STEEL CASINGS

This item consists of supplying all equipment, labor, and material necessary to construct steel casing pipe of the diameter and wall thickness specified (see table) to the elevations and profiles indicated on the plans for storm sewers, sanitary sewers and water mains, or as directed by the Engineer, in conformance with the project specifications.

Casing pipes shall have bituminous coating on the inside and outside of the pipe. Casing pipe shall have minimum yield strength of 35,000 PSI and shall meet the requirements of ASTM A139, Grade B. Ring deflection shall not exceed 2% of the nominal diameter. The steel casing pipe shall be delivered to the jobsite square cut with beveled ends to facilitate field welding and have dead-even lengths which are compatible with the equipment. Joints are to be fully welded. Ensure that joints are air-tight and continuous over the entire circumference of the pipe with a bead equal to or exceeding the minimum of either that required to meet the thickness criteria of the pipe wall for jacking and loading or service life. A qualified welder must perform all welding.

Casing Size (mm)	Minimum Wall Thickness (mm)		
150	4.8		
500	6.3		
550	6.3		
600	7.9		
750	9.5		
1650	20.7		

Casing spacers shall be a two-piece shell and made from T-304 stainless steel of a minimum 14 gauge thickness. Each shell section shall be lined with a 0.090" thick, ribbed PVC extrusion with a retaining section that overlaps the edges of the shell and prevents slippage. Runners shall be ultra high molecular weight polyethylene (UHMW). The runners shall be attached to risers at appropriate positions to properly support the carrier pipe within the casing pipe. The runners shall be mechanically bolted to the riser. The bolt heads shall be welded to the inside of the risers. Risers shall be made of T-304 stainless steel of a maximum 10 gauge. All risers shall be MIG welded to the shell. Bottom risers 150mm and over in height shall be reinforced. All reinforcing plates shall be 10 ga.T-304 stainless steel and shall be MIG welded to mating parts. Positioning within the casing pipe shall be sized such that the height of the risers and runners are to center the carrier pipe in the casing pipe with a top minimum clearance of 19mm.

This item shall include casing pipe, casing spacers, casing pipe end seals, excavation of boring and receiving pits and disposal of excavated material, shoring, dewatering, backfill material (except for trench backfill placed above carrier pipe located within the boring or receiving pits), and adequate compaction of backfill material. Backfill material shall be either CA-7 gradation crushed aggregate or trench spoil as appropriate. Trench backfill for carrier pipe located within the boring or receiving pits shall be paid for separately and calculated based on the maximum trench width allowed per the special detail.

If an obstruction is encountered which prevents completion of the installation in accordance with the design location and specifications; the casing may be taken out of service and left in place at the discretion of the Engineer. Immediately fill the product left in place with excavatable flowable fill. Submit a new installation procedure and revised plans to the Engineer for approval before resuming work at another location. If damage is observed to any property, cease all work until a plan of action to minimize further damage and restore damaged property is submitted and approved by the Engineer.

In addition to the specification located herein, the casing installation under the railroad shall conform to the Railroad's Utility Accommodation Policy and any agreements between the Owner and the Railroad which have been attached.

All labor, equipment, and material required to complete this work shall be paid for at the Contract unit price per meter for STEEL CASINGS of the size specified.

## WATER MAIN CASING EXTENSION

This item consists of extending a steel casing pipe of the same diameter as the existing casing at the locations indicated on the plans or as directed by the Engineer. The existing water main shall be shut down, removed and replaced with new DIP water main of the same diameter as existing. The water main joints within the new casing shall be restrained with threaded tie rods or restrained mechanical joints as appropriate. The casing shall be set in a cradle of Portland Cement Concrete bearing on undisturbed ground or CLSM shall be used as trench backfill material. The existing water main shall be uniformly supported within the casing extension with centralizers that can be assembled around the water main. All material shall meet the same criteria as material used for Steel Casing Pipe. Payment shall be made per meter of WATER MAIN CASING EXTENSION of the diameter specified, complete and in place, and shall include casing pipe, carrier pipe centralizers, new water main and water main fittings, thrust restraint, casing pipe end seals, excavation and disposal of excavated material, shoring, dewatering, concrete cradle or CLSM, backfill material, and adequate compaction of backfill material.

## **CONNECT TO EXISTING MANHOLE**

This item consists of providing all labor, equipment, and material necessary to core an opening in an existing manhole to allow connection of the specified diameter sewer, and install a watertight flexible rubber connector conforming to ASTM C443 and C923. The annular space between the pipe and the interior wall surface and the pipe and the flow channel shall be plugged watertight with an approved non-shrink grout to provide a flush, smooth surface. This item shall also include constructing/reconstructing the existing manhole bench per Yorkville-Bristol Sanitary District (YBSD) "Pipe to Manhole Connector" special detail and vacuum testing of the manhole prior to and after the connection is made.

This item shall be paid for at the contract unit price per each for CONNECT TO EXISTING MANHOLE of the pipe size specified

## **CONNECT TO EXISTING SEWER**

This item consists of providing all necessary labor, equipment, and materials except the pipe and trench backfill, which will be paid for separately, to connect to an existing sanitary sewer of the size specified.

This item shall be paid for at the contract unit price per each for CONNECT TO EXISTING SEWER of the pipe size specified.

#### RECONSTRUCT BENCH

This item consists of providing all labor, equipment, and material necessary to remove and replace the flow lines at the base of a pre-existing manhole with concrete to match the ultimate inlet/outlet sewer configuration. The concrete material shall be fast-setting and capable of resisting degradation due to wastewater flow. Flow lines shall be smooth to prevent solids build-up. Concrete shall be formed to the springline of the sewers. Any sewers to be abandoned shall be sealed with brick and mortar prior to reconstructing the bench.

This item shall include abandonment of sewers entering/leaving the manhole, and removal and placement of concrete, complete and in place.

This item shall be paid for at the contract unit price per each for RECONSTRUCT BENCH

#### TEMPORARY INVERTED SIPHON

This item consists of providing all labor, equipment, and material necessary to construct a 200mm diameter PVC-SDR26 inverted siphon to temporarily carry wastewater flows during construction of replacement sewers. The contractor shall minimize the number of bend fittings, joints, and depth of the siphon to the extent practicable. The contractor shall maintain the inverted siphon from the time it is constructed to the time it is abandoned when the replacement sewer becomes operational.

This item shall include construction, maintenance, and abandonment of the temporary siphon, complete and in place.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per each for TEMPORARY INVERTED SIPHON.

#### SANITARY SEWER BYPASS PUMPING

This item consists of providing all labor, equipment, and material necessary to construct, maintain, and remove an operational bypass pumping system to keep the existing sanitary sewer system on Rt.47 between Van Emmon Street and Hydraulic Avenue in service while replacement sewers are under construction.

The contractor shall provide the name and 24-hour phone number of a qualified individual to contact in case repairs are required while the pump station is in service.

The bypass pumping station shall be constructed in general conformance with the special details. Included shall be a 1.2-meter diameter sump manhole to be set over the existing sanitary sewer, a 150mm diameter steel casing pipe bored beneath the railroad tracks, pump, controller, electrical supply, and discharge piping to the existing sanitary manhole at the Rt.47/Hydraulic intersection.

The materials and installation of the casing shall conform to the STEEL CASING specification included herein.

The pumping system shall use a single submersible centrifugal pump with a pumping capacity of 30 GPM against a total dynamic head of 4 meters. The motor shall be rated at 2 HP with an operating speed of 3450 RPM and have oil-cooled induction design, operate at 230 volts - single phase, and have bi-metallic thermal overload protection and Class F insulation. The motor housing and pump casing shall be made of ASTM-48 cast iron. The pump impeller shall be made of Valox. The pump shall be controlled by a NEMA 3R control panel with three float switches to control pump on, pump off, and high water alarm. A caged high water alarm light shall be mounted on the control box. The alarm light shall glow dim at all times except under alarm conditions when the light shall glow bright and flash. Alarm light shall have rest button. In case of power failure, alarm light shall be powered by a gel-cell battery.

The forcemain shall be 50mm diameter, and made of PE3408 high density polyethylene tubing with a pressure rating of DR 17.0 and shall conform to ASTM F714 and have as few joints as practical to minimize the potential for leakage. Any part of the forcemain constructed above ground shall be protected by an outer conduit or other protection as approved by the Engineer. Electricity is to be obtained from an existing streetlight handhole as indicated in the plans. The cost of electricity shall be paid for by the city.

The ends of the casing pipe shall be temporarily plugged after the bypass pumping system is taken out of service for later use in the lighting conduit installation.

This item shall also include all connections to existing sewer and electrical systems, casing installation, and trench backfill. Rock excavation for placing the sump manhole, if necessary, shall be paid for separately. All equipment and material salvage rights, except for the 150mm casing pipe, shall belong to the contractor.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per lump sum for SANITARY SEWER BYPASS PUMPING.

#### **TELEVISING SANITARY SEWERS**

This item consists of providing all labor, equipment, and material necessary to televise new or existing sewer mains as directed by the Engineer and provide two (2) copies each of a written report and a digital video and audio on DVD. If any deficiencies are found with the sewer, that section of sewer shall be re-televised at the contractor's expense after repairs are made.

All labor, equipment, and material required for this work shall be paid for at the Contract unit price per meter for TELEVISING SANITARY SEWERS regardless of sewer diameter.

## **VACUUM TESTING SANITARY MANHOLES**

This item consists of providing all necessary labor, equipment, and material to perform a vacuum test of new sanitary manholes after adjustment of the manhole frame to finished grade. Grouting of joints shall not be allowed prior to testing. All sewers entering the manhole shall be temporarily plugged, taking care to securely brace the plugs from being drawn into the manhole during testing. Vacuum testing shall be performed in accordance with ASTM C-1244 and the following requirements:

- A vacuum of 10" of Mercury shall be drawn and then the vacuum pump shall be shut off.
- With pump valves closed, the time shall be measured for the vacuum to drop to 9".
- A test is considered satisfactory when the measured time exceeds 60 seconds for a 4-ft diameter manhole, and 75 seconds for a 5-ft diameter manhole.

Should the manhole fail the vacuum test, all leaks shall be sealed with an approved non-shrink grout and the test repeated until a satisfactory test is obtained. Vacuum testing shall not be paid for separately, but shall be considered included in the cost of the sanitary manhole.

# **EXPLORATION TRENCH, 2.1M**

This item consists of excavating a trench to locate sanitary or water utilities or as directed by the Engineer, in general conformance with the project specifications. The minimum depth of trench shall be 2.1 meters. Damage to any unmarked utility shall be temporarily repaired to the satisfaction of the Engineer.

Payment for Exploration Trench shall be made per meter of trench, and shall include temporary repair of damaged unmarked utilities, and backfill with trench spoil as appropriate. Granular trench backfill, if required, shall be paid for separately.

# **SANITARY SEWER REPAIR**

This item consists of providing all labor, equipment, and material necessary to remove and replace sections of existing sanitary sewer as shown on the plans or directed by the Engineer. Replacement sewer shall be uniformly sloped between the connections with existing sewers.

Payment shall be made per meter for the pipe size and type specified, and shall also include bedding, haunching, and making connection to and maintaining flow in the existing sewer. Any trench backfill and televising of the entire run of sewer from manhole to manhole shall be paid for separately.

# **COUPLINGS FOR SANITARY SEWER REPAIRS & CONNECT TO EXISTING SEWERS**

Heavyweight couplings compliant with FM 1680 are to be used in the construction of these pay items when connecting existing and new sanitary sewers. The coupling shall consist of a molded one-piece neoprene rubber sealing sleeve within a 304 Series stainless steel shield and held in place by multiple 304 Series stainless steel axially-slotted clamp bands. At least four clamp bands shall be provided for couplings 100mm diameter or smaller. At least six clamp bands shall be provided for couplings 150mm diameter or larger.

The rubber sleeve shall have internal sealing rings compliant with ASTM C564 and a flange at the outer edge to keep the stainless steel shield and clamp bands in place.

Payment for couplings shall be included in the cost per meter of the size specified for SANITARY SEWER REPAIR or the cost per each of the size specified for CONNECT TO EXISTING SEWER.

#### SANITARY MANHOLE TO BE ADJUSTED

This item shall be performed in general conformance with the project specifications, and shall also include a new exterior chimney seal. Precast concrete adjusting rings shall have a minimum thickness of 50mm, and the total thickness of adjusting rings shall not exceed 200mm. The chimney seal shall cover the flange of the cast iron frame, all adjusting rings, and the top of the manhole structure. The chimney seal shall be INFISHIELD as manufactured by Sealing Systems, Inc. or WRAPID-SEAL as manufactured by Canusa-CPS. Payment shall be made on an each basis, complete and in place.

#### SANITARY SEWER ABANDONMENT

This item shall consist of removing or abandoning in place existing sanitary sewers and sewer services. The ends of sewers abandoned in place shall be sealed with brick and mortar. Sanitary sewer and sewer service abandonment shall not be paid for separately, but shall be considered incidental to sanitary sewer construction.

# FRAMES & LIDS, SPECIAL

This item shall be performed in general conformance to Section 604 of the project specifications, and consists of providing and installing a Neenah R-1530 or EJIW 1050Z1 manhole frame and a gasketed lid and concealed pick hole. The words "Yorkville-Sanitary" or "Yorkville-Water" as directed by the Engineer shall be cast into the lid. The existing frame and lid shall be disposed of by the contractor.

Payment shall be made on an each basis, complete and in place. Payment for structure adjustment or reconstruction shall be made separately.

# **DUCTILE IRON WATER MAIN**

This item shall be constructed in general conformance with Section 561 of the Standard Specifications. The water main shall be Class 52 ductile iron in conformance with ANSI A21.5.1, and will be encased with 0.2mm (8-mil) minimum thickness polyethylene tubing. Fittings shall conform to ANSI 21.10, and shall have a working pressure rating of 350 psi.

Payment shall be made per meter of water main of the diameter specified, to include all labor, equipment, and material necessary to construct the water main to the required alignment and depths, polyethylene encasement, thrust blocking, bedding, haunching, fittings, pressure testing, and disinfection. The laying length of fittings, valves, and water main constructed within casing pipe shall also be measured for payment as DUCTILE IRON WATER MAIN.

## WATER VALVES

This item consists of providing all labor, equipment, and material necessary to construct gate valves of the size specified. Gate valves shall be resilient wedge type, meeting the standards of AWWA C509-80. Valves shall have a non-rising stem and be installed with retaining glands. Gate valves shall have the manufacturer's name, pressure rating, and year of manufacture cast onto the body of the valve. Payment shall be made on an each basis, complete and in place.

#### **TAPPING VALVES AND SLEEVES**

This item consists of providing all labor, equipment, and material necessary to construct tapping valves and sleeves of the sizes specified. Tapping sleeves shall be cast iron conforming to AWWA C110 for size-on-size installations or stainless steel conforming to AWWA C223 for all other size applications. Tapping valves shall conform to AWWA C515 and be resilient seated with a minimum working pressure of 250 PSI.

Payment shall be made on an each basis for the tapping valve and sleeve diameter specified, and shall include the tapping sleeve, tapping valve, excavation, and backfill. Backfill material shall be either CA-7 gradation crushed aggregate or trench spoil as appropriate. Trench backfill for water main located within the excavation for tapping valve shall be paid for separately and calculated based on the maximum trench width allowed per the special detail.

## **VALVE VAULTS**

This item shall be constructed in general conformance to Section 602 of the project specifications. Frame and cover to be Neenah R-1530 or EJIW 1050Z1 with Type B covers. Covers shall have "Yorkville-Water" cast into the lid.

# **VALVE BOX**

This item consists of providing all labor, equipment, and material necessary to construct a valve box over gate valves and tapping valves. Valve boxes shall be one complete assembled unit composed of the valve box and extension stem. All moving parts of the extension stem shall be enclosed in a housing to prevent contact with the soil. Valve box assembly shall be adjustable to accommodate variable trench depths. The extension stem assembly shall be of a telescoping design that allows for variable adjustment length. The extension stem material shall be galvanized square steel tubing. The extension stem assembly shall have a built-in device that prevents the stem assembly from disengaging at its fully extended length. The extension stem must be capable of surviving a torque test to 1000 ft-lb without failure. Payment shall be made on an each basis, complete and in place.

#### FIRE HYDRANT

This item shall be constructed in general conformance with the Standard Specifications for Water and Sewer Main Construction in Illinois. Fire Hydrants shall be Clow F-2545, Mueller A-423, or Waterous WB-67-250.

An auxiliary gate valve and ductile iron hydrant leg shall be included and shall be 150mm diameter. Hydrant color shall be safety red, and shall include one field coat of paint. The auxiliary valve box shall be Trench Adapter by American Flow Control, or Clow F-2546 with F-2493 lid with at least two grip arms attached to the hydrant barrel to hold the valve box plumb. The auxiliary valve box shall be open during the pressure test. This item shall be paid for on an each basis in place, to include all labor, equipment, and material required to construct the fire hydrant, auxiliary gate valve, valve box, 150mm hydrant leg of variable length, polyethylene encasement of hydrant leg, any required fittings, thrust blocking, 1/3 cubic meter of coarse stone surrounding the hydrant barrel weep hole, and trench backfill for the hydrant and hydrant leg. Hydrant legs other than 150mm diameter and the associated trench backfill will be paid for separately.

## FIRE HYDRANT TO BE ADJUSTED

This item shall consist of adjusting the elevation of existing hydrants and auxiliary valve boxes to match the proposed site conditions as shown on the plans or as directed by the Engineer. Hydrant and valve box extensions shall be as recommended by the manufacturer of the hydrant or valve box to be adjusted and shall include backfill with material approved by the Engineer except when trench backfill is required due to the location of the box. The contractor may replace the hydrant and valve box at their option at no additional cost to the contract.

All labor and materials required for this work will be paid for at the contract unit price per each for FIRE HYDRANT TO BE ADJUSTED except any trench backfill required will be paid for at the contract unit price per cubic meter for TRENCH BACKFILL.

# FIRE HYDRANT TO BE REMOVED

This item shall consist of removing existing hydrants, auxiliary valve and box, and hydrant leg as shown on the plans or as directed by the Engineer and shall include removal and disposal of said items, plugging blocking of the connection to the existing water main, and backfill with material approved by the Engineer except when trench backfill is required due to the location of the box.

All labor and materials required for this work will be paid for at the contract unit price per each for FIRE HYDRANT TO BE REMOVED except any trench backfill required will be paid for at the contract unit price per cubic meter for TRENCH BACKFILL.

# **LINE STOP**

Line stops shall be used to temporarily shut down water flow in a section of existing watermain to allow connections to or abandonment of watermains. The Engineer reserves the right to provide water main shutdowns instead of requiring line stops at some or all locations where line stops are specified on the plans or to require additional line stops. Line stops shall be suitable for ordinary water works service, intended to be installed in an upright position to the extent practical on buried water distribution pipe lines. Line stops shall be ANSI/NSF Standard 61 and Standard 61 Annex G Certified, and shall meet ANSI/AWWA Standard C223 Fabricated steel and Stainless steel Tapping Sleeves and MSS SP-124 as applicable.

Sleeves shall be pressure rated at 150 PSI. Sleeve sizes 100mm to 200mm shall be fabricated from 304 Stainless Steel. The gasket shall be molded of synthetic rubber compounded for use with water salt solutions, and shall be a minimum of 6mm thick and have a gridded surface with 304 stainless steel bridge plates molded flush to the gasket. Sleeve sizes 250mm to 300mm shall meet ASTM 283 Grade C, 285 Grade C Steel, ASTM A-36 standards. The gasket shall be a minimum 22mm wide, recessed Buna-N rubber. Fitting sizes and bolts for 100mm to 200mm line stops shall be 18-8 Type 304 stainless steel. Fitting sizes 250mm to 300mm shall be ASTM A285 Grade C or A36 carbon steel, with bolts compliant with ASTM A242. Line stops shall be installed, operated, and removed per the manufacturer's specifications.

Line stop shall be paid for on an each basis of the diameter specified, and shall include all equipment, labor, and material necessary to shut down the watermain for the length of time required to perform the related watermain work. Excavation to confirm diameter of the existing pipe, excavation for the line stop, disposal of excavated material, and backfill of the excavation shall be incidental to line stop.

# WATER SERVICE LINE

This item shall be constructed in general conformance to Section 563 of the project specifications. Water service pipe shall be Type "K" copper tubing. The method of installation shall be either open trenching or augering at the discretion of the contractor, but subject to the approval of the Engineer. The water service shall consist of one continuous piece of copper tubing from the corporation stop to the curb stop if at all possible.

This item will be paid for per meter as Water Service Line of the diameter specified, to include all labor, equipment, and material to install the water service, including CA-7 trench backfill. Water service fittings and connection to the existing water service and water main shall be paid for separately.

# WATER SERVICE CONNECTION

This item shall be constructed in general conformance to Section 563 of the project specifications. All fittings shall be compression type. Corporation stops shall be Mueller H-15000, McDonald No. 4701, or Ford F-600. Curb stops shall be Mueller H-15154, McDonald No. 6104, or Ford B22-333m. Curb boxes shall be Minneapolis-pattern, and be Mueller H-10300 or McDonald No. 5614. Unions and straight couplings shall be Mueller 110, McDonald No. 4758, or Ford Quick Joint fittings.

This item shall be paid for on an each basis for the diameter specified, to include all labor, equipment, and material required to install all fittings required for a single water service and to make connection to the existing water service and water main.

# WATER SERVICE COVER

Any curb box that must be located within a paved area, or any other curb box identified by the Engineer, shall be protected with a surrounding cover. The cover shall exceed H-20 roadway test standards and have a minimum inside diameter of 5-7/8 inches (149mm). The lid and collar shall be made of cast iron and conform to ASTM A-48, Class 25.

The word "WATER" shall be cast into the lid. The collar shall slide vertically over a base tube, which shall be made of Acrylonitrile Butadiene Styrene (ABS) and conform to ASTM D-1788. The vertical adjustment range of the water service cover shall be at least 5 inches (127mm).

This item shall be paid for on an each basis, to include all labor, equipment, and material required to install the water service cover and adjust it to finished grade.

#### WATERMAIN ABANDONMENT

This item shall consist of removing or abandoning in place existing watermains and water services. The ends of watermain abandoned in place shall be sealed with brick and mortar. Removal of fire hydrants, valve vaults, valve boxes, and curb boxes or abandoning in place of valves shall be paid for separately. Disconnection of watermains to be abandoned shall occur at the common fittings with watermains to remain in service with caps or plugs to be installed at those fittings; pressurized stubs of abandoned watermain shall not be allowed. Watermain and water service abandonment shall not be paid for separately, but shall be considered incidental to watermain construction.

## **VALVE VAULTS TO BE REMOVED**

This item shall consist of removing existing valve vaults as shown on the plans or as directed by the Engineer and shall include removal and disposal of the vault and backfill with material approved by the Engineer except when trench backfill is required due to the location of the vault

All labor and materials required for this work will be paid for at the contract unit price per each for VALVE VAULTS TO BE REMOVED except any trench backfill required will be paid for at the contract unit price per cubic meter for TRENCH BACKFILL.

# **VALVE BOXES TO BE REMOVED**

This item shall consist of removing existing valve boxes as shown on the plans or as directed by the Engineer and shall include removal and disposal of the box and backfill with material approved by the Engineer except when trench backfill is required due to the location of the box.

All labor and materials required for this work will be paid for at the contract unit price per each for VALVE BOX TO BE REMOVED except any trench backfill required will be paid for at the contract unit price per cubic meter for TRENCH BACKFILL.

## DOMESTIC WATER SERVICE BOXES TO BE REMOVED

This item shall consist of removing existing service boxes as shown on the plans or as directed by the Engineer and shall include removal and disposal of the box and backfill with material approved by the Engineer except when trench backfill is required due to the location of the box

All labor and materials required for this work will be paid for at the contract unit price per each for DOMESTIC WATER SERVICE BOXES TO BE REMOVED except any trench backfill required will be paid for at the contract unit price per cubic meter for TRENCH BACKFILL.

## DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED

This item shall consist of adjusting the elevation of existing service boxes to match the proposed site conditions as shown on the plans or as directed by the Engineer. Service box extensions shall be as recommended by the manufacturer of the service box to be adjusted and shall include backfill with material approved by the Engineer except when trench backfill is required due to the location of the box. The contractor may replace the service box at their option at no additional cost to the contract.

All labor and materials required for this work will be paid for at the contract unit price per each for DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED except any trench backfill required will be paid for at the contract unit price per cubic meter for TRENCH BACKFILL.

## LANDSCAPE RESTORATION

This item consists of restoring turf grass in areas disturbed only by construction of watermains or sanitary sewers. The work consists of furnishing and placing 100mm of topsoil, applying Seeding Class 1, Nitrogen, Phosphorus, and Potassium, and placing an Erosion Control Blanket. Material and application rates shall be as indicated in the Standard Specifications. The contractor shall protect and maintain the landscaping until a uniform and healthy stand of grass at least 100mm tall is established to the satisfaction of the Engineer.

Payment shall be made per square meter of Landscape Restoration, complete and in place.

# MEDIAN INLET (604106), SPECIAL

This work shall be done in accordance with Section 604 of the Standard Specifications, except as herein specified. The work shall consist of installing the frame and grate detailed in standard detail 604106. The concrete apron shall be omitted.

All labor, equipment and materials required to install the frame and grate at the location designated in the plans shall be paid for at the contract unit price per each for MEDIAN INLET (604106), SPECIAL.

# **PIPE UNDERDRAINS 100MM**

This work consists of constructing pipe underdrains according to the applicable portions of Section 601 of the Standard Specifications and Highway Standard 601001.

The pipe underdrain material used shall meet the requirements of AASHTO M 252-96 except the pipe shall have a slot width of 0.07 in.  $\pm$  0.01 in. (1.75 mm  $\pm$  0.25 mm). The number of slots and the slot length may be modified to maintain the inlet flow specified in AASHTO M 252-96. Fabric around the pipe is not allowed.

The backfill material shall meet the requirements of Section 1003 of the Standard Specifications for a FA-4 Natural Sand or Gravel and meet the following gradation requirements:

Sieve Size Percent Passing

3/8" (9.5 mm) 100 No. 10 (2 mm) 10±10 No. 16 (1.18 mm) 5±5 No. 200 (75 um) 1±1

Backfill material will not be paid for separately, but shall be included in the unit cost of the underdrain.

This work will be paid at the contract unit price per meter for PIPE UNDERDRAINS 100MM.

# PIPE UNDERDRAINS 100MM (SPECIAL)

This work shall be in general accordance with Section 601 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work shall consist of installing an underdrain below the elevated sidewalk and barrier wall as shown in the plans. Prior to installation of the underdrain and granular backfill, the trench shall be lined with geotechnical fabric in accordance with Article 601.06.

This item shall be measured for payment along the length of pipe installed in meters as determined by the Engineer and shall include both the perforated drain and non-perforated pipe used to connect to drainage structures.

All labor, equipment, and materials required for this work, including any pipe fittings and the geotechnical fabric, shall be paid for at the Contract unit price per meter for PIPE UNDERDRAINS 100MM (SPECIAL). The granular backfill shall be paid for at the Contract unit price per cubic meter for POROUS GRANULAR BACKFILL.

# MANHOLES, TYPE A

This work shall be done in accordance with Section 602 of the Standard Specifications, except as herein specified. The work shall consist of constructing storm sewer manholes, of the size specified, in accordance with the plans and standard details at the locations shown on the plans. Standard "cone" top sections shall be used instead of flat slab stops when depth allows. When flat slab tops are used in grass areas, concrete adjusting rings shall be used to provide a minimum of 300mm cover over the slab whenever possible.

All labor, equipment and materials required to construct the manhole at the location designated in the plans shall be paid for at the contract unit price per each for MANHOLES, TYPE A of the size and type of frame specified.

# MANHOLES, TYPE A, 2.4M DIAMETER, SPECIAL

This work shall be done in accordance with Section 602 of the Standard Specifications, except as herein specified.

The work shall consist of constructing storm sewer manholes, of the size specified, in accordance with the plans and standard details at the locations shown on the plans. The manholes shall be constructed with the modified, two opening flat slab top as shown in the plans.

All labor, equipment and materials required to construct the manhole at the location designated in the plans shall be paid for at the contract unit price per each for MANHOLES, TYPE A, 2.4M DIAMETER, SPECIAL and shall include both frames specified.

# **INLETS, TYPE B**

This work shall be done in accordance with Section 602 of the Standard Specifications, except as herein specified. Standard "cone" top sections shall be used instead of flat slab stops when depth allows. When flat slab tops are used in grass areas, concrete adjusting rings shall be used to provide a minimum of 300mm cover over the slab whenever possible.

All labor, equipment and materials required to construct the inlet at the location designated in the plans shall be paid for at the contract unit price per each for INLETS, TYPE B, TYPE 3V FRAME AND GRATE.

# **TRENCH DRAIN, 100MM**

This work shall be in accordance with the applicable portions of Section 602 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This item shall consist of installation of a polymer concrete or composite trench drain in the proposed PCC Sidewalk, (Special) at the locations shown in the plans. The trench drain shall have a nominal 100 mm internal width and shall be covered with ADA compliant ductile iron grates. Installation shall be in accordance with the manufacture's requirements and shall include all fittings and accessories required for connection to the pipe drains. The thickness of the PCC Sidewalk, (Special) shall be increased as shown in the plans to provide at least 100 mm of concrete around the trench drain. This additional concrete shall be included in the cost of the trench drain.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per meter for TRENCH DRAIN, 100MM.

# **TEMPORARY CATCH BASINS**

This work shall be in accordance with the applicable portions of Section 602 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This item shall consist of installation, maintenance, and removal of a Type C Catch Basin with a Type 8 frame and grate and erosion control inlet protection at the ends of the storm sewer pipe stubs as shown in the plans and as directed by the engineer to maintain drainage during construction.

All labor, equipment, and material necessary to complete this work as specified herein shall be paid for at the contract unit price per each for TEMPORARY CATCH BASINS.

# **CONCRETE ISLAND (SPECIAL)**

This work shall be done in accordance with Section 606 of the Standard Specifications, except as herein specified. The work shall consist of constructing full depth concrete islands in accordance with standard detail 606301 and as shown on the plans.

The islands shall be measured for payment from E.O.P. to E.O.P. and shall include all combination curb and gutter, sidewalk, aggregate fill, concrete island surface, etc.

All labor, equipment and materials required to construct the islands at the location designated in the plans shall be paid for at the contract unit price per meter for CONCRETE ISLAND (SPECIAL).

# **CONCRETE CURB, TYPE B (SPECIAL)**

This work shall be done in accordance with Section 606 of the Standard Specifications, except as herein specified. The work shall consist of constructing a modified Type B curb to the dimensions and at the locations shown on the plans.

All labor, equipment and materials required to construct this curb at the location designated in the plans shall be paid for at the contract unit price per meter for CONCRETE CURB, TYPE B (SPECIAL).

# COMBINATION CONCRETE CURB AND GUTTER (ABUTTING EXISTING PAVEMENT)

This work shall be done in accordance with Section 606 of the Standard Specifications, except as herein specified. The work shall consist of constructing curb and gutter adjacent to pavement to remain in place as shown on the plans. The front of the gutter pan adjacent to the pavement shall be finished with a radius edge.

All labor, equipment and materials required to construct this curb at the location designated in the plans shall be paid for at the contract unit price per meter for COMBINATION CONCRETE CURB AND GUTTER (ABUTTING EXISTING PAVEMENT) of the type specified.

# COMBINATION CONCRETE CURB AND GUTTER (DOWELLED)

This work shall be done in accordance with Section 606 of the Standard Specifications, except as herein specified. The work shall consist of constructing curb and gutter adjacent to proposed concrete pavement as shown on the plans. Tie bar placement shall be in accordance with standard detail 606001.

All labor, equipment and materials required to construct this curb at the location designated in the plans shall be paid for at the contract unit price per meter for COMBINATION CONCRETE CURB AND GUTTER (DOWELLED) of the type specified.

# COMBINATION CONCRETE CURB AND GUTTER, TYPE B (SPECIAL)

This work shall be done in accordance with Section 606 of the Standard Specifications, except as herein specified. The work shall consist of constructing a curb and gutter/sidewalk combination to match that already in place at a commercial entrance as shown on the plans.

All labor, equipment and materials required to construct this curb at the location designated in the plans shall be paid for at the contract unit price per meter for COMBINATION CONCRETE CURB AND GUTTER, TYPE B (SPECIAL).

# **CONCRETE MEDIAN (DOWELLED)**

This work shall be done in accordance with Section 606 of the Standard Specifications, except as herein specified. The work shall consist of constructing solid concrete median adjacent to proposed concrete pavement as shown on the plans. The median shall be constructed in accordance with standard detail 606301 except the keyed joint at the longitudinal joint with the PCC pavement shall be replaced with tie bars in accordance with standard detail 606001.

All labor, equipment and materials required to construct this curb at the location designated in the plans shall be paid for at the contract unit price per meter for CONCRETE MEDIAN (DOWELLED) of the type specified.

# **CORRUGATED MEDIAN (DOWELLED)**

This work shall be done in accordance with Section 606 of the Standard Specifications, except as herein specified. The work shall consist of constructing a solid concrete corrugated median adjacent to proposed concrete pavement as shown on the plans. The median shall be constructed in accordance with standard detail 606306 except the keyed joint at the longitudinal joint with the PCC pavement shall be replaced with tie bars in accordance with standard detail 606001.

All labor, equipment and materials required to construct this curb at the location designated in the plans shall be paid for at the contract unit price per meter for CORRUGATED MEDIAN (DOWELLED) of the type specified.

# **JUNCTION BOX**

This item of work shall consist of furnishing and installing junction chambers at locations shown in the plans and in accordance with Section 602 of the Standard Specifications, the details shown in the plans, and as modified herein.

The junction box walls shall be constructed of precast or cast-in-place Class SI concrete in accordance with Section 602 of the Standard Specifications. The minimum wall thickness shall be as shown in the plans. Reinforcement in junction chamber walls shall be in accordance with ASTM C913. The Contractor shall submit shop drawings detailing the location of reinforcement bars to the Engineer for approval prior to fabrication. The top slabs for all junction chambers shall be furnished with a Type 1 Frame (Closed Lid) and a precast concrete manhole riser or adjusting ring as shown in the plans.

Steps will be required and shall be in accordance with Standard 602401, the details in the plans and Article 602.08 of the Standard Specifications.

The junction box shall be constructed with the proper openings on the upstream and downstream ends as shown in the plans to allow for connections of all reinforced concrete pipes. The openings between the proposed connections and the junction chamber shall be grouted closed.

All labor, equipment and materials required to complete this item as specified herein, including excavation, Class SI concrete, reinforcement bars, frames and grates, adjusting rings, concrete manhole riser sections, steps and backfill material as required, will be paid for at the contract unit price per lump sum for JUNCTION BOX NO. 1, JUNCTION BOX NO. 2, JUNCTION BOX NO. 3, JUNCTION BOX NO. 4, and JUNCTION BOX NO. 5.

#### **OUTLET STRUCTURE**

This item of work shall consist of furnishing and installing a reinforced concrete outlet structure at the location shown in the plans. Concrete shall be in accordance with applicable portions of Section 503 and reinforcement bars shall be in accordance with applicable portions of Section 508 of the Standard Specifications, the details shown in the plans, and as modified herein.

The outlet structure shall be constructed with the proper openings on the upstream and downstream ends as shown in the plans to allow for connections of all reinforced concrete pipes. The openings between the proposed connections and the junction box shall be grouted closed.

Each outlet pipe will be furnished with a hot-dipped galvanized grate assembly fabricated and mounted to the outlet structure in accordance with Article 542.07 (a)(2) and the details shown in the plans.

All labor, equipment and materials required to complete this item as specified herein, including excavation, Class SI concrete, reinforcement bars, grate assemblies, anchor bolts and backfill material as required, will be paid for at the contract unit price per lump sum for OUTLET STRUCTURE at the location shown in the plans.

# TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL)

This work shall be in general accordance with section 631 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

As shown in the plans, portions of the Type 6 terminal shall be omitted at the north end of the Fox River Bridge due to space limitations caused by an existing entrance.

All labor, equipment and materials required to complete this item as specified herein will be paid for at the contract unit price per each for TRAFFIC BARRIER TERMINAL, TYPE 6 (SPECIAL).

## **CONCRETE BARRIER WALL**

This item of work shall consist of furnishing and installing a reinforced concrete barrier wall at the locations shown in the plans in accordance with applicable portions of Section 637 and reinforcement bars shall be in accordance with applicable portions of Section 508 of the Standard Specifications, the details shown in the plans, and as modified herein.

This item shall be measured for payment along the centerline of the barrier wall in meters.

All labor, equipment and materials required to complete this item as specified herein, including excavation, formwork, Class SI concrete, reinforcement bars, etc., will be paid for at the contract unit price per meter for CONCRETE BARRIER WALL.

## NON-SPECIAL WASTE WORKING CONDITIONS

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

More information to be added when PSI report is complete (quantities in plans were based on March 9, 2005 memorandum and are subject to change).

# HOURS OF OPERATION / KEEPING ROADS OPEN TO TRAFFIC

All work, including the installation and removal of all traffic control protection, which requires the closing of a driving lane of Illinois Route 47 shall be performed nightly between the hours of 8 p.m. and 6 a.m. Night time lane closures will only be allowed Sunday night through Friday night. Work not requiring lane closures shall also be permitted during these hours. However, slamming of delivery truck tail gates and using milling machines or jackhammers of any size will not be permitted during these hours. The contractor shall abide by the noise requirements set forth in Article 107.35 of the Standard Specifications. The Engineer reserves the right to reject equipment and/or operations that causes excessive noise during the hours of 8 p.m. and 6 a.m.

The Contractor shall notify the Yorkville Police Department and residents within a two block area of proposed night time work location at least 24 hours before the work commences along with an estimate of how long work shall last.

All Illinois Route 47 driving lanes shall be open to traffic during the legal holiday periods according to Article 107.09 of the Standard specifications.

No additional compensation will be allowed the Contractor for working at night, except as outlined in the special provision, Nighttime Work Zone Lighting.

# TRAFFIC CONTROL AND PROTECTION (SPECIAL)

This item of work shall include installation, maintenance, and removal of any measures required to maintain pedestrian traffic to buildings (such as those between Van Emmon Street and Hydraulic Avenue) during construction in accordance with Section 701 and as detailed in the plans.

This shall include, but not be limited to, temporary safety fencing, signage for pedestrian traffic, and bridging over excavations or curing concrete. Temporary sidewalk shall be paid for at the contract unit price for said item.

All labor, equipment and materials required to complete this item as specified herein, will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

#### TRAFFIC CONTROL AND PROTECTION STAGE CONSTRUCTION

This item of work shall include installation, maintenance, and removal of the traffic control required for each stage of construction in accordance with Section 701 and as shown in the plans. This shall include, but not be limited to, the signing, vertical panels, barrels, barricades, flashing lights, use of flaggers and/or specific traffic control standards when required, and removal and/or temporary relocation of existing traffic control devices, such as stop signs on the local streets, required to complete the work in each stage.

Temporary signals, pavement markings, changeable message boards, concrete barrier, impact attenuators and night time work zone lighting shall be paid for at the contract unit price for said item. All work associated with the Truck Detour Route will be paid for at the contract unit price for DETOUR SIGNING.

All labor, equipment and materials required to complete this item as specified herein, will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION STAGE CONSTRUCTION.

# TRAFFIC CONTROL SURVEILLANCE

In addition to the Standard Specifications for Article 701.10 Surveillance and the BDE Special Provision, this item will be required when Traffic Standards 701502, 701601, 701602, 701606, 701701, 701801, and TRAFFIC CONTROL AND PROTECTION STAGE CONSTRUCTION, are in place.

# **DETOUR SIGNING**

This item of work shall consist of installation, maintenance, and removal of the truck detour in accordance with applicable portions of Section 701 of the Standard Specifications, the details shown in the plans, and as modified herein.

This shall include all signs and changeable message boards shown for each stage of the Truck Detour Route details. No additional compensation will be allowed for the changes required during transitions from one stage to the next.

All labor, equipment and materials required to complete this item as specified herein will be paid for at the contract lump sum price for DETOUR SIGNING.

#### WIRELESS LIGHTED PEDESTRIAN CROSSING SYSTEM

This item of work shall consist of furnishing and installing a wireless, push button activated, solar powered, school crossing blinker sign system in accordance with applicable portions of Section 720 of the Standard Specifications and as modified herein.

The sign system shall be the wireless, push button activated, solar powered, school crossing blinker sign system (SZ4009) by School Zone Safety Supply, LLC., or an approved equal.

All labor, equipment and materials required to complete this item as specified herein will be paid for at the contract lump sum price for WIRELESS LIGHTED PEDESTRIAN CROSSING SYSTEM.

# **CHANGEABLE MESSAGE SIGN**

Effective December 1, 1999;

Revised August 7, 2008

In addition to any changeable message signs shown in the truck route detour plans and the traffic control standards, the Contractor shall furnish four (4) Changeable Message Signs for this project. The signs shall be operational two weeks prior to any lane closure and shall be located as directed by the Engineer. Any relocation of the signs directed by the Engineer during construction will not be paid for separately, but shall be included in the cost of the Changeable Message Sign.

# **URETHANE PAVEMENT MARKING**

<u>Description</u>: This work shall consist of furnishing and applying a reflectorized modified urethane, plural component, durable liquid pavement marking lines, sizes and colors as shown on the plans.

Materials: All materials shall meet the following specifications:

- (a) Modified Urethane Marking: The modified urethane pavement marking material shall consist of a homogeneous blend of modified urethane resins and pigments designed to provide a simple volumetric mixing ratio of two components (must be two volumes of Part A to one volume of Part B). No volatile solvent or fillers will be allowed.
- (b) Pigmentation: The pigment content by weight 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 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 when handled according to manufacturer specifications. The modified urethane pavement marking material compositions shall not contain free isocyanate functionality.

(d) Daylight Reflectance: The daylight directional reflectance of the cured modified urethane 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 degree 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 modified urethane shall visually match Color Number 33538 of Federal Standard 595a with chromaticity limits as follows:

Х	0.490	0.475	0.485	0.539
У	0.470	0.438	0.425	0.456

(e) Weathering Resistance: The modified urethane, when mixed in the proper ratio and applied at 0.35 to 0.41 mm (14 to 16 mils) 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 50 °C (122 °F) and four hours of condensation at 40 °C (104 °F). 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) Drying Time: The modified urethane material, when mixed in the proper ratio and applied at 0.35 to 0.41 mm (14 to 16 mils) wet film thickness and with the proper saturation of glass spheres, shall exhibit a no-tracking time of three minutes or less when tested according to ASTM D 711.
- (g) Adhesion: The catalyzed modified urethane pavement marking materials when applied to a 100 x 100 x 50 mm (4 x 4 x2 in) 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 24,100 kPa (3,500 psi). A 50 mm (2 inch) square film of the mixed modified urethane shall be applied to the brushed surface and allowed to cure for 72 hours at room temperature. A 50 mm (2 inch) square cube shall be affixed to the surface of the modified urethane by means of an epoxy glue. After the glue has cured for 24 hours, the modified urethane 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 50 mm (2 inch) cube (glued to the modified urethane surface) is attached to the dynamometer head. Direct upward pressure shall be slowly applied until the modified urethane system fails. The location of the break and the amount of concrete failure shall be recorded.

- (h) Hardness: The modified urethane marking materials, when tested according to ASTM D-2240, shall have a Shore D Hardness greater than 75. Films shall be cast on a rigid substrate at 0.35 to 0.41 mm (14 to 16 mils) in thickness and allowed to cure at room temperature for 72 hours before testing.
- (i) Abrasion: The abrasion resistance shall be evaluated on a Taber Abrader with a 1,000 gram load and CS-17 wheels. The duration of test shall be 1,000 cycles.

The wear index shall be calculated based on ASTM test method D-4060 and the wear index for the catalyzed material shall not be more than 80. The tests shall be run on cured samples of modified urethane material which have been applied at a film thickness of 0.35 to 0.41 (14 to 16 mils) 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) Tensile: When tested according to ASTM D-638, the modified urethane pavement marking materials shall have an average tensile strength of not less than 6,000 pounds per square inch. The Type IV Specimens shall be pulled at a rate of ½" per minute by a suitable dynamic testing machine. The samples shall be allowed to cure at 75 °F± 2°F for a minimum of 24 hours and a maximum of 72 hours prior to performing the indicated tests.
- (k) Compressive Strength: When tested according to ASTM D-695, the catalyzed modified urethane pavement marking materials shall have a compressive strength of not less than 12,000 pounds per square inch. The cast sample shall be conditioned at 75°F± 2°F for a minimum of 72 hours before performing the indicated tests. The rate of compression of these samples shall be no more than ½" per minute.
- (I) Glass Spheres: The glass spheres shall meet the requirements of Article 1095.04(m) and Article 1095.07 of the Standard Specifications for first drop and second drop glass beads.
- (m) 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.
- (n) Prior to approval and use of the modified urethane 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 modified urethane and date of manufacture. The certification shall be accompanied by one half-liter (one-pint) 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 modified urethane 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.

- (o) Acceptance samples shall consist of one half-liter (one-pint) 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 shall be taken by a representative of the Illinois Department of Transportation. The modified urethane pavement marking materials shall not be used until tests are completed and they have met the requirements as set forth herein.
- (p) The manufacturer shall retain the test sample for a minimum of 18 months.

## APPLICATION EQUIPMENT

The modified urethane pavement marking compounds shall be applied through equipment specifically designed to precisely meter the two components in the ratio of 2:1 and approved by the manufacturer of the material. This equipment shall produce the required amount of heat at the mixing head and gun tip and maintain those temperatures within the tolerances specified. 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 the marking application.

The equipment shall be capable of spraying both yellow and white urethane, 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 urethane tanks each of 415 L (110 gal) minimum capacity and shall be equipped with hydraulic systems. 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 glass beads by the double drop pressurized bead system. The system shall apply both the first drop glass beads and the second drop glass beads at a rate of 1.2 kg per L (10 lb/gal). The equipment shall be equipped with pressure gauges for each proportioning pump. All guns shall be in full view of operators 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 urethane application techniques. Certification of equipment shall be provided at the preconstruction conference.

## **APPLICATION**

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. New PCC pavements shall be blast-cleaned to remove all curing compounds.

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. Existing pavement markings shall be at least 90 percent removed. No markings shall be applied until the Engineer approves the cleaning.

Widths, lengths and shapes of the cleaned surface shall be prepared wider than the modified urethane pavement marking material to be applied, such that a prepared area is on all sides of the urethane pavement marking material after application.

New asphalt concrete and seal coated surfaces shall be in place a minimum of two weeks prior to marking applications.

The cleaning operation shall be a continuous moving operation process with minimum interruption to traffic.

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 20 mils in accordance with the manufacturer's installation instructions and at the widths and patterns shown on the contract plans.

The application 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 shall be 40 ° F and rising and the ambient temperature shall be 35° F and rising. The pavement surface temperature and the ambient temperatures shall be determined and documented before the start of each of marking operation. 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 curing periods. The Engineer shall determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

Unless directed by the Engineer, lines shall not be laid directly over a longitudinal crack or joint. The edge of the center line or lane line shall be offset a minimum distance of 50 mm (2 inches) from a longitudinal crack or joint. Edge lines shall be approximately 50 mm (2 inches) from the edge of pavement. The finished center and lane lines shall be straight, with the lateral deviation of any 3 meter (10-foot) line not to exceed 25 mm (1 inch).

## Notification:

The Contractor shall notify the Engineer 72 hours prior to the placement of the markings in order that an inspector can be present during the operation. At the time of this notification, the Contractor shall indicate the manufacturer and lot numbers of urethane and reflective media that he intends to use. The Engineer will ensure that the approved lot numbers appear on the material package. Failure to comply with this provision may be cause for rejection.

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.

# Inspection:

The urethane pavement markings will be inspected following installation, but no later than December 15, and inspected following a winter performance period that extends 180 days from December 15 in accordance with the provisions of Article 780.10 of the Standard Specification for Road and Bridge Construction.

#### Method of Measurement:

The lines will be measured for payment in meter of urethane pavement marking lines applied and accepted, measured in place. Double yellow lines will be measured as two separate lines. Words and symbols shall conform to the size and dimensions specified in the Manual on Uniform Traffic Control Devices and Standard 780001 and will be measured based on total areas indicated in table 1 or as specified in the plans.

# Basis of Payment:

This work will be paid for at the contract unit prices per meter of applied line for URETHANE PAVEMENT MARKING - LINE of the size specified or per square meter URETHANE PAVEMENT MARKING – LETTERS AND SYMBOLS measured as specified herein.

# LIGHT POLE FOUNDATION, 750MM DIAMETER, SPECIAL

This work shall be in accordance with the applicable portions of Section 836 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

A template for the anchor bolt circle will be provided by the Engineer.

All labor, equipment and materials required to complete this item as specified herein, including excavation, formwork, Class SI concrete, reinforcement bars, anchor bolts, grounding rods, etc. will be paid for at the contract unit price per meter for LIGHT POLE FOUNDATION, 750MM DIAMETER, SPECIAL.

# LIGHT POLE FOUNDATION, 750MM DIAMETER, SPECIAL (MODIFIED)

This work shall be in accordance with the applicable portions of Section 836 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

A template for the anchor bolt circle will be provided by the Engineer.

All labor, equipment and materials required to complete this item as specified herein, including excavation, formwork, Class SI concrete, reinforcement bars, anchor bolts, grounding rods, etc. will be paid for at the contract unit price per meter for LIGHT POLE FOUNDATION, 750MM DIAMETER, SPECIAL (MODIFIED).

# LIGHT POLE FOUNDATION, SPECIAL

This item of work shall include constructing a modified section of the concrete barrier wall at the location shown in the plans to allow for mounting of a light pole to be installed by others. The construction shall be in accordance with applicable portions of Sections 637 and 836 and the details shown in the plans.

A template for the anchor bolt circle will be provided by the Engineer.

All labor, equipment and materials required to complete this item as specified herein, including excavation, formwork, Class SI concrete, reinforcement bars, anchor bolts, grounding rods, etc. will be paid for at the contract unit price per each for LIGHT POLE FOUNDATION, SPECIAL.

# CONDUIT, PULLED, COILABLE NON- METALLIC CONDUIT, 50MM

This work shall be in accordance with the applicable portions of Section 810 of the Standard Specifications, as shown in the plans, or as directed by the Engineer and as modified herein.

This work shall involve the installation of conduit inside a steel casing. The contractor shall take precautions to prevent abrasion of the conduit during installation.

The length of conduit measured for payment shall be equal to the length of the casing.

All labor, equipment and materials required to complete this item as specified herein, will be paid for at the contract unit price per meter for CONDUIT, PULLED, COILABLE NON-METALLIC CONDUIT, 50MM.

#### MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

Revise Articles 850.02 and 850.03 of the Standard Specifications to read:

# Procedure

Existing traffic signal installations and/or any electrical facilities at all or various locations may be altered or reconstructed totally or partially as part of the work on this Contract. The Contractor is hereby advised that all traffic control equipment, presently installed at these locations, may be the property of the State of Illinois, Department of Transportation, Division of Highways, County, Private Developer, or the Municipality in which they are located. Once the Contractor has begun any work on any portion of the project, all traffic signals within the limits of this contract or those which have the item "Maintenance of Existing Traffic Signal Installation," "Temporary Traffic Signal Installation(s)" and/or "Maintenance of Existing Flashing Beacon Installation," shall become the full responsibility of the Contractor. Automatic Traffic Enforcement equipment is not owned by the State and the Contractor shall not be responsible for maintaining it during construction. The Contractor shall supply the Engineer a 24-hour emergency contact name and telephone number.

When the project has a pay item for "Maintenance of Existing Traffic Signal Installation," "Temporary Traffic Signal Installation(s)" and/or "Maintenance of Existing Flashing Beacon Installation," the Contractor must notify the Traffic Signal Section at (815) 434-8506 of their intent to begin any physical construction work on the Contract or any portion thereof. This notification must be made a minimum of seven (7) working days prior to the start of construction to allow sufficient time for inspection of the existing traffic signal installation(s) and transfer of maintenance to the Contractor. If work is started prior to an inspection, maintenance of the traffic signal installation(s) will be transferred to the Contractor without an inspection. The Contractor will become responsible for repairing or replacing all equipment that is not operating properly or is damaged at no cost to the owner of the traffic signal. Final repairs or replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection otherwise the traffic signal installation will not be accepted.

The Contractor is advised that the existing and/or temporary traffic signal installation must remain in operation during all construction stages, except for the most essential down time. Any shutdown of the traffic signal installation, which exceeds fifteen (15) minutes, must have prior approval of the Engineer. Approval to shutdown the traffic signal installation will only be granted during the period extending from 10:00 a.m. to 3:00 p.m. on weekdays. Shutdowns shall not be allowed during inclement weather or holiday periods.

The Contractor shall be fully responsible for the safe and efficient operation of the traffic signals. Any inquiry, complaint or request by the Department, the Department's Traffic Signal Section, or the public, shall be investigated and repairs begun within one hour. Failure to provide this service will result in liquidated damages of \$500 per day per occurrence. In addition, the Department reserves the right to assign any work not completed within this timeframe to an outside contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor.

Failure to pay these costs within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. The District's Traffic Signal Section may inspect any signalizing device on the Department's highway system at any time without notification.

Any proposed activity in the vicinity of a highway-rail grade crossing must adhere to the guidelines set forth in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) regarding work in temporary traffic control zones in the vicinity of highway-rail grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.

Full maintenance responsibility shall start as soon as the Contractor begins any physical work on the contract or any portion thereof.

The Contractor shall have electricians with IMSA Level II certification on staff to provide signal maintenance.

This item shall include maintenance of all traffic signal equipment at the intersection, including emergency vehicle pre-emption equipment, master controllers, uninterruptible power supply (UPS and batteries), telephone service installations, communication cables, conduits to adjacent intersections, and other traffic signal equipment, but shall not include Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, or peripheral equipment, not owned by the State.

# Maintenance

The maintenance shall be according to MAINTENANCE AND RESPONSIBILITY in Division 800 of these specifications and the following:

The Contractor shall check all controllers every two (2) weeks, which will include visually inspecting all timing intervals, relays, detectors, and pre-emption equipment to ensure that they are functioning properly. This item includes, as routine maintenance, all portions of emergency vehicle pre-emption equipment. The Contractor shall maintain in stock at all times a sufficient amount of materials and equipment to provide effective temporary and permanent repairs.

The Contractor shall provide immediate corrective action when any part or parts of the system fail to function properly. Two far side heads facing each approach shall be considered the minimum acceptable signal operation pending permanent repairs. When repairs at a signalized intersection require that the controller be disconnected or otherwise removed from normal operation, and power is available, the Contractor shall place the traffic signal installation on flashing operation. The signals shall flash RED for all directions unless a different indication has been specified by the Engineer. The Contractor shall be required to place stop signs (R1-1-36) at each approach of the intersection as a temporary means of regulating traffic. When the signals operate in flash, the Contractor shall furnish and equip all their vehicles assigned to the maintenance of traffic signal installations with a sufficient number of stop signs as specified herein. The Contractor shall maintain a sufficient number of spare stop signs in stock at all times to replace stop signs which may be damaged or stolen.

The Contractor shall provide the Engineer with a 24 hour telephone number for the maintenance of the traffic signal installation and for emergency calls by the Engineer.

Traffic signal equipment which is lost or not returned to the Department for any reason shall be replaced with new equipment meeting the requirements of the Standard Specifications and these special provisions.

The Contractor shall respond to all emergency calls from the Department or others within one hour after notification and provide immediate corrective action. When equipment has been damaged or becomes faulty beyond repair, the Contractor shall replace it with new and identical equipment. The cost of furnishing and installing the replaced equipment shall be borne by the Contractor at no additional charge to the contract. The Contractor may institute action to recover damages from a responsible third party. If at any time the Contractor fails to perform all work as specified herein to keep the traffic signal installation in proper operating condition or if the Engineer cannot contact the Contractor's designated personnel, the Engineer shall have an outside contractor perform the maintenance work required. The outside contractor shall bill the Contractor for the total cost of the work. The Contractor shall pay this bill within thirty (30) days of the date of receipt of the invoice or the cost of such work will be deducted from the amount due the Contractor. The Contractor shall allow the outside contractor to make reviews of the Existing Traffic Signal Installation that has been transferred to the Contractor for Maintenance.

## MASTER CONTROLLER

This work shall include furnishing and installing a Master Controller at the following locations:

- IL Route 47 at Van Emmon Street
- IL Route 47 at US Route 34

In addition to the controller requirements as specified above, the following shall apply:

- The controllers shall be ASC 3-2100 Econolite controllers with EDI-MMU and LS-200 load switch, and ASC 2M-1000 master controllers with GPS Time Sync (RTC-TR-3) in order to be compatible with the City of Yorkville's existing system. No other controllers shall be accepted. The controllers and cabinets shall be purchased no more than four months prior to installation to ensure the latest technology is used.
- A new laptop computer shall be provided.
- A fiber optic tester unit shall be provided.
- The minimum computer specifications shall be as follows:
  - Most current technology tough book with largest available screen
  - Tripp Lite Isotel 6 Ultra Surge Protector
  - Documentation
  - The required cables compatible with proposed controllers and master software shall be installed and tested before acceptance of the computer.
  - Water-Resistant/Waterproof Case
  - Battery Charger
  - Most Current Synchro Software

- o CD/DVD Burner
- o Built-In 9-Pin Serial Port

The Contractor shall supply three (3) copies of the most current Aries Software, as well as two (2) manuals. Three (3) days of training by a factory representative on the software will be provided for up to fifteen (15) people. A five (5) year software maintenance and update agreement shall also be included. The Contractor shall provide two (2) licenses for the most current Synchro software.

Telephone service shall be installed at both Master Controller locations in accordance with Article 860.03 of the Standard Specifications.

Each Master Controller shall also be provided with Time Synchronization (GPS) Devices and Malfunction Management Units (MMU).

This work shall be paid for at the contract unit price per each for MASTER CONTROLLER, which shall include all labor, equipment, and materials to provide the items as specified herein, and which shall also include the fiber optic and signal controller.

# UNINTERRUPTIBLE POWER SUPPLY, EXTENDED

Add the following to Article 862.01 of the Standard Specifications:

The UPS shall have the power capacity to provide normal operation of a signalized intersection that utilizes all LED type signal head optics, for a minimum of six hours.

Add the following to Article 862.02 of the Standard Specifications:

Materials shall be according to Article 1074.04 as modified in UNINTERRUPTIBLE POWER SUPPLY in Division 1000 of these specifications.

Add the following to Article 862.03 of the Standard Specifications:

The UPS shall provide reliable emergency power to the traffic signals in the event of a power failure or interruption.

The UPS shall be provided with a minimum three (3) year warranty.

Revise Article 862.04 of the Standard Specifications to read:

#### Installation

When a UPS is installed at an existing traffic signal cabinet, the UPS cabinet shall partially rest on the lip of the existing controller cabinet foundation and be secured to the existing controller cabinet by means of at least four (4) stainless steel bolts. The UPS cabinet shall be completely enclosed with the bottom and back constructed of the same material as the cabinet.

When a UPS is installed at a new signal cabinet and foundation, it shall be mounted as shown on the plans.

At locations where UPS is installed and Emergency Vehicle Priority System is in use, any existing incandescent confirmation beacons shall be replaced with LED lamps in accordance with the District Three Emergency Vehicle Priority System specification at no additional cost to the contract.

Revise Article 862.05 of the Standard Specifications to read:

# **Basis of Payment**

This work will be paid for at the contract unit price per each for UNINTERRUPTABLE POWER SUPPLY, EXTENDED. Replacement of Emergency Vehicle Priority System confirmation beacons shall be included in the cost of the UNINTERRUPTABLE POWER SUPPLY, EXTENDED item.

## MODIFY EXISTING CONTROLLER AND CABINET

This work shall be performed in accordance with Sections 857 863, 873, and 1073 of the Standard Specifications. It consists of the removal of a master controller and/or replacements of a full-actuated controller in an existing controller cabinet for proper signal and interconnection operation. The contractor shall deliver the removed controllers and peripheral equipment to the City of Yorkville, 610 Tower Lane, Yorkville, Illinois. Five copies of the revised wiring diagram shall be furnished to the City of Yorkville.

In addition to the requirements of Sections 857, 863, 873, and 1073 of the Standard Specifications, this pay item will include modifying the existing controller and cabinet for the proposed fiber optic interconnect, phasing, detector loops, preemption, and/or uninterruptible power supply as shown in the plans.

The Contractor shall update the software on the existing controllers to ensure compatibility with all other controllers on the proposed interconnect.

This work shall be performed at the below listed intersections:

- IL Route 47 at Saravanos Drive
- IL Route 47 at IL Route 71
- US Route 34 at Beecher Road
- US Route 34 at Isabel Drive
- US Route 34 at Cannonball Trail
- US Route 34 at Game Farm Road
- US Route 34 at Market Place Drive
- US Route 34 at McHugh Road
- US Route 34 at Countryside Parkway

Basis of Payment. This work will be paid for at the contract unit price each for MODIFY EXISTING CONTROLLER AND CABINET, which price shall be payment in full for the labor and parts to modify the controller and cabinet complete. The full-actuated controller and transceiver-fiber optic, where needed, will be paid for separately.

## **TEMPORARY TRAFFIC SIGNAL TIMING**

# Description:

This work shall consist of developing and maintaining appropriate traffic single timings for the following intersections for the duration of the temporary signalized condition, as well as impact to existing traffic signal timings caused by detours or other temporary conditions:

# System I

- IL Route 47 at Saravanos Drive
- IL Route 47 at IL Route 71
- IL Route 47 at Fountainview Drive

# System II

- IL Route 47 at IL Route 126
- IL Route 47 at Fox Street
- IL Route 47 at Van Emmon Street

## System III

- IL Route 47 at Somonauk Street
- IL Route 47 at Landmark Avenue
- IL Route 47 at US Route 34
- IL Route 47 at Countryside Parkway
- IL Route 47 at Kennedy Road

All timings and adjustments necessary for this work shall be performed by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems.

The following tasks are associated with TEMPORARY TRAFFIC SIGNAL TIMINGS:

- a. Consultant shall attend temporary traffic signal inspection (turn-on) and/or detour meeting and conduct on-site implementation of the traffic signal timings. Make fineturning adjustments to the timings in the field to alleviate observed adverse operating conditions and to enhance operations.
- b. Consultant shall provide monthly observation of traffic signal operations in the field.
- c. Consultant shall provide on-site consultation and adjust timings as necessary for construction stage changes, temporary traffic signal phase changes, and any other conditions affecting timing and phasing, including lane closures, detours, and other construction activities.
- d. Consultant shall make timing adjustments and prepare comment responses.
- e. The following minimum warning times shall be coordinated with the railroad at the IL Route 47 and Van Emmon Street intersection, which will prepare plans for the new IL Route 47 layout with gates:
  - 1 second Delay
  - 1 second All Green
  - 4 seconds Yellow Clearance

- 2 seconds All Red Clearance
- 27 seconds Track Clear Green
- 35 seconds TOTAL

# Basis of Payment:

The work shall be paid for at the contract unit price per each for TEMPORARY TRAFFIC SIGNAL TIMING, which price shall be payment in full for performing all work described herein per intersection location.

## TEMPORARY TRAFFIC SIGNAL INTERCONNECT SYSTEM

The temporary traffic signals for this project shall be divided into two groups as follows:

# System I

- IL Route 47 at Saravanos Drive
- IL Route 47 at IL Route 71
- IL Route 47 at Fountainview Drive

# System II

- IL Route 47 at IL Route 126
- IL Route 47 at Fox Street
- IL Route 47 at Van Emmon Street

# System III

- IL Route 47 at Somonauk Street
- IL Route 47 at Landmark Avenue
- IL Route 47 at US Route 34
- IL Route 47 at Countryside Parkway
- IL Route 47 at Kennedy Road

The Master Controllers and the telephone lines shall be located at the intersections of IL Route 47/Saravanos Drive, IL Route 47/Fox Street, and IL Route 47/US Route 34. The Master Controller locations may be adjusted in the field as determined by the Engineer.

This work shall consist of furnishing, installing, testing, maintaining, and removing a temporary traffic signal interconnect system. All controller cabinet modifications and other modifications to the existing equipment that are required for the installation of the interconnect system shall be included in this item.

The temporary traffic signal interconnect system shall use the radio interconnect technology and shall be compatible with the existing Econolite closed loop system. The Contractor shall submit the marked-up traffic signal plans showing the locations of the radio transceivers, the antennas, and the installation details. This item shall include all materials, labor, and testing to provide an operational traffic signal interconnect system.

The radio interconnect system shall include the following components:

- Rack or Shelf Mounted RS-232 Frequency Hopping Spread Spectrum (FHSS) Radio
- b. Software for Radio Configuration (Configure Frequency and Hopping Patterns)
- c. Antennas (Omni Directional or Yagi Directional)

- d. Antenna Cables, LMR400, Low Loss. Max. 100-ft. from Controller Cabinet to antenna
- e. Brackets, Mounting Hardware, and Accessories required for installation
- f. RS232 data Cable for connection from the radio to the Local or Master Controller
- g. All radio modems shall be frequency hopping spread spectrum. FHSS provides increased performance, higher data security, and excellent interface rejection. Fifteen hopping patterns per band, 105 total user selectable. Hopping channels 50 to 112 and seven hopping bands user selectable. Data must be encrypted.
- h. Manufacturing of radio modems will be in the United States of America with 100% performance testing over operating temperatures of -40°C to +75°C (-40°F to +167°F).
- i. RF connector is to be Type N female for shelf-mount or SMA female for rack-mount.
- j. Diagnostic connector is to be separate standard DB9 for shelf-mount or 3-pin mini sub-D for rack mount.

This work shall be paid for at the contract unit price per each for TEMPORARY TRAFFIC SIGNAL INTERCONNECT – SYSTEM I, TEMPORARY TRAFFIC SIGNAL INTERCONNECT – SYSTEM II, and TEMPORARY TRAFFIC SIGNAL INTERCONNECT – SYSTEM III, which price shall be payment in full for furnishing, installing, testing, maintaining and removing the temporary traffic signal interconnect system and all appurtenances as described above.

# RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM / TEMPORARY RE-OPTIMIZATION OF EXISTING TRAFFIC SIGNAL SYSTEM

Effective April 1, 2003;

Revised January 1, 2007

This work shall consist of providing a revised Signal Coordination and Timing (SCAT) Report and implementing optimized timings to an existing previously optimized closed loop traffic signal system. This work is required due to the addition of a signalized intersection to an existing system or a modification of an existing signalized intersection, which affects the quality of an existing system's operation. MAINTENANCE OF THE SUBJECT INTERSECTION SHALL NOT BE ACCEPTED BY THE DEPARTMENT UNTIL THE RE-OPTIMIZED TIMINGS ARE IMPLEMENTED AND THE SIGNALS ARE FUNCTIONING TO THE SATISFACTION OF THE ENGINEER.

The traffic signal system to be re-optimized includes the following intersections:

- IL Route 47 (Bridge Street) at Saravanos Drive
- IL Route 47 (Bridge Street) at IL Route 71 (Stagecoach Trail)
- IL Route 47 (Bridge Street) at Fountainview Drive
- IL Route 47 (Bridge Street) at IL Route 126 (Schoolhouse Road)
- IL Route 47 (Bridge Street) at Fox Street
- IL Route 47 (Bridge Street) at Van Emmon Street
- IL Route 47 (Bridge Street) at Somonauk Street
- IL Route 47 (Bridge Street) at Landmark Avenue
- IL Route 47 (Bridge Street) at US Route 34 (Veterans Parkway)
- IL Route 47 (Bridge Street) at Countryside Parkway
- IL Route 47 (Bridge Street) at Kennedy Road
- IL Route 47 (Bridge Street) at Cannonball Trail
- US Route 34 (Veterans Parkway) at Beecher Road
- US Route 34 (Veterans Parkway) at Isabel Drive
- US Route 34 (Veterans Parkway) at Cannonball Trail

- US Route 34 (Veterans Parkway) at Game Farm Road
- US Route 34 (Veterans Parkway) at Center Parkway
- US Route 34 (Veterans Parkway) at Market Place
- US Route 34 (Veterans Parkway) at McHugh Road
- US Route 34 (Veterans Parkway) at Countryside Parkway

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

After the new signalized intersection is added or the existing signal is modified, the traffic signal system shall be re-optimized by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District 3 of the Illinois Department of Transportation. The Contractor shall contact the Area Traffic Signal Operations Engineer at 815-434-8505 for a listing of approved Consultants. Traffic signal system optimization work, including fine-tuning adjustments of the optimized system, shall follow the requirements stated in the most recent IDOT District 3 SCAT Guidelines, if available, except as note herein.

A listing of existing signal equipment, interconnect information and existing phasing/timing patterns may be obtained from the Department if available and as appropriate. The existing SCAT Report is available for review at the District Three office (if one exists) and if the Consultant provides blank rewritable compact disks, copies containing software runs for the existing optimized system and a timing database that includes intersection displays will be made for the Consultant. The Consultant shall consult with the Area Traffic Signal Operations Engineer prior to optimizing the system to determine if any extraordinary conditions exist that would affect traffic flows in the vicinity of the system; in which case, the Consultant may be instructed to wait until the conditions return to normal or to follow specific instructions regarding the re-optimization.

Appropriate signal timings shall be developed for the subject intersection and existing timings shall be utilized for the rest of the intersections in the system. Proposed signal timing plan for the new or modified intersection(s) shall be forwarded to IDOT for review prior to implementation. Consultant shall conduct on-site implementation of the timings at the turn-on and make fine-tuning adjustments to the timings of the subject intersection in the field to alleviate observed adverse operating conditions and to enhance operations.

Traffic counts shall be taken at the subject intersection after the traffic signals are approved for operation by the Area Traffic Signal Operations Engineer. Seven day/twenty-four hour automatic traffic recorder counts will be required and manual turning movement counts shall be conducted from 6:30 a.m. to 9:30 a.m., 11:00 a.m. to 1:00 p.m., and 3:30 p.m. to 6:30 p.m. on a typical weekday from midday Monday to midday Friday, and if necessary, on the weekend. Additional manual turning movement counts may be necessary if heavy traffic flows exist during off peak hours. The turning movement counts shall identify cars, and single-unit, multi-unit heavy vehicles, transit buses, and pedestrian/bicyclist movements.

As necessary, the intersections shall be re-addressed and all system detectors reassigned in the master controllers according to the current standard of District Three.

Traffic responsive program operation shall be evaluated to verify proper pattern selection and lack of oscillation and a report of the operation shall be provided to IDOT.

A Capacity Analysis shall be conducted at the subject intersection to determine its level of service and degree of saturation. Appropriate signal timings shall be developed for the subject intersection and existing timings shall be utilized for the rest of the intersections in the system with minor adjustments if necessary. Changes to the cycle lengths and offsets for the entire system may be required due to the addition/modification of the subject intersection. Both volume and occupancy shall be considered when developing the re-optimized timing program. Signal system optimization analyses shall be conducted utilizing PASSER II, TRANSYT 7F, SIGNAL 85, SYNCHRO 6.0 or other appropriate approved computer software.

The following traffic signal timings are required:

- a. Confirm that all signals have minimum 4 second yellow and 2 second red and check that the formula meets latest MUTCD edition.
- b. "Zero out" all density times.
- c. Confirm pedestrian times meet MUTCD latest edition (3.5 seconds).
- d. Confirm minimum green times are 6 seconds on left turn, 8 seconds on side streets, and 10 seconds on main street.
- e. Confirm all detection is "non-locking".
- f. The following minimum warning times shall be coordinated with the railroad at the IL Route 47 and Van Emmon Street intersection, which will prepare plans for the new IL Route 47 layout with gates:
  - 1 second Delay
  - 1 second All Green
  - 4 seconds Yellow Clearance
  - 2 seconds All Red Clearance
  - 27 seconds Track Clear Green
  - 35 seconds TOTAL

If the system is being re-optimized due to the addition of a signalized intersection, all the intersections shall be re-addressed according to the current standard of District Three. The proposed signal timing plan shall be forwarded to IDOT for review and approval seven days prior to the traffic signal turn on at the intersection. The timing plan shall be implemented at least two working days prior to the turn on of the traffic signal. The timing plan shall include a traffic responsive program and a time-of-day program, which may be used as a back-up system. After downloading the system timings, the Consultant shall make fine turning adjustments to the timing in the field to alleviate observed operating conditions and to enhance operations. The timing plans shall be re-evaluated after the signal has been turned on and traffic has had an opportunity to adjust to the new signal. Any necessary timing changes shall be made at that time with the approval of the Area Signal Engineer.

The following deliverables shall be required:

 Consultant shall furnish to IDOT a cover letter describing the extent of the reoptimization work performed.

- Consultant shall furnish an updated intersection graphic display for the subject intersection to IDOT and to IDOT's Traffic Signal Maintenance Contractor.
- Consultant shall furnish to IDOT one (1) copy of a technical memorandum for the optimized system. The technical memorandum shall include the following elements:
  - (1) Brief description of the project.
  - (2) Printed copies of the analysis output from Synchro (or other appropriate, approved optimization software file).
  - (3) Turning movement and automatic traffic recorder counts, capacity analyses for each count period, computer optimization analyses for each count period, proposed implementation plans and summaries including system description, analysis methodology, method of effectiveness comparison results and special recommendations and/or observations. The new report shall follow the format of the old report and shall incorporate all data from the old report which remains unchanged. Copies of the entire database including intersection displays and any other displays which the system software allows shall be furnished to the Department and to the Department's Traffic Signal Maintenance Contractor.
- Consultant shall furnish to IDOT two (2) CDs for the optimized system. The CDs shall include the following elements:
  - (1) Electronic copy of the technical memorandum in PDF format.
  - (2) Revised Synchro files (or other appropriate, approved optimization software file) including the new signal and the rest of the signals in the closed loop system.
  - (3) Traffic counts conducted at the subject intersection.
  - (4) New or updated intersection graphic display file for the subject intersection.
  - (5) The CD shall be labeled with the IDOT system number and master locations, as well as the submittal date and the consultant logo. The CD case shall include a clearly readable label displaying the same information securely affixed to the side and front.

Basis of Payment: This work will be paid for at the contract unit price per lump sum for RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, and TEMPORARY RE-OPTIMIZATION OF EXISTING TRAFFIC SIGNAL SYSTEM.

# SERVICE INSTALLATION, GROUND MOUNTED

Effective August 15, 2005;

Revised January 1, 2007

In addition to the requirements of Section 805 of the Standard Specifications the following shall apply:

Description: This work shall install, modify, or extend the electric service installation. All installations shall meet the requirements of the details included on the plans and applicable portions of these specifications.

Materials.

General. The completed control panel shall be constructed in accordance with UL Std. 508, Industrial Control Panel, and carry the UL label. Wire terminations shall be UL listed.

- a. Enclosures: Ground Mounted Cabinet. The cabinet shall be UL 50, NEMA Type 3R unfinished signal door design with back panel. The cabinet shall be fabricated from Type 5052 H-32 aluminum with the frame and door 0.125 inch thick, the top 0.250 inch thick and the bottom 0.500 inch thick. Seams shall be continuous welded and ground smooth. The door and door opening shall be double flanged. The door shall be approximately 80% of the front surface, with a full length tamper proof stainless steel .075 inch thick hinge bolted to the cabinet with stainless steel carriage bolts and nylock nuts. The locking mechanism shall be slam-latch type with a keyhole cover. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 40 inches high, 16 inches wide, and 15 inches in depth is required. The cabinet shall be mounted upon a square Type A concrete foundation as indicated on the plans. The foundation is paid for separately.
- b. Surge Protector. Over voltage protection, with LED indicator, shall be provided for the 120 volt load circuit by means of MOV and thermal fusing technology. The response time shall be <5n seconds and operate within a range of -40° F to 185° F (-40° C to 85° C). The surge protector shall be UL 1449 Listed.
- c. Circuit Breakers. Circuit breakers shall be standard UL listed molded case, thermal-magnetic bolt-on type circuit breakers with trip free indicating handles. 120 volt circuit breakers shall have an interrupting rating of not less than 65,000 rms symmetrical amperes. Unless otherwise indicated, the main disconnect circuit breaker for the traffic signal controller shall be rated 60 amperes. Unless otherwise noted on the plans, 120 V and the auxiliary circuit breakers shall be rated 10 amperes, 120 V.
- d. Fuses. Fuseholders, and Power Indicating Light. Fuses shall be small-dimensional cylindrical fuses of the dual element time-delay type. The fuses shall be rated for 600 V AC and shall have a UL listed interrupting rating of not less than 10,000 rms symmetrical amperes at rated voltage. The power indicating light shall be LED type with a green colored lens and shall be energized when electric utility power is present.
- e. Ground and Neutral Bus Bars. A single copper ground and neutral bus bar, mounted on the equipment panel, shall be provided. Ground and neutral conductors shall be separated on the bus bar. Compression lugs, plus 2 spare lugs, shall be sized to accommodate the cables with the heads of the connector screws painted green for ground connections and white for neutral connections.
- f. Utility Services Connections. The Contractor shall contact the utility company, prior to beginning work, to determine the utility company regulations relating to electrical service. The Contractor shall provide the utility company an estimated date that the service connection will be required, the agency which will be responsible for monthly service changes, and the connected load for flat rate billing if required. The customer service agreement with the utility company shall be executed by the agency responsible for monthly service charges.

All information furnished to the utility company shall be in writing with a copy provided to the Engineer. Prior to contacting the Utility Company for service connection, the service installation controller cabinet and cable must be installed for inspection by the Utility Company.

During the interim between the service activation date and the signal turn on day, all energy charges for the intersection shall be paid by the Contractor according to Article 109.05 of the Standard Specifications. Beginning the day of the traffic signal turn on, all energy charges for the intersection will be paid by the responsible agency listed in the plans. The Contractor is responsible for making arrangements with the responsible agency to transfer billing to the responsible agency.

g. Ground Rod. Ground rods shall be copper-clad steel, a minimum of 10' in length, and 0.75 inch in diameter. Ground rod resistance measurements to ground shall be 25 ohms or less. If necessary, additional rods shall be installed to meet resistance requirements at no additional cost.

#### Installation.

- a. General. The Contractor shall confirm the orientation of the traffic service installation and its door side with the Engineer, prior to installation. All conduit entrances into the service installation shall be sealed with a pliable waterproof material.
- b. Ground mounted. The service installation shall be mounted plumb and level on the foundation and fastened to the anchor bolts with hot-dipped galvanized or stainless steel nuts and washers. The space between the bottom of the enclosure and top of the foundation shall be caulked at the base with silicone.

Basis of Payment. The service installation will be paid for at the contract unit price per each for SERVICE INSTALLATION – GROUND MOUNTED. The Type A foundation which includes the ground rod will be paid for separately.

# INDUCTIVE LOOP DETECTOR

Effective January 1, 2002;

Revised January 1, 2007

Inductive loop detectors shall meet the requirements of Sections 885 and 1079 of the Standard Specifications with the following modifications:

Each inductive loop detector amplifier shall be rack mounted. Each inductive loop detector amplifier channel shall have a minimum of:

- 8 sensitivity settings
- LCD program menu
- Detector logs and displays number of loop failure incidents since last reset
- Internal function to determine the ideal sensitivity setting for every loop system
- 8 frequency settings
- 32 second call extend timer
- 32 second delay timer
- Call extend and delay timers able to operate cooperatively
- LED indication for detection

The detector supplied shall be the Reno Model C1200R Revision 34 or greater single channel detector. An upgraded model of Reno detector may be substituted if the C1200R is not the current model.

The Contractor shall label each amplifier for the loop and movement where they provide input according to the chart in the plans.

Basis of Payment. This item will be paid for according to Article 885.04 of the Standard Specifications.

# **CONDUIT PUSHED**

Effective April 1, 2003;

Revised January 1, 2007

Description: This work shall consist of furnishing and installing pushed conduit according to Section 810 of the Standard Specifications except as modified below.

Materials: The conduit shall be according to Article 810.02(a) or 810.02(b) of the Standard Specifications except that the rigid nonmetallic conduit shall be Schedule 80.

Construction Requirements: The tunnel created for the pushed conduit shall not be significantly larger than the conduit being pushed to prevent undue settling. No tunnel shall be left for more than two hours without conduit filling it.

# FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL / FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL

Effective January 1, 2002;

Revised January 1, 2007

Full Actuated Controller and Type IV Cabinet, Special and Full-Actuated Controller and Type V Cabinet, Special shall meet the requirements of Sections 857, 1073 and 1074 of the Standard Specifications with the following modifications.

This item requires that a factory representative capable of ensuring that the controller and cabinet are operating to the satisfaction of the Engineer shall be present at the turn on of the controller and shall remain until the intersection is operating to the satisfaction of the Engineer. Should a defect appear in the controller or cabinet operation, the representative shall return as often as necessary until all defects are repaired.

At the preconstruction meeting, the Contractor shall provide the names and phone numbers of two technicians who would be able to respond to controller malfunctions that occur within the 30 day acceptance period after the controller is turned on. If neither person can be reached at the time of the malfunction nor be at the location within two hours of receiving the call, any available electrician capable of evaluating and correcting the malfunction may be called at the State's discretion. Any and all bills resulting from defective operation of the controller or cabinet shall be the responsibility of the Contractor.

#### CONTROLLER:

The controller shall be capable of uploading and downloading its database to a laptop computer that has been installed with the proper software. All uploaded data shall be able to be changed within the laptop and then downloaded to the controller. The necessary cables for upload/download shall be provided and upload/download software shall be provided and installed onto the District Three laptop computer if the software and cables have not already been supplied to District Three or the software presently being used by District Three requires updating.

The controllers shall be ASC 3-2100 Econolite controllers with EDI-MMU and LS-200 load switch in order to be compatible with the City of Yorkville's existing system. No other controllers shall be accepted. The controllers and cabinets shall be purchased no more than four months prior to installation to ensure the latest technology is used.

The controller data entry fields shall have a clear distinction between data fields and information. Data fields shall be in matrix format with a minimum of eight phases wide and four date lines deep.

The active status screen shall display the following information for all operating phases in an alpha-numeric display.

A clear distinction between the following detection's for each phase: vehicle recall, vehicle detection, pedestrian recall, and pedestrian detection.

A clear distinction among the phases receiving detection.

Status displayed simultaneously whenever one or more of the following is operating: vehicle passage timer, maximum phase timer, added initial timer, time before reduction timer, time to reduce timer, existing gap timer, walk timer, don't walk timer.

When a phase ends, the controller shall report whether the exit was a max out, gap out or force out condition. The controller shall show the yellow and red timers timing and any trailing overlap timers timing.

The color of all operating overlaps.

The phase of the controller shall be as shown in the plans.

# **CONTROLLER CABINET**

The police door compartment shall contain a manual control cord from which the signals may be operated manually. The inside door toggle switches shall be protected from accidental contact by vertical metal slats. The slats shall extend beyond the switches, in a manner similar to the terminals on the back panel. A plastic plans holder shall be installed on the cabinet door. The holder shall be at least 11 inches high and 17 inches wide, shall open from the side, and shall not interfere with the filter. The holder shall have a means of closing the side opening to prevent water from entering.

A Plexiglas cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power panel. The cover shall completely shield the service wires, and circuit breaker wires from accidental contact.

A Plexiglas cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power terminals for the thermostatically controlled exhaust fan. The thermostat shall be of the knob type capable of adjustment by hand and without tools. The thermostat and terminals shall be mounted on the left or right side of the controller cabinet.

All harness wiring of connectors A, B, C and D shall be factory installed so that an additional phase may be added to the existing phasing by the addition of a load switch and the proper conflict monitor card pinning.

A self adhering phasing diagram shall be placed on the inside of the cabinet door.

The cabinet shall be Super "P" Cabinet type.

Three 0.4 meter (15 inch) Velcro straps shall be fastened to the front of each cabinet shelf to secure the detector amplifier cables.

Traffic signal controller and the cabinet assembly shall be fully tested by the equipment supplier. Five (5) copies of the complete cabinet wiring showing all connections shall be furnished to the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL, and FULL-ACTUATED CONTROLLER AND TYPE V CABINET, SPECIAL.

#### CONCRETE HANDHOLE OR CONCRETE DOUBLE HANDHOLE

Effective December 1, 1999;

Revised January 1, 2007

Concrete Handhole and Concrete Double Handhole shall meet the requirements of Sections 814 and 1088 of the Standard Specifications with the following modifications:

The lift ring for the cover shall consist of a solid closed ring of stainless steel at least 0.375 inch (10 mm) in diameter. The lift ring shall be attached to the cover by a loop of stainless steel at least 0.375 inch (10 mm) in diameter. The lift ring and loop shall be recessed in the cover.

## LIGHT EMITTING DIODE (LED) SIGNAL HEAD (BDE)

Add the following paragraph to the end of Article 802.03 of the Standard Specifications:

"The warranty for light emitting diode (LED) modules, including the maintained minimum luminous intensities, shall cover a minimum of 60 months from the data of delivery."

Revise Article 880.01 of the Standard Specifications to read:

"880.01 Description. This work shall consist of furnishing and installing a conventional signal head, optically programmed signal head or light emitting diode (LED) signal head."

Revise Article 880.02(a) of the Standard Specifications to read:

"(a) Signal Heads 1078.01

Revise the first sentence of the first paragraph of Article 880.03 of the Standard Specifications to read:

"The signal head shall be installed on a post, bracket, span wire or mast arm as shown on the plans."

Revise the first paragraph of Article 880.04 of the Standard Specifications to read:

"880.04 Basis of Payment. This work will be paid for at the contract unit price each for SIGNAL HEAD, OPTICALLY PROGRAMMED SIGNAL HEAD, or SIGNAL HEAD, LED of the type specified and of the material type when specified,"

Revise Article 1078.01 of the Standard Specifications to read:

"1078.01 Signal Head, Optically Programmed Signal Head and Light Emitting Diode (LED) Signal Head."

Add the following to Article 1078.01 of the Standard Specifications:

- "(3) The LED signal section shall be according to the following:
  - a. General Requirements. The LED signal head shall meet the requirements of the Institute of Transportation Engineers (ITE) interim LED purchase specification, "Vehicle Traffic Control Signal Heads, Part 2: LED Vehicle Traffic Signal Modules," or applicable successor ITE specifications, except as modified herein. The LEDs utilized in the modules shall not be Aluminum Gallium Arsenide (AlGaAs) material technology.
  - b. Physical and Mechanical Requirements. The power supply for the LED module shall be integrated with the unit.
  - c. Photometric Requirements. The candlepower values for yellow 300mm (12 in) circular modules shall be equal to the corresponding values for green 300 mm (12 in.) circular modules as listed in Table 1 of Section 4 of the aforementioned ITE specification.

The illuminated portion of the arrow module shall be uniformly and completely dispersed with the LEDs.

d. Electrical Requirements. When applicable to the particular module type, the LED signal module shall be EPA Energy Star qualified. For yellow 300mm (12 in.) circular and arrow modules, the wattage requirements shall be as follows:

Module Type	Maximum Watts (W)	Nominal Watts (W)
	At 74°C (165°F)	At 25°C (77°F)
300 mm (12 in.) Yellow Circular	25	22
300 mm (12 in.) Yellow Arrow	12	10

The LED module shall provide the failed state impedance as specified in ITE, VTCSH, and Part 2.

e. Warranty. The LED modules shall be warranted according to Article 802.03. The maintained minimum intensities for 30 mm (12 in.) arrow modules throughout the warranty period under the operating temperature and voltage range and at the end of the warranty period shall not be less than the following values:

Module Type	Maintained Minimum Intensities (cd/sq m)	
Red Arrow	5,000	
Yellow Arrow	11,000	
Green Arrow	11,000	

## FIBER OPTIC CABLE IN CONDUIT

Revised January 1, 2007

This work shall be performed in accordance with Section 871 of the Standard Specifications with modifications per below.

Add the following paragraph to the end of Article 871.04 of the Standard Specifications:

"The trench carrying the fiber optic cable conduit between intersections shall be marked with a one-polymer warning stake placed equidistant between handholes. The warning stake shall be a solid orange color with a warning sign at the top of the stake. The stake shall have a sign at the top stating BURIED FIBER OPTIC CABLE ↔ CALL UNITED CITY OF YORKVILLE (630) 553-4350 BEFORE DIGGING. The sign shall have a nominal dimension of 14 inches (350 mm) by 3 inches (75 mm). The stake shall have a nominal dimension of 3 inches (75 mm) wide by 0.25 inch (6 mm) thick by 5.5 feet (1.67 m) long. Fifty percent of the stake length shall be buried leaving approximately 30 inches (760 mm) exposed above ground displaying the sign. The stake shall be of such design as to deflect upon impact by a vehicle and flex back to original position. The stake shall have a factory-attached anchor. The anchor shall catch soil around the stake and prevent unauthorized removal."

This work will not be paid for separately, but shall be included in the contract cost per meter for FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM 24F, SM 24F.

## **TRAINING**

Within 60 days, but not before 30 days after the signal system is fully operational and accepted by the Engineer, the Contractor shall provide training for up to 15 Department, City and County personnel for a minimum of four days. The training shall consist of detailed instructions on the operation and programming of the intersection controllers, master controller, video detection system and fiber optic cable. The instructors shall be qualified personnel and approved by the respective manufacturers. One set of manuals shall be furnished to each class participant. This is in addition to the documentation normally provided on this contract. It will be the responsibility of the contractor to provide the training site. Three follow-up days will also be required within two years for video camera adjustments.

Basis of Payment. This work will not be paid for separately, but shall be included in the unit price for intersection controller, master controller, video detection system and fiber optic cable respectively.

# LIGHTING CONTROLLER, SPECIAL

This work shall be in accordance with Section 825 and 1068 of the Standard Specifications. This pay item includes the lighting controller, cabinet, photocell, photocell relay, and all cable, conduit, materials, and hardware required to complete the installation in accordance with the Standard Specifications and as specified herein.

The photocell relay shall include a main breaker to facilitate power turn off at the cabinet. There shall be a minimum of one spare breaker in the cabinet.

The photocell relay shall be equipped with additional surge suppression for the control circuit (photocell, selector switch, and contractor). The additional surge suppressor shall meet or exceed the following minimum specifications:

Peak current (8x20us):	20,00 Amp
Occurrences:	20 times minimum @ peak current
Clamp Voltage:	340 volts @ 20kA (tested with MAIN NEUTRAL strapped to ground)
Response Time:	Voltage never exceeds 340 volts during the surge
Series Inductance:	200uh
Continuous Service Current:	10 Amps Max (120 VAC, 60 Hz)
Temperature Range:	-40°C to +85°C

A three-position manual control switch shall be included with positions marked HAND, OFF, AUTO on an engraved plastic cover plate. It shall include a lighting surge protector or expulsion gaps designed to bypass lighting surges.

The photocell shall have a hermetically sealed cadmium sulfide element arranged so that it can be adjusted to "turn on" at  $1.5\pm.5$  foot-candles. "Turn-off" shall occur only after the light level has exceeded "turn-on" value by two or more foot-candles for not less than .10 seconds. The circuitry shall include surge protection, turn the lights on in case of failure, operate on any input voltage from 105 to 260 volts, and control 10 amperes at 120 volts. The case shall be weatherproof, made of glass or plastic and designed to plug into a locking type socket, NEMA 3-pin.

Basis of Payment. This work will be paid at the contract unit price each for LIGHTING CONTROLLER, SPECIAL.

# ELECTRIC CABLE IN CONDUIT NO. 20, 3/C, TWISTED, SHIELDED

This item shall be provided in accordance with Section 817 of the Standard Specifications, and as directed by the Engineer.

<u>Basis of Payment:</u> This item shall be paid for at the contract unit price per meter for ELECTRIC CABLE IN CONDUIT NO. 20, 3/C, TWISTED, SHIELDED which price shall include payment in full for all labor, equipment, and materials necessary to perform the work as specified herein.

## FIBER OPTIC TRACER CABLE

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

Add the following to Article 817.03 of the Standard Specifications:

In order to trace the fiber optic cable after installation, the tracer cable shall be installed in the same conduit as the fiber optic cable in locations shown on the plans. The tracer cable shall be continuous, extended into the controller cabinet and terminated on a barrier type terminal strip mounted on the side wall of the controller cabinet. The barrier type terminal strip and tracer cable shall be clearly marked and identified.

All tracer cable splices shall be kept to a minimum and shall incorporate maximum lengths of cable supplied by the manufacturer. The tracer cable will be allowed to be spliced at handholes only. The tracer cable splice shall use a Western Union Splice soldered with resin core flux and shall be soldered using a soldering iron. Blow torches or other devices which oxidize copper cable shall not be allowed for soldering operations. All exposed surfaces of the solder shall be smooth. The splice shall be covered with a black shrink tube meeting UL 224 guidelines, Type V and rated 600v, minimum length 4 inches (100 mm) and with a minimum 1 inch (25 mm) coverage over the XLP insulation, underwater grade.

Add the following to Article 817.05 of the Standard Specifications:

Basis of Payment.

The tracer cable shall be paid for separately as ELECTRIC CABLE IN CONDUIT, TRACER, of the number and number of conductors specified, per foot (meter), which price shall include all associated labor and material for installation.

### **GROUNDING CABLE**

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

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

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

The traffic signal grounding conductor shall be bonded, using a Listed grounding connector (Burndy type KC/K2C, as applicable, or approved equal), to all proposed and existing traffic signal mast arm poles and traffic/pedestrian signal posts, including push button posts. The grounding conductor shall be bonded to all proposed and existing pull boxes, handhole frames and covers and other metallic enclosures throughout the traffic signal wiring system and noted herein and detailed on the plans. The grounding conductor shall be bonded to conduit terminations using rated grounding bushings. Bonding to existing handhole frames and covers shall be paid for separately.

Add the following to Article 817.05 of the Standard Specifications:

# Basis of Payment.

Grounding cable shall be measured in place for payment in foot (meter). Payment shall be at the contract unit price for ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 6, which price includes all associated labor and material including grounding clamps, splicing, exothermic welds, grounding connectors, conduit grounding bushings, and other hardware.

# **ELECTRIC CABLE IN CONDUIT, RAILROAD**

The cable shall meet the requirements of Section 873 of the Standard Specifications, except for the following:

Add to Article 873.02 of the Standard Specifications:

The railroad interconnect cable shall be three conductor stranded #14 copper cable in a clear polyester binder, shielded with #36 AWG tinned copper braid with 85% coverage, and insulated with .016" polyethylene (black, blue, red). The jacket shall be black 0.045 PVC or polyethylene.

Add the following to Article 873.05 of the Standard Specifications:

# Basis of Payment.

This work shall be paid for at the contract unit price per foot (meter) for ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C, which price shall be payment in full for furnishing, installing, and making all electrical connections in the traffic signal controller cabinet. Connections in the railroad controller cabinet shall be performed by railroad personnel.

#### **GROUNDING OF TRAFFIC SIGNAL SYSTEMS**

Revise Section 806 of the Standard Specifications to read:

## General.

All traffic signal systems, equipment and appurtenances shall be properly grounded in strict conformance with the NEC. See applicable Highway Standards for additional information.

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

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

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

- All metallic and non-metallic raceways containing traffic signal circuit runs shall have a
  continuous equipment grounding conductor, except raceways containing only detector
  loop lead-in circuits, circuits under 50 volts and/or fiber optic cable will not be required to
  include an equipment grounding conductor.
- 4. Individual conductor splices in handholes shall be soldered and sealed with heat shrink. When necessary to maintain effective equipment grounding, a full cable heat shrink shall be provided over individual conductor heat shrinks.
- (c) The grounding electrode conductor shall be similar to the equipment grounding conductor in color coding (green) and size. The grounding electrode conductor is used to connect the ground rod to the equipment grounding conductor and is bonded to ground rods via exothermic welding, listed pressure connectors, listed clamps or other approved listed means.

# PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED

Revise Article 881.01 of the Standard Specifications to read:

## Description.

This work shall consist of furnishing and installing a pedestrian signal head with light emitting diodes (LED) or pedestrian countdown signal head, with light emitting diodes (LED) of the type specified in the plans.

All pedestrian signals at an intersection shall be the same type and have the same display. No mixing of different types of pedestrian traffic signals or displays will be permitted.

Revise Article 881.02 of the Standard Specifications to read:

#### Materials.

Materials shall be according to SIGNAL HEAD, POLYCARBONATE, LED, and PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED WITH COUNT DOWN TIMER in Divisions 800 and 1000 of these specifications.

Add the following to Article 881.03 of the Standard Specifications:

- (a) Pedestrian Countdown Signal Heads.
  - (1) Pedestrian Countdown Signal Heads shall not be installed at signalized intersections where traffic signals and railroad warning devices are interconnected.
  - (2) Pedestrian Countdown Signal Heads shall be 16 inch (406mm) x 18 inch (457mm), for single units with the housings glossy black polycarbonate. Connecting hardware and mounting brackets shall be polycarbonate (black). A corrosion resistant antiseize lubricant shall be applied to all metallic mounting bracket joints, and shall be visible to the inspector at the signal turn-on.
  - (3) Each pedestrian signal LED module shall be fully MUTCD compliant and shall consist of double overlay message combining full LED symbols of an Upraised Hand and a Walking Person.

"Egg Crate" type sun shields are not permitted. Numerals shall measure 9 inches (229mm) in height and easily identified from a distance of 120 feet (36.6m).

(4) Each pedestrian signal LED module shall come with a minimum five (5) year warranty.

Revise Article 881.04 of the Standard Specifications to read:

## Basis of Payment.

This item shall be paid for at the contract unit price each for PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, or PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED WITH COUNT DOWN TIMER, of the type specified and of the particular kind of material when specified, which price shall be payment in full for furnishing the equipment described above including signal head with LED modules, all mounting hardware, and installing them in satisfactory operating condition. The type specified will indicate the number of faces and the method of mounting.

# STEEL MAST ARM ASSEMBLY AND POLE / STEEL COMBINATION MAST ARM ASSEMBLY AND POLE

Revise Article 877.01 of the Standard Specifications to read:

## Description.

This work shall consist of furnishing and installing a steel mast arm and assembly or steel combination mast arm assembly and a galvanized steel or extruded aluminum shroud for protection of the base plate.

Revise Article 877.03 of the Standard Specifications:

Mast arm assembly and pole shall be as follows.

- (a) Steel Mast Arm Assembly and Pole and Steel Combination Mast Arm Assembly and Pole. The steel mast arm assembly and pole and steel combination mast arm assembly and pole shall consist of a traffic signal mast arm, a luminaire mast arm or davit (for combination pole only), a pole, and a base, together with anchor rods and other appurtenances. The configuration of the mast arm assembly, pole, and base shall be according to the details shown on the plans.
  - (1) Loading. The mast arm assembly and pole, and combination mast arm assembly and pole shall be designed for the loading shown on the Highway Standards or elsewhere on the plans, whichever is greater. The design shall be according to AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 1994 Edition for 80 mph (130 km/hr) wind velocity. However, the arm-to-pole connection for tapered signal and luminaire arms shall be according to the "ring plate" detail as shown in Figure 11-1(f) of the 2002 Interim, to the AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 2001 4th Edition.

- (2) Structural Steel Grade. The mast arm and pole shall be fabricated according to ASTM A 595, Grade A or B, ASTM A 572 Grade 55, or ASTM A 1011 Grade 55 HSLAS Class 2. The base and flange plates shall be of structural steel according to AASHTO M 270 Grade 50 (M 270M Grade 345). Luminaire arms and trussed arms 15 ft (4.5 m) or less shall be fabricated from one steel pipe or tube size according to ASTM A 53 Grade B or ASTM A 500 Grade B or C. All mast arm assemblies, poles, and bases shall be galvanized according to AASHTO M 111.
- (3) Fabrication. The design and fabrication of the mast arm assembly, pole, and base shall be according to the requirements of the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals published by AASHTO. The mast arm and pole may be of single length or sectional design. If section design is used, the overlap shall be at least 150 percent of the maximum diameter of the overlapping section and shall be assembled in the factory.

The manufacturer will be allowed to slot the base plate in which other bolt circles may fit, providing that these slots do not offset the integrity of the pole. Circumferential welds of tapered arms and poles to base plates shall be full penetration welds.

- (4) Shop Drawing Approval. The Contractor shall submit detailed drawings showing design materials, thickness of sections, weld sizes, and anchor rods to the Engineer for approval prior to fabrication. These drawings shall be at least 11 x 17 in. (275 x 425 mm) in size and of adequate quality for microfilming.
- (b) Anchor Rods. The anchor rods shall be ASTM F 1554 Grade 105, coated by the hot-dip galvanizing process according to AASHTO M 232 and shall be threaded a minimum of 7 1/2 in. (185 mm) at one end and have a bend at the other end. T he first 12 in. (300 mm) at the threaded end shall be galvanized. Two nuts, one lock washer, and one flat washer shall be furnished with each anchor rod. All nuts and washers shall be galvanized.

#### **CONCRETE FOUNDATIONS**

Add the following to Article 878.03 of the Standard Specifications:

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

Concrete Foundations, Type "A" for Traffic Signal Posts shall provide anchor bolts with the bolt pattern specified within the "District One Standard Traffic Signal Design Details." All Type "A" foundations shall be a minimum depth of 48 inches (1220 mm).

Concrete Foundations, Type "C" (Special) for Traffic Signal Cabinets with Uninterruptible Power Supply (UPS) cabinet installations shall be a minimum of 72 inches (1830 mm) long and 31 inches (790 mm) wide. All Type "C" foundations shall be a minimum depth of 48 inches (1220 mm). Anchor bolts shall provide bolt spacing as required by the manufacturer. All concrete foundation dimensions and specifications shall conform to the Super "P" cabinet type.

Concrete Foundations, Type "D" for Traffic Signal Cabinets shall be a minimum of 48 inches (1220 mm) long and 31 inches (790 mm) wide.

All Type "D" foundations shall be a minimum depth of 48 inches (1220 mm). The concrete apron shall be 36 in. x 48 in. x 5 in. (910 mm X 1220 mm X 130 mm). Anchor bolts shall provide bolt spacing as required by the manufacturer.

Concrete Foundations, Type "E" for Mast Arm and Combination Mast Arm Poles shall meet the current requirements listed in the Highway Standards.

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

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

# RAILROAD, FULL-ACTUATED CONTROLLER AND CABINET

This special provision shall apply at the IL Route 47/Van Emmon Street intersection.

Controller shall comply with Article 1073.01 as amended in these Traffic Signal Special Provisions.

Controller Cabinet and Peripheral Equipment shall comply with Article 1074.03 as amended in these Traffic Signal Special Provisions.

Add the following to Articles 1073.01 (c) (2) and 1074.03 (a) (5) (e) of the Standard Specifications:

Controllers and cabinets shall be new and NEMA TS2 Type 1 design.

A method of monitoring and/or providing redundancy to the railroad preemptor input to the controller shall be included as a component of the Railroad, Full Actuated Controller and Cabinet installation and be verified by the traffic signal equipment supplier prior to installation.

Railroad interconnected controllers and cabinets shall be assembled only by an approved traffic signal equipment supplier. All railroad interconnected (including temporary railroad interconnect) controllers and cabinets shall be new, built, tested and approved by the controller equipment vendor, in the vendor's District Three facility, prior to field installation. The vendor shall provide the technical equipment and assistance as required by the Engineer to fully test this equipment. The above work and associated pay items shall be provided by the railroad agency, and are not included in the contract quantities.

#### PEDESTRIAN SIGNING FOR RAILROAD

This special provision shall apply at the IL Route 47/Van Emmon Street intersection.

This work shall be performed in accordance with applicable portions of Section 720 of the Standard Specifications and as specified herein.

Illinois Standard X10-I100 "Caution Walk Time Shortened When Train Approaches" sign panels shall be provided at each push-button location within the intersection.

A total of eight (8) sign panels shall be required. Orientation of sign shall be determined by the Engineer.

Dimensions of each sign shall be 450mm x 600mm. The Legend and Border shall be Non-Reflectorized Black. The Backgound shall be Reflectorized White and Yellow.

All mounting hardware shall be stainless steel construction. All mounting bolts shall be hex head.

All equipment, materials, and labor to provide the sign panels as specified herein shall be included in the contract cost per square meter for SIGN PANEL – TYPE 1.

#### PAINTING OF TRAFFIC SIGNALS AND SIGNAL EQUIPMENT

Black powder coat shall be applied to the traffic signal posts, traffic signal mast arm assemblies, and controller cabinets at the following intersections:

- IL Route 47 at IL Route 126
- IL Route 47 at Fox Street
- IL Route 47 at Van Emmon Street
- IL Route 47 at Somonauk Street

The finish shall be electrostatically applied black semi-gloss, super durable polyester powder coat finish with a minimum of a 5 year limited warranty.

The cost of this work shall be included in the contract unit price per Lump Sum for PAINTING OF TRAFFIC SIGNALS AND SIGNAL EQUIPMENT.

#### **REMOVE EXISTING JUNCTION BOX**

This item shall be provided in accordance with Section 895 of the Standard Specifications, as specified herein, and as directed by the Engineer.

The removal of existing junction boxes at locations as shown in the plans shall conform to procedures as outlined in Section 895 of the Standard Specifications for removal of existing handholes, and as directed by the Engineer.

<u>Basis of Payment:</u> This item shall be paid for at the contract unit price per each for REMOVE EXISTING JUNCTION BOX, which price shall include payment in full for all labor, equipment, and materials necessary to perform the work as specified herein.

#### **WORK AT AND AROUND ILLINOIS RAILWAY**

# Protection of Illinois Railway Equipment

When work is performed near and around the Illinois Railway, it shall be protected according to Article 107.12 of the Standard Specifications. Other facilities shall include, but not limited to the flashing light signals and gates, signal house, grade crossing and other equipment owned by the Illinois Railway.

If damage occurs, the Contractor shall cease all work until the damaged equipment is restored. All damaged equipment shall be replaced to the satisfaction of the Illinois Railway at the Contractor's expense. In addition, a plan to minimize further damage shall be submitted to and approved by the General Manager of the Illinois Railway or his authorized representative prior to the Contractor resuming work.

# Notification/Request for Locating and Marking Illinois Railway Underground Facilities

The Illinois Railway is not a member of JULIE, the Contractor shall contact the Illinois Railway to have the underground signal wires located. The contact person is Ms. Cindy Biskie, Signal Maintainer, (815) 751-8612 (cell). A minimum of 72 hours advance notice is required. The Contractor shall be responsible for any costs from the Illinois Railway associated with marking/locating the underground signal wires.

# Monitoring/Protecting Illinois Railway's Track During Work Under the Tracks

The Contractor shall notify the Engineer 48 hours prior to placing any pipe under the Illinois Railway's track in order for an existing top of rail profile above the work area to be ran. The Contractor shall also allow the Engineer adequate time to run a top of rail profile periodically after the placing of any pipe to ensure that there is no track settlement due to the pipe installation.

If damage to the tracks is observed during the installation of any pipe, the Contractor shall cease all work until damage to the tracks is repaired or replaced. All damage to the tracks shall be repaired or replaced to the satisfaction of the Illinois Railway at the Contractor's expense. In addition, a plan to minimize further damage shall be submitted to and approved by the General Manager of the Illinois Railway or his authorized representative prior to the Contractor resuming work.

No additional compensation will be allowed the Contractor for complying with these requirements.

# HOT - MIX ASPHALT SURFACE REMOVAL AT RAILROAD CROSSING

This work shall be performed in accordance to the applicable portions of Section 440 and Article 406.08 of the Standard Specifications and the following additional requirements.

The HMA Surface Removal shall abut either side of the existing Epton Railseal grade crossing as detailed in the plans. The HMA Surface Removal shall be performed in a workmanlike manner such that the existing Epton Railseal grade crossing shall not be damaged by the Contractor's operations. If such damage occurs, the Epton Railseal grade crossing shall be replaced to the satisfaction of the Engineer and or Railroad Representative at the Contractor's expense.

This work will be paid for at the contract unit price per square meter for HOT – MIX ASPHALT SURFACE REMOVAL, of the depth specified, which price shall include the cost of all labor, equipment and materials necessary to complete the surface removal as specified herein and in the plan details.

## RAILROAD PROTECTIVE LIABILITY INSURANCE

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. A separate policy is required for each railroad indicated below unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER AND SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
Illinois Railway, Inc. 430 West Madison Street Ottawa, IL 61350	2 freights per day at 30 mph	
DOT/AAR No- 065 029 D RR Division	Mile Post- 49.71 RR Subdivision - Ottawa	

FOR FREIGHT/PASSENGER INFORMATION CONTACT: Johnnie DeClue Phone: 815-431-0940 FOR INSURANCE INFORMATION CONTACT: David Ingram Phone: (303) 398-0510

<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.

## **CLEANING BRIDGE SCUPPERS AND DOWNSPOUTS**

<u>Description</u>: This work consists of cleaning the existing drainage scuppers and downspouts on SN 047-0048.

<u>Construction Requirements</u>: This item of work shall be performed in accordance to applicable portions of Section 592 of the Standard Specifications. The method for cleaning shall not damage the existing drainage system and shall be submitted to the Engineer for approval. Any damage to the drainage system shall be repaired by the Contactor at no additional cost. The drainage system shall be cleaned to the satisfaction of the Engineer, which includes the testing of each scupper to ensure that is has been completely cleaned.

<u>Basis of Payment</u>: This work described shall be paid for at the contract unit price each for CLEANING BRIDGE SCUPPERS AND DOWNSPOUTS, which price shall include all labor and equipment necessary to satisfactorily complete the work.

#### **DECK SLAB REPAIR**

Effective: May 15, 1995 Revised: January 18, 2011

This work shall consist of hot-mix asphalt surface removal, when required, the removal and disposal of all loose and deteriorated concrete from bridge deck and the replacement with new concrete to the original top of deck. The work shall be done according to the applicable requirements of Sections 501, 503 and 1020 of the Standard Specifications and this Special Provision.

Deck slab repairs will be classified as follows:

- (a) Partial-Depth. Partial-depth repairs shall consist of removing the loose and unsound deck concrete, disposing of the concrete removed and replacing with new concrete. The removal may be performed by chipping with power driven hand tools or by hydroscarification equipment. The depth shall be measured from the top of the concrete deck surface, at least 3/4 in. (20 mm) but not more than 1/2 the concrete deck thickness.
- (b) Full-Depth. Full-depth repairs shall consist of removing concrete full-depth of the deck, disposing of the concrete removed, and replacing with new concrete to the original concrete deck surface. The removal may be performed with power driven hand tools, hydraulic impact equipment, or by hydro-scarification equipment. Full-depth repairs shall be classified for payment as Full-Depth, Type I and Full-Depth, Type II according to the following:
  - Type I Full-depth patches less than or equal to 5 sq. ft. (0.5 sq m) in area. The minimum dimensions for a patch shall be 1 ft. x 1 ft. (300 mm x 300 mm).
  - Type II Full-depth patches greater than 5 sq. ft. (0.5 sq. m) in area.

## Materials.

Materials shall be according to Article 1020.02.

Portland cement concrete for partial and full-depth repairs shall be according to Section 1020. Class PP-1, PP-2, PP-3, PP-4, PP-5 or BS concrete shall be used at the Contractor's option unless noted otherwise on the contract plans. For Class BS concrete, a CA 13, 14, or 16 shall be used. If the BS concrete mixture is used only for full depth repairs, a CA-11 may be used. In Section 1020, revise the second sentence of Note 10 for Table 1 of Article1020.04 to read as follows for Class PP concrete: "The bridge deck patching mix design strength shall be increased to 4000 psi (27,500 kPa) compressive or 675 psi (4650 kPa) flexural, and the mixture shall have 72 hours to obtain the required strength."

## Equipment:

The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

(a) Surface Preparation Equipment. Surface preparation and concrete removal equipment shall be according to the applicable portions of Section 1100 and the following:

- (1) Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
- (2) Blast Cleaning Equipment. The blast cleaning may be performed by wet sandblasting, high-pressure waterblasting, shotblasting or abrasive blasting. Blast cleaning equipment shall be capable of removing rust and old concrete from exposed reinforcement bars, and shall have oil traps.
- (3) Power-Driven Hand Tools. Power-driven hand tools will be permitted including jackhammers lighter than the nominal 45 lb. (20 kg) class. Chipping hammers heavier than a nominal 15 lb. (6.8 kg) class shall not be used for removing concrete from below any reinforcing bar for partial depth repairs, or for removal within 1 ft (300 mm) of existing beams, girders or other supporting structural members that are to remain in service or within 1 ft (300 mm) of the boundaries of full-depth repairs. Jackhammers or chipping hammers shall not be operated at an angle in excess of 45 degrees measured from the surface of the slab.
- (4) Hydraulic Impact Equipment. Hydraulic impact equipment with a maximum rated striking energy of 360 ft-lbs (270 J) may be permitted only in areas of full depth removal more than 1 ft (300 mm) away from existing beams, girders or other supporting structural members that are to remain in service or more than 1 ft (300 mm) from the boundaries of full-depth repairs.
- (5) Hydro-Demolition Equipment. The hydro-demolition equipment shall consist of filtering and pumping units operating with a remote-controlled robotic device. The equipment shall use water according to Section 1002. The equipment shall be capable of being controlled to remove only unsound concrete.
- (b) Concrete Equipment: Equipment for proportioning and mixing the concrete shall be according to Article 1020.03.
- (c) Finishing Equipment: Finishing equipment shall be according to Article 1103.17. Adequate hand tools will be permitted for placing and consolidating concrete in the patch areas and for finishing small patches.

<u>Construction Requirements:</u> Sidewalks, curbs, drains, reinforcement and/or existing transverse and longitudinal joints which are to remain in place shall be protected from damage during removal and cleaning operations.

The Contractor shall control the runoff water generated by the various construction activities in such a manner as to minimize, to the maximum extent practicable, the discharge of untreated effluent into adjacent waters, and shall properly dispose of the solids generated according to Article 202.03. The Contractor shall submit a water management plan to the Engineer specifying the control measures to be used. The control measures shall be in place prior to the start of runoff water generating activities. Runoff water shall not be allowed to constitute a hazard to adjacent or underlying roadways, waterways, drainage areas or railroads nor be allowed to erode existing slopes.

(a) Hot-Mix Asphalt Surface Removal.

The hot-mix asphalt surface course and all waterproofing membrane shall be removed and disposed of according to applicable portions of Articles 440.04 and 440.06, except milling equipment will not be allowed if the deck is to receive a waterproofing membrane system. If the overlay or waterproofing membrane contains asbestos fibers, removal shall be in accordance with the Special Provision for "Asbestos Waterproofing Membrane or Asbestos Hot-mix Asphalt Surface Removal". Removal of the hot-mix asphalt surface by the use of radiant or direct heat will not be permitted.

# (b) Surface Preparation:

All loose, disintegrated and unsound concrete shall be removed from portions of the deck slab shown on the plans or as designated by the Engineer. The Engineer will determine the limits of removal as the work progresses.

The Contractor shall take care not to damage reinforcement bars or expansion joints which are to remain in place. Any damage to reinforcement bars or expansion joints shall be corrected at the Contractor's expense. All loose reinforcement bars, as determined by the Engineer, shall be retied at the Contractor's expense.

(1) Partial-Depth. Areas to be repaired will be determined and marked by the Engineer. A concrete saw shall be used to provide vertical edges approximately 3/4 in. (20 mm) deep around the perimeter of the area to be patched when a concrete overlay is not specified. Where high steel is present, the depth may be reduced as directed by the Engineer. A saw cut will not be required on those boundaries along the face of the curb, parapet or joint or when sharp vertical edges are provided by hydro-demolition.

The loose and unsound concrete shall be removed by chipping, with power driven hand tools or by hydro-demolition equipment. All exposed reinforcing bars and newly exposed concrete shall be thoroughly blast cleaned. Where, in the judgment of the Engineer, the bond between existing concrete and reinforcement steel within the patch area has been destroyed, the concrete adjacent to the bar shall be removed to a depth that will permit new concrete to bond to the entire periphery of the exposed bar. A minimum of 1 in. (25 mm) clearance will be required. The Engineer may require enlarging a designated removal area should inspection indicate deterioration beyond the limits previously designated. In this event, a new saw cut shall be made around the extended area before additional removal is begun. The removal area shall not be enlarged solely to correct debonded reinforcement or deficient lap lengths.

(2) Full-Depth. Concrete shall be removed as determined by the Engineer within all areas designated for full-depth repair and in all designated areas of partial depth repair in which unsound concrete is found to extend below half the concrete deck thickness. Full depth removal shall be performed according to Article 501.05 except that hydraulic impact equipment may be permitted in areas of full depth removal more than 1 ft (300 mm) away from the edges of existing beams, girders or other supporting structural members or more than 1 ft (300 mm) from the boundaries of full-depth repairs. Saw cuts shall be made on the top of the deck, except those boundaries along the face of curbs, parapets and joints or where hydro-demolition provided sharp vertical edges. The top saw cut may be omitted if the deck is to receive an overlay.

Forms for full-depth repair may be supported by hangers with adjustable bolts or by blocking from the beams below. When approved by the Engineer, forms for Type 1 patches may be supported by No. 9 wires or other devices attached to the reinforcement bars.

All form work shall be removed after the curing sequence is complete and prior to opening to traffic.

- (3) Reinforcement Treatment. Care shall be exercised during concrete removal to protect the reinforcement bars and structural steel from damage. Any damage to the reinforcement bars or structural steel to remain in place shall be repaired or replaced. All existing reinforcement bars shall remain in place except as herein provided for corroded bars. Tying of loose bars will be required. Reinforcing bars which have been cut or have lost 25 percent or more of their original cross sectional area shall be supplemented by new in kind reinforcement bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. An approved mechanical bar splice capable of developing in tension at least 125 percent of the yield strength of the existing bar shall be used when it is not feasible to provide the minimum bar lap. No welding of bars will be permitted.
- (4) Cleaning. Immediately after completion of the concrete removal and reinforcement repairs, the repair areas shall be cleaned of dust and debris. Once the initial cleaning is completed, the repair areas shall be thoroughly blast cleaned to a roughened appearance free from all foreign matter. Particular attention shall be given to removal of concrete fines. Any method of cleaning which does not consistently produce satisfactory results shall be discontinued and replaced by an acceptable method. All debris, including water, resulting from the blast cleaning shall be confined and shall be immediately and thoroughly removed from all areas of accumulation. If concrete placement does not follow immediately after the final cleaning, the area shall be carefully protected with well-anchored polyethylene sheeting.

Exposed reinforcement bars shall be free of dirt, detrimental scale, paint, oil, or other foreign substances which may reduce bond with the concrete. A tight non-scaling coating of rust is not considered objectionable. Loose, scaling rust shall be removed by rubbing with burlap, wire brushing, blast cleaning or other methods approved by the Engineer.

# (c) Placement & Finishing of Concrete Repair:

(1) Bonding Method. The patch area shall be cleaned to the satisfaction of the Engineer and shall be thoroughly wetted and maintained in a dampened condition with water for at least 12 hours before placement of the concrete. Any excess water shall be removed by compressed air or by vacuuming prior to the beginning of concrete placement. Water shall not be applied to the patch surface within one hour before or at any time during placement of the concrete.

# (2) Concrete Placement.

The concrete shall be placed and consolidated according to Article 503.07 and as herein specified. Article 1020.14 shall apply.

When an overlay system is not specified, the patches shall be finished according to Article 503.16 (a), followed by a light brooming.

# (d) Curing and Protection.

Concrete patches shall be cured by the Wetted Burlap or Wetted Cotton Mat Method according to Article 1020.13 (a)(3) or Article 1020.13 (a)(5). The curing period shall be 3 days for Class PP-1, PP-2, PP-3, PP-4, and PP-5 concrete. The curing period shall be 7 days for Class BS concrete. In addition to Article 1020.13, when the air temperature is less than 55° F (13° C), the Contractor shall cover the patch according to Article 1020.13 (d)(1) with minimum R12 insulation. Insulation is optional when the air temperature is  $55^{\circ}$  F. -  $90^{\circ}$  F ( $13^{\circ}$  C -  $32^{\circ}$  C). Insulation shall not be placed when the air temperature is greater than  $90^{\circ}$  F ( $32^{\circ}$  C). A 72-hour minimum drying period shall be required before placing waterproofing or hot-mix asphalt surfacing.

# (e) Opening to Traffic.

No traffic will be permitted on a patch until after the specified cure period, and the concrete has obtained a minimum compressive strength of 4000 psi (27.6 MPa) or flexural strength of 675 psi (4.65 MPa).

Construction equipment will be permitted on a patch during the cure period if the concrete has obtained the minimum required strength. In this instance, the strength specimens shall be cured with the patch.

#### Method of Measurement.

When specified, hot-mix asphalt surface removal and full or partial depth repairs will be measured for payment and computed in square yards (square meters).

# Basis of Payment.

The hot-mix asphalt surface removal will be paid for at the contract unit price per square yard (square meter) for HOT-MIX ASPHALT SURFACE REMOVAL (DECK). Areas removed and replaced up to and including a depth of half the concrete deck thickness will be paid for at the contract unit price per square yard (square meter) for DECK SLAB REPAIR (PARTIAL). Areas requiring removal greater than a depth of half the concrete deck thickness shall be removed and replaced full depth and will be paid for at the contract unit price per square yard (square meter) for DECK SLAB REPAIR (FULL DEPTH, TYPE I) and/or DECK SLAB REPAIR (FULL DEPTH, TYPE II).

When corroded reinforcement bars are encountered in the performance of this work and replacement is required, the Contractor will be paid according to Article 109.04.

No payment will be allowed for removal and replacement of reinforcement bars damaged by the Contractor in the performance of his/her work or for any increases in dimensions needed to provide splices for these replacement bars.

Removal and disposal of asbestos waterproofing and/or asbestos bituminous concrete will be paid for as specified in the Special Provision for "Asbestos Waterproofing Membrane or Asbestos Hot-Mix Asphalt Surface Removal".

## SILICONE BRIDGE JOINT SEALER

Effective: August 1, 1995 Revised: October 4, 2010

<u>Description.</u> This work shall consist of furnishing all labor, equipment, technical assistance and materials necessary to install the silicone joint sealer as shown on the plans and as specified herein.

When specified, a polymer concrete nosing compatible with the silicone sealant as required by the sealant manufacturer shall be installed. The minimum dimensions for a polymer concrete nosing cross section are 1 1/2 in. (40 mm) deep by 3 1/2 in. (90 mm) wide. The polymer concrete shall be furnished and installed according to the Special Provision for "Polymer Concrete".

# Materials:

(a) <u>Silicone Joint Sealer</u>. The silicone joint sealer shall cure in less than one week, and shall accommodate typical bridge movements and traffic within 8 hours. The sealant shall be self-leveling, cold applied, and two component. The sealant, upon curing, shall demonstrate resilience, flexibility and resistance to moisture and puncture. The sealant shall also demonstrate excellent adhesion to portland cement concrete, polymer concrete and steel over a range of temperatures from -30 to 130°F (-34 to 54°C) while maintaining a watertight seal. The sealant shall not contain any solvents or diluents that cause shrinkage or expansion during curing. In addition, acid cure sealants will not be accepted. The date of manufacture shall be provided with each lot. Materials twelve months old or older from the date of manufacture will not be accepted. The manufacturer shall certify that the sealant meets or exceeds the following test requirements before installation begins. The Department reserves the right to test representative samples from material proposed for use.

#### Physical Properties:

Each component as supplied:

Specific Gravity (ASTM D 1475) 1.2-1.4

Extrusion Rate (ASTM C 1183) 200 - 600 grams per minute

Durometer Hardness, "00" (ASTM C 661) 40-80

(32°F and 77 <u>+</u> 3°F (0° and 25°C <u>+</u> 1°C))

Accelerated Weathering (ASTM C 793)

No chalking, cracking or

bond loss after 5,000 hours.

After Mixing:

Tack Free Time (ASTM C 679) 60 minutes max.

Upon Complete Cure: (ASTM D 5329)

Joint Elongation (Tensile Adhesion) 600% min

Joint Modulus 3-15 psi (21-103 kPa)

@ 100% elongation

<sup>1</sup>Modified; Sample cured 7 days at 77 ± 2°F (25±1°C) 50 ± 5% relative humidity

(b) Backer Rod. The backer rod shall conform to ASTM D 5249, Type 3.

## CONSTRUCTION REQUIREMENTS

<u>General.</u> The Contractor shall furnish the Engineer with the manufacturer's product information and installation procedures at least two weeks prior to installation.

When placing the silicone against concrete, the concrete surface shall be dry. For newly placed concrete, the concrete shall be fully cured and allowed to dry out a minimum of seven additional days prior to placement of the silicone. Cold, wet, inclement weather will require an extended drying time.

## (a) Surface Preparation:

(1) Sandblasting. Both faces of the joint shall be sandblasted. A separate pass for each face for the full length of the joint and to the design depth of the center of the backer rod will be required. The nozzle shall be held at an angle of 30-90 degrees to the joint face, at a distance of 1 – 2 in. (25-50 mm).

For portland cement concrete and polymer concrete surfaces, sandblasting will be considered acceptable when both joint faces have a roughened surface with clean, exposed aggregate. The surface shall be free of foreign matter or plastic residue.

For steel surfaces, sandblasting will be considered acceptable when the steel surfaces have been cleaned to an SSPC-SP10 degree of cleanliness.

After sandblasting is completed, the joint shall be cleaned of debris using compressed air with a minimum pressure of 90 psi (620 kPa). The air compressor shall be equipped with traps to prevent the inclusion of water and/or oil in the air line.

(2) Priming. Priming shall be according to the manufacturer's instructions. This operation will immediately follow sandblasting and cleaning, and will only be permitted to proceed when the air and substrate temperatures are at least 41°F (5°C) and rising. Sandblasting, priming and sealing must be performed on the same day. Surfaces to be primed shall be primed using a brush applied primer. For steel surfaces, when specified per the manufacturer's instructions, the primer shall be allowed to cure before proceeding. The minimum cure time shall be extended according to the manufacturer's recommendations when the substrate temperature is below 60°F (15°C).

The primer shall be supplied in original containers and shall have a "use-by" date clearly marked on them. Only primer, freshly poured from the original container into clean pails will be permitted. The primer must be used immediately. All primer left in the pail after priming shall be disposed of and shall not be reused.

# (b) Joint Installation:

- (1) Backer Rod Placement. The backer rod shall be installed to a uniform depth as specified on the plans and as recommended by the manufacturer. All splices in the backer rod shall be taped to prevent material loss during sealing. The backer rod shall be installed to within 1/8 in. (3 mm) tolerance prior to sealing.
- (2) Sealant Placement. The sealant shall be 1/2 in. (13 mm) thick within  $\pm$  1/8 in. (3 mm) tolerance as measured in the center of the joint at the thinnest point.

The sealant thickness shall be measured during installation every  $\pm 2$  ft. ( $\pm 600$  mm). Adjustments to correct sealant thickness to within tolerance shall be made immediately before the sealant begins to set up. Sealant placement will only be permitted when the air and substrate temperatures are above 41°F (5°C) and 5°F (2.8°C) above the dew point. The joint shall be kept clean and dry during sealing. If the joint becomes wet and/or dirty during sealing, the operation shall stop until the joint has been restored to a clean and dry state.

Sealing shall be performed using a pneumatic gun approved by the sealant manufacturer. Prior to sealing, the gun shall be inspected to insure that it is in proper working order and that it is being operated at the recommended air pressure.

The gun shall demonstrate proper mixing action before sealant is placed in the joint. All unmixed sealant found in the joint shall be removed and replaced.

After the Engineer has determined that the pneumatic gun is functioning properly, the joint shall be sealed to the thickness and depth as shown on the plans. The sealant shall achieve initial set before opening the joint to traffic.

End of seal treatment at vertical faces of curbs, sidewalks or parapets shall be as recommended by the manufacturer and as shown on the plans.

Sealant placed incorrectly shall be removed and replaced by the Contractor.

(3) Field Testing. A minimum of one joint per bridge per joint configuration will be tested by the Engineer by performing a "Pull Test". The sealant shall cure for a minimum of 24 hours before testing. The locations for the tests will be determined by the Engineer. The tests will be performed per the manufacturer's instructions. As part of the test, the depth and thickness of the sealant will be verified. All joint system installations failing to meet the specifications shall be removed and replaced, by the Contractor, to the satisfaction of the Engineer. In addition, the Pull Test is a destructive test; the Contractor shall repair the joint after completion of the test per the manufacturer's instructions.

<u>Method of Measurement</u>. The installed joint sealer will be measured in feet (meters) along the centerline of the joint.

<u>Basis of Payment</u>. The silicone joint sealer measured as specified will be paid for at the contract unit price per foot (meter) for SILICONE JOINT SEALER, of the size specified. The size is defined as the joint opening at 50°F (10°C), rounded to the nearest 1/2 in. (13 mm). When a polymer concrete nosing is specified it shall not be included in this item but will be paid for according to the Special Provision for "Polymer Concrete".

#### SEGMENTAL CONCRETE BLOCK WALL

Effective: January 7, 1999 Revised: October 4, 2010

<u>Description.</u> This work shall consist of furnishing the design computations, shop plans, materials, equipment and labor to construct a Segmental Concrete Block Retaining Wall to the limits shown on the plans.

<u>General.</u> The wall shall consist of a leveling pad, precast concrete blocks (either dry-cast or wet cast), select fill and, if required by the design, soil reinforcement.

The wall shall be designed and constructed according to the lines, grades, and dimensions shown on the contract plans and approved shop plans.

<u>Submittals</u>. The wall supplier shall submit design computations and shop plans to the Engineer according to Article 1042.03(b) of the Standard Specifications. No work or ordering of materials for the structure shall be done by the Contractor until the submittal has been approved in writing by the Engineer. The shop plans shall be sealed by an Illinois Licensed Structural Engineer and shall include all details, dimensions, quantities, and cross sections necessary to construct the wall and shall include, but not be limited to, the following items:

- (a) Plan, elevation, and cross section sheet(s) for each wall showing the following:
  - (1) A plan view of the wall indicating the offsets from the construction centerline to the first course of blocks at all changes in horizontal alignment. These shall be calculated using the offsets to the front face of the block shown on the contract plans and the suppliers proposed wall batter. The plan view shall indicate bottom (and top course of block when battered), the excavation and select fill limits as well as any soil reinforcing required by the design. The centerline of any drainage structure or pipe behind or passing through/under the wall shall also be shown.
  - (2) An elevation view of the wall, indicating the elevation and all steps in the top course of blocks along the length of the wall. The top of these blocks shall be at or above the theoretical top of block line shown on the contract plans. This view shall also show the steps and proposed top of leveling pad elevations as well as the finished grade line at the wall face specified on the contract plans. These leveling pad elevations shall be located at or below the theoretical top of leveling line shown on the contract plans. The location, size, and length of any soil reinforcing connected to the blocks shall be indicated.
  - (3) Typical cross section(s) showing the limits of the select fill, soil reinforcement if used in the design. The right-of-way limits shall be indicated as well as the proposed excavation, cut slopes, and the elevation relationship between existing ground conditions and proposed grades.
  - (4) All general notes required for constructing the wall.
- (b) All details for the leveling pads, including the steps, shall be shown. The theoretical top of the leveling pad shall either be below the anticipated frost depth or 1.5 ft. (450 mm) below the finished grade line at the wall face, whichever is greater; unless otherwise shown on the plans. The minimum leveling pad thickness shall be 6 in. (152 mm)
- (c) Cap blocks shall be used to cover the top of the standard block units. The top course of blocks and cap blocks shall be stepped to satisfy the top of block line shown on the contract plans.
- (d) All details of the block and/or soil reinforcement placement around all appurtenances located behind, on top of, or passing through the wall shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular design arrangement shall also be submitted.
- (e) All details of the blocks, including color and texture shall be shown. The exterior face shall preferably be straight, textured with a "split rock face" pattern, and dark gray in color unless otherwise stated on the plans.

- (f) All block types (standard, cap, corner, and radius turning blocks) shall be detailed showing all dimensions.
- (g) All blocks shall have alignment/connection devices such as shear keys, leading/trailing lips, or pins. The details for the connection devices between adjacent blocks and the block to soil reinforcement shall be shown. The block set back or face batter shall be limited to 20 degrees from vertical, unless otherwise shown by the plans.

# **Materials.** The materials shall meet the following requirements:

- (a) Dry-Cast Concrete Block: Dry-cast concrete block proposed for use shall be pre-cast and produced according Article 1042.02 and the requirements of ASTM C1372 except as follows:
  - 1. Fly ash shall be according to Articles 1010.01 and 1010.02(b).
  - 2. Ground granulated blast-furnace slag shall be according to Articles 1010.01 and 1010.05.
  - 3. Aggregate shall be according to Articles 1003.02 and 1004.02, with the exception of gradation.
  - 4. Water shall be according to Section 1002.
  - 5. Testing for freeze-thaw durability will not be required. However, unsatisfactory field performance as determined by the Department will be cause to prohibit the use of the block on Department projects.
- (b) Wet-cast Concrete Block: Wet-cast concrete block proposed for use shall be pre-cast and produced according to Section 1020 and Article 1042.02. The concrete shall be Class PC with a minimum compressive strength of at least 3000 psi (31 MPa) at 28 days.
- (c) Select fill: The select fill, defined as the material placed in the reinforced volume behind the wall, shall be according to Sections 1003 and 1004 of the Standard Specifications and the following:
  - (1) Select Fill Gradation. Either a coarse aggregate or a fine aggregate may be used. For coarse aggregate, gradations CA 6 thru CA 16 may be used. If geosynthetic reinforcing is used, the coarse aggregate gradations shall be limited to CA 12 thru CA 16. For fine aggregate, gradations FA 1, FA 2, or FA 20 may be used.
    - Other aggregate gradations may be used provided the maximum aggregate size is 1 1/2 in. (38 mm), the maximum material passing the #40 (425  $\mu$ m) sieve is 60 percent, and the maximum material passing the #200 (75  $\mu$ m) sieve is 15 percent.
  - (2) Select Fill Quality. The coarse or fine aggregate shall be Class B quality or better, except that a maximum of 15 percent of the material may be finer than the #200 (75  $\mu$ m) sieve.
  - (3) Select Fill Internal Friction Angle. The effective internal friction angle for the coarse or fine aggregate shall be a minimum 34 degrees according to AASHTO T 236 on samples compacted to 95 percent density according to Illinois Modified AASHTO T 99. The AASHTO T 296 test with pore pressure measurement may be used in lieu of AASHTO T 236. If the vendor's design uses a friction angle higher than 34 degrees, as indicated on the approved shop drawings, this higher value shall be taken as the minimum required.

- (4) Select Fill and Geosynthetic Reinforcing. When geosynthetic reinforcing is used, the select fill pH shall be 4.5 to 9.0 according to AASHTO T 289.
- (5) Test Frequency. Prior to start of construction, the Contractor shall provide internal friction angle and pH to show the select fill material meets the specification requirements. However, the pH will be required only when geosynthetic reinforcing is used. All test results shall not be older than 12 months. In addition, a sample of select fill material will be obtained for testing and approval by the Department. Thereafter, the minimum frequency of sampling and testing at the jobsite will be one per 20,000 cubic yards (15,500 cubic meters) of select fill material.

When a fine aggregate is selected, the rear of all block joints shall be covered by a non-woven needle punch geotextile filter material according to Article 1080.05 of the Standard Specifications and shall have a minimum permeability according to ASTM D4491 of 0.008 cm/sec. All fabric overlaps shall be 6 in. (150 mm) and non-sewn. As an alternative to the geotextile, a coarse aggregate shall be placed against the back face of the blocks to create a minimum 12 in. (300 mm) wide continuous gradation filter to prevent the select fill material from passing through the block joints.

- (d) Leveling pad: The material shall be either Class SI concrete according to Article 1020.04 or compacted coarse aggregate according to Articles 1004.04, (a) and (b). The compacted coarse aggregate gradation shall be CA 6 or CA 10.
- (e) Soil Reinforcement: If soil reinforcement is required by the approved design, the Contractor shall submit a manufacturer's certification for the soil reinforcement properties which equals or exceeds those required in the design computations. The soil reinforcement shall be manufactured from high density polyethylene (HDPE) uniaxial or polypropylene biaxial resins or high tenacity polyester fibers with a PVC coating, stored between -20 and 140° F (-29 and 60° C). The following standards shall be used in determining and demonstrating the soil reinforcement capacities:

ASTM D638 Test Method for Tensile Properties of Plastic

ASTM D1248 Specification for Polyethylene Plastics Molding and Extrusion Materials

ASTM D4218 Test Method for Carbon Black Content in Polyethylene Compounds

ASTM D5262 Test Method for Evaluating the Unconfined Tension Creep Behavior of Geosynthetics

GG1-Standard Test Method for Geogrid Rib Tensile Strength

GG2-Standard Test Method for Geogrid Junction Strength

GG4-Standard Practice for Determination of the Long Term Design Strength of Geogrid

GG5-Standard Practice for Evaluating Geogrid Pullout Behavior

<u>Design Criteria</u>. The design shall be according to AASHTO Specifications and commentaries for Earth Retaining Walls or FHWA Publication No. HI-95-038, SA-96-071 and SA-96-072. The wall supplier shall be responsible for all internal stability aspects of the wall design.

Internal stability design shall insure that adequate factors of safety against overturning and sliding are present at each level of block. If required by design, soil reinforcement shall be utilized and the loading at the block/soil reinforcement connection as well as the failure surface must be indicated. The calculations to determine the allowable load of the soil reinforcement and the factor of safety against pullout shall also be included. The analysis of settlement, bearing capacity, and overall slope stability are the responsibility of the Department.

External loads such as those applied through structure foundations, from traffic or railroads, slope surcharge etc., shall be accounted for in the internal stability design. The presence of all appurtenances behind, in front of, mounted upon, or passing through the wall volume such as drainage structures, utilities, structure foundation elements, or other items shall be accounted for in the internal stability design of the wall.

<u>Construction Requirements</u>. The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include all costs related to this technical assistance in the unit price bid for this item.

The foundation material for the leveling pad and select fill volume shall be graded to the design elevation and compacted according to Article 205.05, except the minimum required compaction shall be 95 percent of the standard laboratory density. The Engineer will perform one density test per 1500 ft (450 m) of the entire length of foundation material through both cut and fill areas. Any foundation soils found to be unsuitable shall be removed and replaced as directed by the Engineer and shall be paid for according to Article 109.04.

The select fill lift placement shall closely follow the erection of each course of blocks. All aggregate shall be swept from the top of the block prior to placing the next block lift. If soil reinforcement is used, the select fill material shall be leveled and compacted before placing and attaching the soil reinforcement to the blocks. The soil reinforcement shall be pulled taut, staked in place, and select fill placed from the rear face of the blocks outward. The lift thickness shall be the lesser of 10 in. (255 mm) loose measurement or the proposed block height.

The select fill shall be compacted according to Article 205.05, except the minimum required compaction shall be 95 percent of the standard laboratory density. Compaction shall be achieved using a minimum of 3 passes of a lightweight mechanical tamper, roller, or vibratory system. The Engineer will perform one density test per 5000 cu yd (3800 cu m) and not less than one test per 2 ft (0.6m) of lift. The top 12 in. (300 mm) of backfill shall be a cohesive, impervious material capable of supporting vegetation, unless other details are specified on the plans.

The blocks shall be maintained in position as successive lifts are compacted along the rear face of the block. Vertical, horizontal, and rotational alignment tolerances shall not exceed 0.5 in. (12 mm) when measured along a 10 ft. (3 m) straight edge.

<u>Method of Measurement</u>. Segmental Concrete Block Wall will be measured by the square foot (square meter) of wall face from the top of block line to the theoretical top of the leveling pad for the length of the wall in a vertical plane, as shown on the contract plans.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot (square meter) for SEGMENTAL CONCRETE BLOCK WALL.

# ACCESSIBLE PEDESTRIAN SIGNALS (APS) (BDE)

Effective: April 1, 2003 Revised: January 1, 2007

<u>Description</u>. This work shall consist of furnishing and installing accessible pedestrian signals (APS). Each APS shall consist of an interactive pedestrian pushbutton with speaker, an informational sign, a solid state electronic control board, a power supply, wiring, and mounting hardware.

The APS shall meet the requirements of the MUTCD and Sections 801 and 873 of the Standard Specifications, except as modified herein.

<u>Electrical Requirements</u>. The APS shall operate with systems providing 95 to 130 VAC, 60 Hz and throughout an ambient air temperature range of –29 to +160 °F (-34 to +70 °C).

The APS shall contain a power protection circuit consisting of both fuse and transient protection.

Audible Indications. A pushbutton locator tone shall sound at each pushbutton.

A clear, verbal message shall be used to communicate the pedestrian walk interval. This message shall sound throughout the WALK interval only. The verbal message shall be "WALK SIGN", which may be followed by the name of the street to be crossed. No other messages shall be used to denote the WALK interval.

Automatic volume adjustments in response to ambient traffic sound level shall be provided up to a maximum volume of 89 dB. Locator tone and verbal messages shall be no more than 5 dB louder than ambient sound.

<u>Pedestrian Pushbutton</u>. Pedestrian pushbuttons shall be at least 2 in. (50 mm) in diameter or width. The force required to activate the pushbutton shall be no greater than 3.5 lb (15.5 N).

If a pushbutton is depressed for three seconds, a custom verbal message shall be given before the walk cycle goes into effect which tells the pedestrian their location or other pertinent information about the intersection.

A red light emitting diode (LED) shall be located on or near the pushbutton which, when activated, acknowledges the pedestrians request to cross the street.

<u>Signage</u>. A sign shall be located immediately above the pedestrian pushbutton and parallel to the crosswalk controlled by the pushbutton. The sign shall resemble either of the following:





<u>Tactile Arrow</u>. A tactile arrow, pointing in the direction of travel controlled by a pushbutton, shall be provided either on the pushbutton or its sign.

This arrow shall meet the requirements of Section X02.5.1.4 of the U.S. Access Board's "Public Rights-of-way Access Advisory Committee Report, 2001".

<u>Vibrotactile Feature</u>. When specified on the plans, vibrotactile messages shall also be provided at each pedestrian pushbutton. The pushbutton shall pulse when depressed and shall vibrate continuously throughout the WALK interval.

Method of Measurement. This work will be measured for payment as each, per pushbutton.

When provided the vibrotactile feature will be measured for payment as each, per pushbutton.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per each for ACCESSIBLE PEDESTRIAN SIGNALS.

When provided, the vibrotactile feature will be paid for at the contract unit price per each for VIBROTACTILE FEATURE.

# ALKALI-SILICA REACTION FOR CAST-IN-PLACE CONCRETE (BDE)

Effective: August 1, 2007 Revised: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to precast products or precast prestressed products.

Aggregate Expansion Values. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content ( $Na_2O + 0.658K_2O$ ) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

<u>Aggregate Groups</u>. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

AGGREGATE GROUPS			
Coarse Aggregate or Coarse Aggregate Blend ASTM C 1260 Expansion	Fine Aggregate or Fine Aggregate Blend ASTM C 1260 Expansion		
	≤ 0.16%	> 0.16% - 0.27%	> 0.27%
≤ 0.16%	Group I	Group II	Group III
> 0.16% - 0.27%	Group II	Group II	Group III
> 0.27%	Group III	Group III	Group IV

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Group I - Mixture options are not applicable. Use any cement or finely divided mineral.

Group II - Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III - Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

For Class PP-3 concrete the mixture options are not applicable, and any cement may be used with the specified finely divided minerals.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$ 

Where: a, b, c... = percentage of aggregate in the blend; A, B, C... = expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".
  - 1) Class F Fly Ash. For Class PV, BS, MS, DS, SC, and SI concrete and cement aggregate mixture II (CAM II), Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
  - 2) Class C Fly Ash. For Class PV, MS, SC, and SI Concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.

For Class PP-1, RR, BS, and DS concrete and CAM II, Class C fly ash with less than 26.5 percent calcium oxide content shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

3) Ground Granulated Blast-Furnace Slag. For Class PV, BS, MS, SI, DS, and SC concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.

For Class PP-1 and RR concrete, ground granulated blast-furnace slag shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

For Class PP-2, ground granulated blast-furnace slag shall replace 25 to 30 percent of the portland cement at a minimum replacement ratio of 1:1.

- 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. For latex concrete, the ASTM C 1567 test shall be performed without the latex. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O), a new ASTM C 1567 test will not be required.

<u>Testing.</u> If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content ( $Na_2O + 0.658K_2O$ ) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement Concrete or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

# ALKALI-SILICA REACTION FOR PRECAST AND PRECAST PRESTRESSED CONCRETE (BDE)

Effective: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in precast and precast prestressed concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to cast-in-place concrete.

Aggregate Expansion Values. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content ( $Na_2O + 0.658K_2O$ ) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

<u>Aggregate Groups</u>. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

AGGREGATE GROUPS			
Coarse Aggregate or Coarse Aggregate Blend ASTM C 1260 Expansion	Fine Aggregate or Fine Aggregate Blend ASTM C 1260 Expansion		
	≤ 0.16%	> 0.16% - 0.27%	> 0.27%
≤ 0.16%	Group I	Group II	Group III
> 0.16% - 0.27%	Group II	Group II	Group III
> 0.27%	Group III	Group III	Group IV

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Group I - Mixture options are not applicable. Use any cement or finely divided mineral.

Group II - Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III - Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$ 

Where: a, b, c... = percentage of aggregate in the blend; A, B, C... = expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".
  - 1) Class F Fly Ash. For Class PC concrete, precast products, and PS concrete, Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
  - 2) Class C Fly Ash. For Class PC Concrete, precast products, and Class PS concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.
  - 3) Ground Granulated Blast-Furnace Slag. For Class PC concrete, precast products, and Class PS concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.
  - 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content  $(Na_2O + 0.658K_2O)$  of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content  $(Na_2O + 0.658K_2O)$ , a new ASTM C 1567 test will not be required.

<u>Testing</u>. If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content (Na<sub>2</sub>O + 0.658K<sub>2</sub>O) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper.

If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

# APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS (BDE)

Effective: November 1, 2008 Revised: November 1, 2010

Replace the first paragraph of Article 107.22 of the Standard Specifications with the following:

"All proposed borrow areas, including commercial borrow areas; use areas, including, but not limited to temporary access roads, detours, runarounds, plant sites, and staging and storage areas; and/or waste areas are to be designated by the Contractor to the Engineer and approved prior to their use. Such areas outside the State of Illinois shall be evaluated, at no additional cost to the Department, according to the requirements of the state in which the area lies; and approval by the authority within that state having jurisdiction for such areas shall be forwarded to the Engineer. Such areas within Illinois shall be evaluated as described herein.

A location map delineating the proposed borrow area, use area, and/or waste area shall be submitted to the Engineer for approval along with an agreement from the property owner granting the Department permission to enter the property and conduct cultural and biological resource reconnaissance surveys of the site for archaeological resources, threatened or endangered species or their designated essential habitat, wetlands, prairies, and savannahs. The type of location map submitted shall be a topographic map, a plat map, or a 7.5 minute quadrangle map. Submittals shall include the intended use of the site and provide sufficient detail for the Engineer to determine the extent of impacts to the site. The Engineer will initiate cultural and biological resource reconnaissance surveys of the site, as necessary, at no cost to the Contractor. The Engineer will advise the Contractor of the expected time required to complete all surveys. If the proposed area is within 150 ft (45 m) of the highway right-of-way, a topographic map of the proposed site will be required as specified in Article 204.02."

## **AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)**

Effective: January 1, 2008

<u>Description</u>. This work shall consist of furnishing and operating automated flagger assistance devices (AFADs) as part of the work zone traffic control and protection for two-lane highways where two-way traffic is maintained over one lane of pavement.

Use of these devices shall be at the option of the Contractor.

Equipment. AFADs shall be according to the FHWA memorandum, "MUTCD - Revised Interim Approval for the use of Automated Flagger Assistance Devices in Temporary Traffic Control Zones (IA-4R)", dated January 28, 2005. The devices shall be mounted on a trailer or a moveable cart and shall meet the requirements of NCHRP 350, Category 4.

The AFAD shall be the Stop/Slow type. This device uses remotely controlled "STOP" and "SLOW" signs to alternately control right-of-way.

Signs for the AFAD shall be according to Article 701.03 of the Standard Specifications and the MUTCD. The signs shall be  $24 \times 24$  in. ( $600 \times 600$  mm) having an octagon shaped "STOP" sign on one side and a diamond shaped "SLOW" sign on the opposite side. The letters on the signs shall be 8 in. (200 mm) high. If the "STOP" sign has louvers, the full sign face shall be visible at a distance of 50 ft (15 m) and greater.

The signs shall be supplemented with one of the following types of lights.

- (a) Flashing Lights. When flashing lights are used, white or red flashing lights shall be mounted within the "STOP" sign face and white or yellow flashing lights within the "SLOW" sign face.
- (b) Stop and Warning Beacons. When beacons are used, a stop beacon shall be mounted 24 in. (600 mm) or less above the "STOP" sign face and a warning beacon mounted 24 in. (600 mm) or less above, below, or to the side of the "SLOW" sign face. As an option, a Type B warning light may be used in lieu of the warning beacon.

A "WAIT ON STOP" sign shall be placed on the right hand side of the roadway at a point where drivers are expected to stop. The sign shall be  $24 \times 30$  in.  $(600 \times 750 \text{ mm})$  with a black legend and border on a white background. The letters shall be at least 6 in. (150 mm) high.

This device may include a gate arm or mast arm that descends to a horizontal position when the "STOP" sign is displayed and rises to a vertical position when the "SLOW" sign is displayed. When included, the end of the arm shall reach at least to the center of the lane being controlled. The arm shall have alternating red and white retroreflective stripes, on both sides, sloping downward at 45 degrees toward the side on which traffic will pass. The stripes shall be 6 in. (150 mm) in width and at least 2 in. (50 mm) in height.

<u>Flagging Requirements</u>. Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

AFADs shall be placed at each end of the traffic control, where a flagger is shown on the plans. The flaggers shall be able to view the face of the AFAD and approaching traffic during operation.

To stop traffic, the "STOP" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall descend to a horizontal position. To permit traffic to move, the "SLOW" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall rise to a vertical position.

If used at night, the AFAD location shall be illuminated according to Section 701 of the Standard Specifications.

When not in use, AFADs will be considered nonoperating equipment and shall be stored according to Article 701.11 of the Standard Specifications.

<u>Basis of Payment</u>. This work will not be paid for separately but shall be considered as included in the cost of the various traffic control items included in the contract.

**CEMENT (BDE)** 

Effective: January 1, 2007 Revised: April 1, 2011

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 AASHTO M 85, and shall meet the standard physical and chemical requirements. The Contractor has the option to use any type of portland cement listed in AASHTO M 85 unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C or F 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 AASHTO M 240 and shall meet the standard physical and chemical requirements. The Contractor has the option to use portland-pozzolan cement unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C or F fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust. The pozzolan constituent for Type IP using Class F fly ash shall be a maximum of 25 percent of the weight (mass) of the portland-pozzolan cement. The pozzolan constituent for Type IP using Class C fly ash shall be a maximum of 30 percent of the weight (mass) of the portland-pozzolan cement. The pozzolan constituent for Type IP using microsilica or high-reactivity metakaolin shall be a maximum of ten percent. The pozzolan constituent for Type IP using other materials shall have the approval of the Engineer.

Portland-pozzolan cement may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

(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 AASHTO M 240 and shall meet the standard physical and chemical requirements. The Contractor has the option to use portland blast-furnace slag cement unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C or F fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust. The blast-furnace slag constituent for Type IS shall be a maximum of 35 percent of the weight (mass) of the portland blast-furnace slag cement.

Portland blast-furnace slag cement may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

- (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 AASHTO T 131.
  - (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 AASHTO T 106.
  - (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 Illinois Modified AASHTO T 161, Procedure B.
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to AASHTO M 85, except the time of setting shall not apply. The chemical requirements shall be determined according to AASHTO T 105 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."

# **CERTIFICATION OF METAL FABRICATOR (BDE)**

Effective: July 1, 2010

Revise Article 106.08 of the Standard Specifications to read:

"106.08 Certification of Metal Fabricator. All fabricators performing work on metal components of structures shall be certified under the appropriate category of the AISC Quality Certification Program as follows.

- (a) Fabricators of the main load carrying steel components of welded plate girder, box girder, truss, and arch structures shall be certified under Category MBr (Major Steel Bridges).
- (b) Fabricators of the main load carrying steel components of rolled beam structures, either simple span or continuous, and overhead sign structures shall be certified under Category SBr (Simple Steel Bridges).

Fabricators of steel or other non-ferrous metal components of structures not certified under (a) or (b) above shall be certified under the program for Bridge and Highway Metal Component Manufacturers."

# 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). The 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.

The 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 overlay 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.

**1021.03 Retarding 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."

## **CONCRETE MIX DESIGNS (BDE)**

Effective: April 1, 2009

Add the following to Article 1020.05(c) of the Standard Specifications:

- "(5) Performance Based Finely Divided Mineral Combination. For Class PV and SI concrete a performance based finely divided mineral combination may be used. The minimum cement factor, maximum cement factor, and water cement ratio of Article 1020.04 shall be replaced with the values below, and the performance based finely divided mineral combination herein is an alternative to Articles 1020.05(c)(1), (c)(2), (c)(3), and (c)(4). The mix design shall meet the following requirements and the Engineer may request a trial batch.
  - a. The mixture shall contain a minimum of 375 lbs/cu yd (222 kg/cu m) of portland cement. For a blended cement, a sufficient amount shall be used to obtain the required 375 lbs/cu yd (222 kg/cu m) of portland cement in the mixture. For example, a blended cement stated to have 20 percent finely divided mineral, ignoring any ASTM C 595 tolerance on the 20 percent, would require a minimum of 469 lbs/cu yd (278 kg/cu m) of material in the mixture. When the mixture is designed for cement content from 375 lbs/cu yd (222 kg/cu m) to 400 lbs/cu yd (237 kg/cu m), the total of organic processing additions, inorganic processing additions, and limestone addition in the cement shall not exceed 5.0 percent.
  - b. The mixture shall contain a maximum of two finely divided minerals. The finely divided mineral in a blended cement shall count toward the total number of finely divided minerals allowed. The finely divided mineral(s) shall constitute a maximum of 35.0 percent of the total cement plus finely divided mineral(s). The fly ash portion shall not exceed 30.0 percent for Class C fly ash or 25.0 percent for Class F fly ash. The Class C and F fly ash combination shall not exceed 30.0 percent.

The ground granulated blast-furnace slag portion shall not exceed 35.0 percent. The microsilica or high-reactivity metakaolin portion used together or separately shall not exceed 5.0 percent. The finely divided mineral in the blended cement shall apply to the maximum 35.0 percent, and shall be determined as discussed in a. above for determining portland cement in blended cement.

c. For central mixed Class PV and SI concrete, the mixture shall contain a minimum of 535 lbs/cu yd (320 kg/cu m) of cement and finely divided mineral(s) summed together, and a water-reducing admixture shall be used. The value shall be 565 lbs/cu yd (335 kg/cu m) without a water-reducing admixture.

For truck mixed or shrink mixed Class PV and SI concrete, the mixture shall contain a minimum of 575 lbs/cu yd (345 kg/cu m) of cement and finely divided mineral(s) summed together, and a water-reducing admixture shall be used. The value shall be 605 lbs/cu yd (360 kg/cu m) without a water-reducing admixture.

- d. The mixture shall contain a maximum of 705 lbs/cu yd (418 kg/cu m) of cement and finely divided mineral(s) summed together.
- e. The mixture shall have a water/cement ratio of 0.32 0.44.
- f. The mixture shall not be used for placement underwater.
- g. The combination of cement and finely divided mineral(s) shall have an ASTM C 1567 expansion value ≤ 0.16 percent, and shall be performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly.

If during the two year time period the Contractor needs to replace the portland cement, and the replacement portland cement has an equal or lower total equivalent alkali content (Na $_2$ O + 0.658K $_2$ O), a new ASTM C 1567 test will not be required. However, replacement of a blended cement with another cement will require a new ASTM C 1567 test."

#### 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 no control.
- 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 (150 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<sub>1</sub> = 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.

PERCENT WITHIN LIMITS							
	Percent		Percent		Percent		Percent
Quality	Within	Quality	Within	Quality	Within	Quality	Within
Index (Q <sub>I</sub> )*	Limits (PWL)	Index (Q <sub>I</sub> )*	Limits (PWL)	Index (Q <sub>I</sub> )*	Limits (PWL)	Index (Q <sub>L</sub> )*	Limits (PWL)
0.00	50.00	0.40	65.07	0.80	78.43	1.20	88.76
0.00	50.38	0.40	65.43	0.80	78.72	1.20	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 0.12	54.22 54.60	0.51 0.52	68.98 69.32	0.91 0.92	81.61 81.88	1.31 1.32	90.96 91.15
0.12	54.00	0.52	69.67	0.92	82.16	1.32	91.13
0.13	55.37	0.54	70.01	0.94	82.43	1.34	91.52
0.15 0.16	55.75 56.13	0.55 0.56	70.36 70.70	0.95 0.96	82.71 82.97	1.35 1.36	91.70 91.87
0.16	56.51	0.56	70.70	0.96	62.97 83.24	1.36	91.67
0.17	56.89	0.57	71.04	0.98	83.50	1.37	92.04
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 0.28	60.28 60.65	0.67 0.68	74.36 74.69	1.07 1.08	85.77 86.02	1.47 1.48	93.67 93.83
0.28	61.03	0.68	74.69 75.01	1.08	86.02 86.26	1.48	93.83
0.30	61.40	0.70	75.33	1.10	86.50	1.50	94.13
0.31 0.32	61.77 62.14	0.71 0.72	75.64 75.06	1.11 1.12	86.73 86.96	1.51 1.52	94.27 94.41
0.32	62.14	0.72	75.96 76.27	1.12	86.96 87.20	1.52	94.41
0.34	62.88	0.74	76.59	1.13	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  $Q_L$  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			

\*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. 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."

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

Effective: September 1, 2000 Revised: August 2, 2011

<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. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 6.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

<u>DBE LOCATOR REFERENCES</u>. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies.

In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's website at <a href="https://www.dot.il.gov">www.dot.il.gov</a>.

<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 if 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 that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A.

The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

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

Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.

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

A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217)785-4611. Telefax number (217)785-1524.
- (b) <u>TERMINATION OR REPLACEMENT</u>. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in the Special Provision.
- (c) <u>CHANGES TO WORK</u>. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
  - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or

- (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
- (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons. if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

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

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

- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal.

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

## **ENGINEER'S FIELD OFFICE TYPE A (BDE)**

Effective: April 1, 2007 Revised: January 1, 2011

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 and monthly local 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."

## FRAMES AND GRATES (BDE)

Effective: January 1, 2010

Revise Article 609.02 of the Standard Specifications to read:

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

Item	Article/Section
(a) Portland Cement Concrete	1020
(b) Gray Iron Castings	
(c) Ductile Iron Castings	1006.15
(d) Reinforcement Bars	1006.10
(e) Bedding Layer (Note 1)	1004.01
(f) Precast Concrete Bridge Approach Drains	1042

Note 1. Gradation CA 6, CA 10, or CA 12 of D quality or better."

Revise Article 609.04 of the Standard Specifications to read:

"609.04 Frames and Grates. Cast iron frames and grates shall be used. Grates shall seat firmly in the frame."

### FRICTION AGGREGATE (BDE)

Effective: January 1, 2011

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

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

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

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

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

Mixture	Aggregates Allowe	ed	
Seal or Cover	Allowed Alone or in Combination:  Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete		
Stabilized Subbase or Shoulders	Gravel Crushed Gravel Carbonate Crushe Crystalline Crushed Crushed Sandstor Crushed Slag (AC Crushed Steel Sla	ed Stone ed Stone ne BF) g <sup>1/</sup>	
Binder IL-25.0, IL-19.0, or IL-19.0L SMA Binder	Crushed Gravel Carbonate Crushe Crystalline Crushe Crushed Sandstor Crushed Slag (AC	ed Stone <sup>2/</sup> ed Stone ne BF)	
C Surface and Leveling Binder IL-12.5,IL-9.5, or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Crushed Gravel Carbonate Crushed Crushed Crushed Sandstor Crushed Slag (ACC Crushed Steel Slag)	n Combination: ed Stone ed Stone ne BF) gd/4/	
D Surface and Leveling Binder IL-12.5 or IL-9.5 SMA Ndesign 50 Surface	Crushed Gravel Carbonate Crus Limestone) <sup>2/</sup> Crystalline Crushed Crushed Sandstor Crushed Slag (AC Crushed Steel Sla Crushed Concrete	shed Stone (other than ed Stone ne BF) 5/ g 4/ 5/ g 3/	
	Seal or Cover  Stabilized Subbase or Shoulders  Binder IL-25.0, IL-19.0, or IL-19.0L  SMA Binder  C Surface and Leveling Binder IL-12.5, IL-9.5, or IL-9.5L  SMA Ndesign 50 Surface  D Surface and Leveling Binder IL-12.5 or IL-9.5  SMA Ndesign 50	Seal or Cover    Allowed Alone or i Gravel Crushed Gravel Carbonate Crushed Crushed Sandstor Crushed Steel Sla Crushed Concrete Gravel Carbonate Crushed Steel Sla Crushed Gravel Carbonate Crushed Gravel Carbonate Crushed Carbonate Crushed Sandstor Crushed Sandstor Crushed Slag (AC Crushed Steel Sla Crushed Concrete Gravel Carbonate Crushed Slag (AC Crushed Steel Sla Crushed Concrete Carbonate Crushed Carbonate Crushed Sandstor Crushed Sandstor Crushed Sandstor Crushed Sandstor Crushed Sandstor Crushed Sandstor Crushed Slag (AC Crushed Concrete Carbonate Crushed Slag (AC Crushed Concrete Carbonate Crushed Crushed Slag (AC Crushed Sandstor Crushed Slag (AC Crushed Steel Sla Crushed Concrete SMA Ndesign 50 Surface    D Surface and Leveling Binder IL-12.5 or IL-9.5   Crushed Gravel Carbonate Crushed Slag (AC Crushed Sandstor Crushed Sandstor Crushed Gravel Carbonate Crushed Sing (AC Crushed Sandstor Crushed Sandsto	

		50% Limestone	Any Mixture D aggregate other than Dolomite
		75% Limestone	Crushed Slag (ACBF) <sup>5/</sup> or Crushed Sandstone
HMA High ESAL	E Surface IL-12.5 or IL-9.5 SMA Ndesign 80 Surface	Allowed Alone or in Crushed Gravel Crystalline Crushed Crushed Sandstor Crushed Slag (ACC Crushed Steel Slag Crushed Concrete No Limestone.  Other Combination	ed Stone ne BF) <sup>5/</sup>
		Up to	
		50% Dolomite <sup>2/</sup> 75% Dolomite <sup>2/</sup>	Any Mixture E aggregate  Crushed Sandstone, Crushed Slag (ACBF) <sup>5/</sup> , Crushed Steel Slag <sup>5/</sup> , or Crystalline Crushed Stone
		75% Crushed Gravel or Crushed Concrete <sup>3/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF) <sup>5/</sup> , or Crushed Steel Slag <sup>5/</sup>
HMA High ESAL F Surface IL-12.5 or IL-9.5 SMA Ndesign 80 Surface		Allowed Alone or in Crystalline Crushed Sandstor Crushed Slag (AC Crushed Steel Slat No Limestone.  Other Combination Up to	ed Stone ne :BF) <sup>5/</sup> :g <sup>5/</sup>
		50% Crushed Gravel, Crushed Concrete <sup>3/</sup> , or Dolomite <sup>2/</sup>	Crushed Slag (ACBF) <sup>5/</sup> ,

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

# **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 – 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 - FINE AGGREGATE (BDE)**

Effective: April 1, 2010

Add the following to the gradation tables of Article 1003.01(c) of the Standard Specifications:

"FINE AGGREGATE GRADATIONS						
Grad No.	Sieve Size and Percent Passing					
Grau No.	3/8	No. 4	No. 8	No. 16	No. 200	
FA 22	100	6/	6/	8±8	2±2	

FINE AGGREGATE GRADATIONS (Metric)						
Grad No.	Sieve Size and Percent Passing					
Grau No.	9.5 mm	4.75 mm	2.36 mm	1.18 mm	75 µm	
FA 22	100	6/	6/	8±8	2±2	

<sup>6/</sup> For the fine aggregate gradation FA 22, the aggregate producer shall set the midpoint percent passing, and the Department will apply a range of ± ten percent. The midpoint shall not be changed without Department approval."

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

"(a) Description. Fine aggregate for HMA shall consist of sand, stone sand, chats, slag sand, or steel slag sand. For gradation FA 22, uncrushed material will not be permitted."

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

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

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

## 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:

Ownig.	
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

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, ATTENUATORS. (FULLY REDIRECTIVE, RESETTABLE); IMPACT TEMPORARY 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.

# **IMPROVED SUBGRADE (BDE)**

Effective: January 1, 2010

Revise the second paragraph of Article 302.04 of the Standard Specifications to read:

"The quantity of modified soil constructed shall be limited to that which can be covered by the full thickness of portland cement concrete pavement or HMA binder during the same construction season."

Revise the first paragraph of Article 302.07 of the Standard Specifications to read:

"302.07 Application of Modifier. The modifier shall be applied uniformly on the soil. The application of modifier shall be limited to that amount which can be mixed with the soil within the same working day."

Revise the first paragraph of Article 302.08 of the Standard Specifications to read:

"302.08 Mixing. The modifier, soil, and water shall be thoroughly mixed. Mixing shall continue until a homogenous layer of the required thickness has been obtained and a minimum of 75 percent of the mixture is smaller than 1 in. (25 mm). The moisture content of the modified soil shall be above optimum moisture content with a maximum of three percent above optimum."

Revise Article 302.10 of the Standard Specifications to read:

"302.10 Finishing and Curing. When multiple lifts are used to construct the modified soil layer, the top lift shall be a minimum of 6 in. (150 mm) thick when compacted.

Construction of pipe underdrains shall follow the requirements of Article 407.07. The surface of the modified soil shall be kept drained according to Article 301.09 and shall maintain moisture content not exceeding three percent above optimum prior to pavement construction.

When compaction of the modified soil is nearing completion, the surface shall be shaped to the required lines, grades, and cross section shown on the plans. For HMA base course and pavement (full-depth) and portland cement concrete base course and pavement, the surface of the modified soil shall be brought to true shape and correct elevation according to Article 301.07, except well compacted earth shall not be used to fill low areas.

The modified soil shall be cured for a minimum of 24 hours. The ambient air temperature shall be above 45 °F (7 °C) during curing.

During the curing period, the moisture content of the modified soil shall be maintained at optimum by sprinkling with water, use of plastic sheeting, or applying bituminous materials according to Article 312.14. During this period, no equipment or traffic will be permitted on the completed work beyond that required for maintenance of curing.

Equipment of such weight, or used in such a way as to cause a rut depth of 1/2 in. (13 mm) or more in the finished modified soil, shall be removed, or the rutting otherwise prevented, as directed by the Engineer."

Revise the first paragraph of Article 302.11 of the Standard Specifications to read:

"302.11 Subgrade Stability. Following curing, the Engineer will determine the stability of the modified soil in terms of the immediate bearing value (IBV), according to Illinois Test Procedure 501. The IBV shall be a minimum of 10.0 measured within 10 calendar days prior to pavement construction."

Revise the second paragraph of Article 310.04 of the Standard Specifications to read:

"The quantity of lime stabilized soil mixture constructed shall be limited to that which can be covered by the full thickness of portland cement concrete pavement or HMA binder during the same construction season."

Revise the first paragraph of Article 310.08(a) of the Standard Specifications to read:

"(a) Initial Mixing. The lime, soil, and water shall be thoroughly mixed until a uniform mixture throughout the required depth and width is obtained. All clods and lumps shall be reduced to a maximum size of 2 in. (50 mm). The moisture content of the stabilized soil shall be above optimum moisture content with a maximum of three percent above optimum."

Insert the following paragraph after the first paragraph of Article 310.10 of the Standard Specifications:

"Construction of pipe underdrains shall follow the requirements of Article 407.07. The surface of the lime stabilized soil shall be kept drained according to Article 301.09 and shall maintain a maximum moisture content of three percent above optimum prior to pavement construction."

Revise the first paragraph of Article 310.11 of the Standard Specifications to read:

"310.11 Subgrade Stability. Following curing, the Engineer will determine the stability of the lime stabilized soil mixture in terms of the immediate bearing value (IBV) according to Illinois Test Procedure 501. The IBV shall be a minimum of 23.0 measured within 10 calendar days prior to pavement construction."

Revise the second paragraph of Article 311.05 of the Standard Specifications to read:

"The granular material shall be placed and compacted at least three days prior to the placement of pavement or base course. Except where required for temporary access, the quantity of subbase granular material Types A or B to be placed shall be limited to that which can be covered by the full thickness of PCC pavement or HMA binder during the same construction season."

#### LIQUIDATED DAMAGES (BDE)

Effective: April 1, 2009 Revised: April 1, 2011

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	From More Than To and Including Calendar D		Work Day	
\$ 0	\$ 100,000	\$ 475	\$ 675	
100,000	500,000	750	1,050	
500,000	1,000,000	1,025	1,425	
1,000,000	3,000,000	1,275	1,725	
3,000,000	6,000,000	1,425	2,000	
6,000,000	12,000,000	2,300	3,450	
12,000,000	And over	5,800	8,125"	

## 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:

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)"

# MULCH AND EROSION CONTROL BLANKETS (BDE)

Effective: November 1, 2010 Revised: April 1, 2011

Revise the first sentence of Article 251.03 of the Standard Specifications to read:

"Within 24 hours of seed placement, mulch by one of the following methods shall be placed on the areas specified."

Revise Article 251.03(b)(2) of the Standard Specifications to read:

"(2) Procedure 2. This procedure shall consist of stabilizing the straw with an approved mulch blower followed immediately by an overspray application of light-duty hydraulic mulch. The hydraulic mulch shall be according to Article 251.03(c) except that it shall be applied as a slurry of 900 lb (1020 kg) of mulch and 1000 gal (9500 L) of water per acre (hectare) using a hydraulic mulch applicator. The light-duty hydraulic mulch shall be agitated a minimum of five minutes before application and shall be agitated during application. The light-duty hydraulic mulch shall be applied from opposing directions to ensure even coverage."

Revise Article 251.03(c) of the Standard Specification to read:

"(c) Method 3. This method shall consist of the machine application of a light-duty hydraulic mulch. Seeding shall be conducted as a separate operation and shall not be added to the hydraulic mulch slurry. Hydraulic mulch shall not be applied when the ambient temperature is at or below freezing. To achieve full and even coverage, the hydraulic mulch shall be applied from two opposing directions. Mixing and application rates shall be according to the manufacturer's recommendations and meet the minimum application rates set in Article 1081.06(a)(2)."

Revise Article 251.03(d) of the Standard Specifications to read:

"(d) Method 3A. This method shall consist of the machine application of a heavy-duty hydraulic mulch. Seeding shall be conducted as a separate operation and shall not be added to the hydraulic mulch slurry. The hydraulic mulch shall not be applied when the ambient temperature is at or below freezing. To achieve full and even coverage, the hydraulic mulch shall be applied from two opposing directions. Mixing and application rates shall be according to the manufacturer's recommendations and meet the minimum application rates set in Article 1081.06(a)(2). The heavy-duty hydraulic mulch shall be applied using a mechanically agitated hydraulic mulching machine."

Add the following to Article 251.03 of the Standard Specifications:

"(e) Method 4. This method shall consist of applying compost combined with a performance additive designed to bind/stabilize the compost. The compost/performance additive mixture shall be applied to the surface of the slope using a pneumatic blower at a depth of 2 in. (50 mm)."

Revise Article 251.04 of the Standard Specifications to read:

"251.04 Erosion Control Blanket. Erosion control blanket may be placed using either excelsior blanket or knitted straw blanket. Within 24 hours of seed placement, blanket shall be placed on the areas specified. Prior to placing the blanket, the areas to be covered shall be relatively free of rocks or clods over 1 1/2 in. (40 mm) in diameter, and sticks or other foreign material which will prevent the close contact of the blanket with the seed bed. If, as a result of rain, the prepared seed bed becomes crusted or eroded, or if eroded places, ruts, or depressions exist for any reason, the Contractor shall rework the soil until it is smooth and reseed such areas which are reworked.

After the area has been properly shaped, fertilized, and seeded, the blanket shall be laid out flat, evenly, and smoothly, without stretching the material. The excelsior and knitted straw blankets shall be placed so that the netting is on the top and the fibers are in contact with the soil. The heavy duty blankets shall be placed so that the heavy duty extruded plastic mesh is on the bottom.

For placement in ditches, the erosion control blanket shall be applied parallel to the centerline of the ditch so that there are no longitudinal seams within 2 ft (600 mm) of the bottom centerline of the ditch. The blanket shall be toed in on the upslope edge and shingled or overlapped with the flow.

On slopes, the blanket shall be applied either horizontally or vertically to the contour, toed in on the upslope edge, and shingled or overlapped with the flow.

When placed adjacent to the roadway, blankets shall be toed in along the edge of shoulder.

Anchoring the blankets shall be according to the manufacturer's specifications."

Revise Article 251.06(b) of the Supplemental Specifications to read:

"(b) Measured Quantities. Mulch Methods 1, 2, 3, 3A and 4 will be measured for payment in place in acres (hectares) of surface area mulched.

Erosion control blanket, heavy duty erosion control blanket, and turf reinforcement mat will be measured for payment in place in square yards (square meters)."

Revise Article 251.07 of the Supplemental Specifications to read:

"251.07 Basis of Payment. This work will be paid for at the contract unit price per acre (hectare) for MULCH, METHOD 1; MULCH, METHOD 2; MULCH, METHOD 3; MULCH, METHOD 3A; MULCH, METHOD 4; and at the contract unit price per square yard (square meter) for EROSION CONTROL BLANKET, HEAVY DUTY EROSION CONTROL BLANKET, or TURF REINFORCEMENT MAT."

Revise Article 1081.06(a)(2) of the Standard Specifications to read:

"(2) Hydraulic Mulch. The mulch component shall be comprised of a minimum of 70 percent biodegradable material such as wood cellulose, paper fibers, straw or cotton and shall contain no growth or germination inhibiting factors. The remainder of the components shall consist of the manufacturer's choice of tackifiers and/or strengthening fibers needed to meet the performance specifications. Tackifiers shall be non-toxic and LC 50 test results shall be provided along with the manufacturer's certification. Hydraulic mulch shall disperse evenly and rapidly and remain in slurry when agitated with water. When uniformly applied, the slurry shall form an absorbent cover allowing percolation of water to the underlying surface. Hydraulic mulch shall be packaged in UV and moisture resistant factory labeled packages or bags with the net quantity of the packaged material plainly shown on each package. The biodegradable material shall be relatively free of glossy papers and shall not be water soluble. The hydraulic mulches shall be according to the following.

Light-Duty Hydraulic Mulch			
Property <sup>17</sup> Value			
Functional Longevity <sup>2/</sup>	3 months		
Minimum Application Rates	2000 lb/acre (2240 kg/ha)		
Typical Maximum Slope Gradient (V:H)	≤ 1:3		
Maximum Uninterrupted Slope Length	50 ft (15 m)		
Maximum C Factor	0.15		
Minimum Vegetation Establishment <sup>5/</sup>	200 %		

Heavy-Duty Hydraulic Mulch				
Property <sup>1/</sup> Value				
Functional Longevity <sup>2/</sup>	12 months			
Minimum Application Rates	3000 lb/acre (3360 kg/ha)			
Typical Maximum Slope Gradient (V:H)	≤ 1:2			
Maximum Uninterrupted Slope Length	100 ft (30 m)			
Maximum C Factor <sup>3/4/</sup>	0.02			
Minimum Vegetation Establishment <sup>5</sup>	400 %			

1/ This table sets minimum requirements only. Refer to manufacturer recommendations for application rates, instructions, gradients, maximum continuous slope lengths and other site specific recommendations.

- 2/ Manufacturer's estimated time period, based upon field observations, that a material can be anticipated to provide erosion control as influenced by its composition and site-specific conditions.
- 3/ "C" Factor calculated as ratio of soil loss from HECP protected slope (tested at specified or greater gradient, h:v) to ratio of soil loss from unprotected (control) plot based on large-scale testing.
- 4/ Large-scale test methods shall be according to ASTM D 6459.
- 5/ Minimum vegetation establishment shall be calculated according to ASTM D 7322.

The manufacturer shall furnish a certification with each shipment of hydraulic mulch stating the number of packages or bags furnished and that the material complies with these requirements."

# 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 Gravity Adjustment Factors				
	_ , ,			lv Ctabilinad
Types of Violations	At Time of		. Permaneni	ly Stabilized
	< 5	5 - 10	>10 - 25	> 25
	Acres	Acres	Acres	Acres
Failure to Install or Properly Maintain BMP	0.1 - 0.5	0.2 - 1.0	0.5 - 2.5	1.0 - 5
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 Chemicals,	0.2 - 1	0.2 - 1	0.5 - 2.5	1.0 - 5
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 Written or	0.2 - 1	0.5 - 2.5	1.0 - 5	1.0 - 5
Graphic Plans Required by SWPPP				
Failure to comply with Other Provisions of the	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5"
NPDES Permit				

# **NIGHTTIME WORK ZONE LIGHTING (BDE)**

Effective: November 1, 2008

<u>Description</u>. This work shall consist of furnishing, installing, maintaining, moving, and removing lighting for nighttime work zones. Nighttime shall be defined as occurring shortly before sunset until after sunrise.

<u>Materials</u>. The lighting shall consist of mobile and/or stationary lighting systems as required herein for the specific type of construction. Mobile lighting systems shall consist of luminaires attached to construction equipment or moveable carts. Stationary lighting systems shall consist of roadway luminaires mounted on temporary poles or trailer mounted light towers at fixed locations. Some lighting systems, such as balloon lights, may be adapted to both mobile and stationary applications.

Equipment. The Contractor shall furnish an illuminance meter for use by the Engineer. The meter shall have a digital display calibrated to NIST standards, shall be cosine and color corrected, and shall have an accuracy of  $\pm$  five percent. The sensor shall have a level indicator to ensure measurements are taken in a horizontal plane.

# **CONSTRUCTION REQUIREMENTS**

<u>General</u>. At the preconstruction conference, the Contractor shall submit the type(s) of lighting system to be used and the locations of all devices.

Before nighttime construction may begin, the lighting system shall be demonstrated as being operational.

<u>Nighttime Flagging</u>. The requirements for nighttime flagging shall be according to Article 701.13 of the Standard Specifications and the glare control requirements contained herein.

<u>Lighting System Design</u>. The lighting system shall be designed to meet the following.

- (a) Lighting Levels. The lighting system shall provide a minimum of 5 foot candles (54 lux) throughout the work area. For mobile operations, the work area shall be defined as 25 ft (9 m) in front of and behind moving equipment. For stationary operations, the work area shall be defined as the entire area where work is being performed.
  - Lighting levels will be measured with an illuminance meter. Readings will be taken in a horizontal plane 3 ft (1 m) above the pavement or ground surface.
- (b) Glare Control. The lighting system shall be designed and operated so as to avoid glare that interferes with traffic, workers, or inspection personnel. Lighting systems with flood, spot, or stadium type luminaires shall be aimed downward at the work and rotated outward no greater than 30 degrees from nadir (straight down). Balloon lights shall be positioned at least 12 ft (3.6 m) above the roadway.
  - As a large component of glare, the headlights of construction vehicles and equipment shall not be operated within the work zone except as allowed for specific construction operations. Headlights shall never be used when facing oncoming traffic.
- (c) Light Trespass. The lighting system shall be designed to effectively light the work area without spilling over to adjoining property. When, in the opinion of the Engineer, the lighting is disturbing adjoining property, the Contractor shall modify the lighting arrangement or add hardware to shield the light trespass.

<u>Construction Operations</u>. The lighting design required above shall be provided at any location where construction equipment is operating or workers are present on foot. When multiple operations are being carried on simultaneously, lighting shall be provided at each separate work area.

The lighting requirements for specific construction operations shall be as follows.

- (a) Installation or Removal of Work Zone Traffic Control. The required lighting level shall be provided at each truck and piece of equipment used during the installation or removal of work zone traffic control. Headlights may be operated in the work zone.
- (b) Milling and Paving. The required lighting level shall be provided by mounting a minimum of one balloon light to each piece of mobile construction equipment used in the work zone. This would include milling machines, mechanical sweepers, material transfer devices, spreading and finishing machines, and rollers; but not include trucks used to transport materials and personnel or other vehicles that are continuously moving in and out of the work zone. The headlights of construction equipment shall not be operated within the work zone.
- (c) Patching. The required lighting level shall be provided at each patching location where work is being performed.

(d) Pavement Marking and Raised Reflective Pavement Marker Removal/Installation. The striping truck and the attenuator/arrow board trucks may by operated by headlights alone; however, additional lighting may be necessary for the operator of the striping truck to perform the work.

For raised reflective pavement marker removal and installation and other pavement marking operations where workers are on foot, the required lighting level shall be provided at each truck and piece of equipment.

(e) Layout, Testing, and Inspection. The required lighting level shall be provided for each active area of construction layout, material testing, and inspection. The work area shall be defined as 15 ft (7.6 m) in front and back of the individual(s) performing the tasks.

<u>Basis of Payment</u>. This work will be paid for at the contract lump sum price for NIGHTTIME WORK ZONE LIGHTING.

# 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.

## **POST MOUNTING OF SIGNS (BDE)**

Effective: January 1, 2011

Revise the second paragraph of Article 701.14 of the Standard Specifications to read:

"Post mounted signs shall be a breakaway design. The sign shall be within five degrees of vertical. Two posts shall be used for signs greater than 16 sq ft (1.5 sq m) in area or where the height between the sign and the ground exceeds 7 ft (2.1 m)."

# 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)"

## RAISED REFLECTIVE PAVEMENT MARKERS (BDE)

Effective: November 1, 2009 Revised: April 1, 2010

Revise the first sentence of the second paragraph of Article 781.03(a) 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."

## RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007 Revised: January 1, 2011

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 % $^{1/}$	± 0.5 %
$G_{mm}$	± 0.03	

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

If more than 20 percent of the individual sieves 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.
  - (1) If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer. If the quality is not known, the quality shall be determined according to Article 1031.04(b)(2).
  - (2) 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.

## Max RAP Percentage

HMA Mixtures 1/, 3/	Maximum % RAP				
Ndesign	Binder/Leveling Binder Surface Polymer Modifi				
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		

- 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

internal to a content of the content						
HMA Mixtures 1/, 2/	Maximum % FRAP					
Ndesign	Binder/Leveling Binder	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."

SEEDING (BDE)

Effective: July 1, 2004 Revised: July 1, 2010

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
	Class – Type	Seeus	(kg/hectare)
1A	Salt Tolerant	Bluegrass	60 (70)
	Lawn Mixture 7/	Perennial Ryegrass	20 (20)
		Red Fescue	20 (20)
		(Audubon, Sea Link, or Epic)	
		Hard Fescue	20 (20)
		(Rescue 911, Spartan II, or Reliant IV)	
		Fults Salt Grass 1/ or Salty Alkaligrass	60 (70)
2	Roadside Mixture 7/	Tall Fescue	100 (110)
		(Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	=0 (==)
		Perennial Ryegrass	50 (55)
		Creeping Red Fescue	40 (50)
0.4	0.11.7.11	Red Top	10 (10)
2A	Salt Tolerant	Tall Fescue	60 (70)
	Roadside Mixture 7/	(Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	00 (00)
		Perennial Ryegrass	20 (20)
		Red Fescue	30 (20)
		(Audubon, Sea Link, or Epic)	00 (00)
		Hard Fescue	30 (20)
		(Rescue 911, Spartan II, or Reliant IV)	CO (70)
2	Northern Illinois	Fults Salt Grass 1/ or Salty Alkaligrass	60 (70)
3		Elymus Canadensis	5 (5)
	Slope Mixture 7/	(Canada Wild Rye) Perennial Ryegrass	20 (20)
		Alsike Cover 2/	20 (20) 5 (5)
		Desmanthus Illinoensis	2 (2)
		(Illinois Bundleflower) 2/, 5/	2 (2)
		Andropogon Scoparius	12 (12)
		(Little Bluestem) 5/	12 (12)
		Bouteloua Curtipendula	10 (10)
		(Side-Oats Grama)	(10)
		Fults Salt Grass 1/ or Salty Alkaligrass	30 (35)
		Oats, Spring	50 (55)
		Slender Wheat Grass 5/	15 (15)
		Buffalo Grass (Cody or Bowie) 4/, 5/, 9/	5 (5)
6A	Salt Tolerant	Andropogon Scoparius	5 (5)
	Conservation	(Little Bluestem) 5/	
	Mixture	Elymus Canadensis	2 (2)
		(Canada Wild Rye) 5/	
		Buffalo Grass (Cody or Bowie) 4/, 5/, 9/	5 (5)
		Vernal Alfalfa 2/	15 (15)
		Oats, Spring	48 (55)
		Fults Salt Grass 1/ or Salty Alkaligrass	20 (20)"

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. 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 the first paragraph of Article 1081.04(a) of the Standard Specifications to read:

"(a) Sampling and Testing. Each lot of seed furnished shall be tested by a State Agriculture Department (including other States) or by land grant college or university agricultural sections or by a Registered Seed Technologist. Germination testing of seed shall be accomplished within the 12 months prior to the seed being installed on the project."

Delete the last sentence of the first paragraph of Article 1081.04(c)(2) of the Standard Specifications.

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

TABLE 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)	-
Salty Alkaligrass	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	-	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."

## SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)

Effective: November 1, 2005 Revised: July 1, 2010

<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.

<u>Materials</u>. 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  $\pm 2$  in. ( $\pm 50$  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 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-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 target slump flow shall be submitted.

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 or L-box blocking ratio, and hardened visual stability index. For the trial mixture, the slump flow shall be near the proposed target slump flow.

<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 or L-box blocking ratio, 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.

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. 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 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 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: July 1, 2010

<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  $\pm 2$  in. ( $\pm 50$  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 hardened visual stability index shall be a maximum of 1.

Mixing Portland Cement Concrete. 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>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 Revised: April 1, 2011

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 according to 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.

The mobilization payment to the subcontractor is an advance payment of the reported amount of the subcontract and is not a payment in addition to the amount of the subcontract; therefore, the amount of the advance payment will be deducted from future progress payments.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

# **SURFACE TESTING OF PAVEMENTS (BDE)**

Effective: April 1, 2002 Revised: January 1, 2007

## **Hot-Mix Asphalt (HMA) Overlays**

Revise Article 406.03(h) of the Standard Specifications to read:

"(h) Pavement Surface Test Equipment ......1101.10"

Revise Article 406.11 of the Standard Specifications to read:

"406.11 Surface Tests. The finished surface of the pavement shall be tested for smoothness within three days of paving. Testing shall be performed in the presence of the Engineer.

Prior to testing, a copy of the approval letter and recorded settings from the Profile Equipment Verification (PEV) Program shall be submitted to the Engineer; and all objects and debris shall be removed from the pavement.

- (a) Test Sections/Equipment.
  - (1) High-Speed Mainline Pavement. High-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed greater than 45 mph. These sections shall be tested using a profile testing device.
  - (2) Low-Speed Mainline Pavement. Low-speed mainline pavement shall consist of pavements, ramps, and loops with a posted speed of 45 mph or less. These sections shall be tested using a profile testing device.
  - (3) Miscellaneous Pavement. Miscellaneous pavement shall consist of:
    - a. pavement on horizontal curves with a centerline radius of curvature of less than or equal to 1000 ft (300 m) and pavement within the superelevation transition of such curves:
    - b. pavement on vertical curves having a length of less than or equal to 200 ft (60 m) in combination with an algebraic change in tangent grades greater than or equal to three percent, as may occur on urban ramps or other constricted-space facilities:
    - c. the first or last 15 ft (4.5 m) of a pavement section where the Contractor is not responsible for the adjoining surface;
    - d. intersections;
    - e. variable width pavements;
    - f. side street returns;
    - g. crossovers;
    - h. connector pavement from mainline pavement expansion joint to the bridge approach pavement;
    - i. bridge approach pavement; and
    - j. other miscellaneous pavement surfaces (i.e. a turn lane) as determined by the Engineer.

Miscellaneous pavement shall be tested using a 16 ft (5 m) straightedge set to a 3/8 in. (10 mm) tolerance.

- (b) Lots/Sublots. Mainline pavement test sections will be divided into lots and sublots.
  - (1) Lots. A lot will be defined as a continuous strip of pavement 1 mile (1600 m) long and one lane wide. When the length of a continuous strip of pavement is less than 1 mile (1600 m), that pavement will be included in an adjacent lot. Structures will be omitted when measuring pavement length.
  - (2) Sublots. Lots will be divided into 0.1 mile (160 m) sublots. A partial sublot greater than or equal to 250 ft (76 m) resulting from an interruption in the pavement will be subject to the same evaluation as a whole sublot. Partial sublots less than 250 ft (76 m) shall be included with the previous sublot for evaluation purposes.
- (c) Testing Procedure. One wheel track shall be tested per lane. Testing shall be performed 3 ft (1 m) from and parallel to the edge of the lane away from traffic. A guide shall be used to maintain the proper distance.

The profile trace generated shall have stationing indicated every 500 ft (150 m) at a minimum. Both ends of the profile trace shall be labeled with the following information: contract number, beginning and ending stationing, which direction is up on the trace, which direction the data was collected, and the device operator name(s). The top portion of the Department supplied form, "Profile Report of Pavement Smoothness" shall be completed and secured around the trace roll.

Although surface testing of intermediate lifts will not be required, they may be performed at the Contractor's option. When this option is chosen, the testing shall be performed and the profile traces shall be generated as described above.

The Engineer may perform his/her own testing at any time for monitoring and comparison purposes.

(d) Trace Reduction and Bump Locating Procedure. All traces shall be reduced. Traces produced by a mechanical recorder shall be reduced using an electronic scanner and computer software. This software shall calculate the profile index of each sublot in in./mile (mm/km) and indicate any high points (bumps) in excess of 0.30 in. (8 mm) with a line intersecting the profile on the printout. Computerized recorders shall provide the same information.

The profile index of each track, average profile index of each sublot, average profile index of the lot and locations of bumps shall be recorded on the form.

All traces and reports shall be provided within two working days of completing the testing to the Engineer for the project file. Traces from either a computerized profile testing device or analysis software used with a manual profile testing device shall display the settings used for the data reduction. The Engineer will compare these settings with the approved settings from the PEV Program. If the settings do not match, the results will be rejected and the section shall be retested/reanalyzed with the appropriate settings.

The Engineer will use the results of the testing to evaluate paving methods and equipment.

If the average profile index of a lot exceeds 40.0 in./mile (635 mm/km) for high-speed mainline pavement or 65.0 in./mile (1025 mm/km) for low-speed mainline pavement, the paving operation will be suspended until corrective action is taken by the Contractor.

- (e) Corrective Work. All bumps in excess of 0.30 in. (8 mm) in a length of 25 ft (8 m) or less shall be corrected. If the bump is greater than 0.50 in. (13 mm), the pavement shall be removed and replaced. The minimum length of pavement to be removed shall be 3 ft (900 mm).
  - (1) High-Speed Mainline Pavement. Any sublot having a profile index within the range of, greater than 30.0 to 40.0 in./mile (475 to 635 mm/km) including bumps, shall be corrected to reduce the profile index to 30.0 in./mile (475 mm/km) or less on each trace. Any sublot having a profile index greater than 40.0 in./mile (635 mm/km) including bumps, shall be corrected to reduce the profile index to 30.0 in./mile (475 mm/km) or less on each trace, or replaced at the Contractor's option.
  - (2) Low-Speed Mainline Pavement. Any sublot having a profile index within the range of, greater than 45.0 to 65.0 in./mile (710 to 1025 mm/km) including bumps, shall be corrected to reduce the profile index to 45.0 in./mile (710 mm/km) or less on each trace. Any sublot having a profile index greater than 65.0 in./mile (1025 mm/km) including bumps, shall be corrected to reduce the profile index to 45.0 in./mile (710 mm/km) or less on each trace, or replaced at the Contractor's option.
  - (3) Miscellaneous Pavement. Surface variations which exceed the 3/8 in. (10 mm) tolerance will be marked by the Engineer and shall be corrected by the Contractor.

Corrective work shall be completed using either an approved grinding device consisting of multiple saws or by removing and replacing the pavement. Corrective work shall be applied to the full lane width. When completed, the corrected area shall have uniform texture and appearance, with the beginning and ending of the corrected area squared normal to the centerline of the paved surface.

Upon completion of the corrective work, the surface of the sublot(s) shall be retested. The Contractor shall furnish the profile tracing(s) and the completed form(s) to the Engineer within two working days after corrections are made. If the profile index and/or bumps still do not meet the requirements, additional corrective work shall be performed.

Corrective work shall be at no additional cost to the Department.

(f) Smoothness Assessments. Assessments will be paid to or deducted from the Contractor for each sublot of mainline pavement, per the Smoothness Assessment Schedule. Assessments will be based on the average profile index of each sublot prior to performing any corrective work unless the Contractor has chosen to remove and replace the sublot. For sublots that are replaced, assessments will be based on the profile index determined after replacement.

Assessments will not be paid or deducted until all other contract requirements for the pavement are satisfied. Pavement that is corrected or replaced for reasons other than smoothness, shall be retested as stated herein.

SMOOTHNESS ASSESSMENT SCHEDULE (HMA Overlays)			
High-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Low-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Assessment per sublot	
6.0 (95) or less	15.0 (240) or less	+\$150.00	
>6.0 (95) to 10.0 (160)	>15.0 (240) to 25.0 (400)	+\$80.00	
>10.0 (160) to 30.0 (475)	>25.0 (400) to 45.0 (710)	+\$0.00	
>30.0 (475) to 40.0 (635)	>45.0 (710) to 65.0 (1025)	+\$0.00	
Greater than 40.0 (635)	Greater than 65.0 (1025)	-\$300.00	

Smoothness assessments will not be applied to miscellaneous pavement sections."

# **Hot-Mix Asphalt (HMA) Pavement (Full-Depth)**

Revise Article 407.09 of the Standard Specifications to read:

"407.09 Surface Tests. The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows:

Two wheel tracks shall be tested per lane. Testing shall be performed 3 ft (1 m) from and parallel to each lane edge.

SMOOTHNESS ASSESSMENT SCHEDULE (Full-Depth HMA)			
High-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Low-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Assessment per sublot	
6.0 (95) or less		+\$800.00	
>6.0 (95) to 11.0 (175)	15.0 (240) or less	+\$550.00	
>11.0 (175) to 17.0 (270)	>15.0 (240) to 25.0 (400)	+\$350.00	
>17.0 (270) to 30.0 (475)	>25.0 (400) to 45.0 (710)	+\$0.00	
>30.0 (475) to 40.0 (635)	>45.0 (710) to 65.0 (1025)	+\$0.00	
Greater than 40.0 (635)	Greater than 65.0 (1025)	-\$500.00"	

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

#### **Portland Cement Concrete Pavement**

Revise Article 420.10 of the Standard Specifications to read:

"**420.10 Surface Tests.** The finished surface of the pavement shall be tested for smoothness according to Article 406.11, except as follows:

The finished surface of the pavement shall be tested for smoothness once the pavement has attained a flexural strength of 550 psi (3800 kPa) or a compressive strength of 3000 psi (20,700 kPa).

Two wheel tracks shall be tested per lane. Testing shall be performed 3 ft (1 m) from and parallel to each lane edge.

Membrane curing damaged during testing shall be repaired as directed by the Engineer at no additional cost to the Department.

No further texturing for skid resistance will be required for areas corrected by grinding. Protective coat shall be reapplied to ground areas according to Article 420.18 at no additional cost to the Department.

For pavement that is corrected by removal and replacement, the minimum length to be removed shall meet the requirements of either Class A or Class B patching.

SMOOTHNESS ASSESSMENT SCHEDULE (PCC)			
High-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Low-Speed Mainline Pavement Average Profile Index in./mile (mm/km)	Assessment per sublot	
6.0 (95) or less		+\$1200.00	
>6.0 (95) to 11.0 (175)	15.0 (240) or less	+\$950.00	
>11.0 (175) to 17.0 (270)	>15.0 (240) to 25.0 (400)	+\$600.00	
>17.0 (270) to 30.0 (475)	>25.0 (400) to 45.0 (710)	+\$0.00	
>30.0 (475) to 40.0 (635)	>45.0 (710) to 65.0 (1025)	+\$0.00	
Greater than 40.0 (635)	Greater than 65.0 (1025)	-\$750.00"	

Delete the fourth paragraph of Article 420.20 of the Standard Specifications.

#### **Testing Equipment**

Revise Article 1101.10 of the Standard Specifications to read:

"1101.10 Pavement Surface Test Equipment. Required surface testing and analysis equipment and their jobsite transportation shall be provided by the Contractor.

- (a) 16 ft (5 m) Straightedge. The 16 ft (5 m) straightedge shall consist of a metal I-beam mounted between two wheels spaced 16 ft (5 m) between the axles. Scratcher bolts which can be easily and accurately adjusted, shall be set at the 1/4, 1/2, and 3/4 points between the axles. A handle suitable for pushing and guiding shall be attached to the straightedge.
- (b) Profile Testing Device. The profile testing device shall have a decal displayed to indicate it has been tested through the Profile Equipment Verification (PEV) Program administered by the Department.

(1) California Profilograph. The California Profilograph shall be either computerized or manual and have a frame 25 ft (8 m) in length supported upon multiple wheels at either end. The profile shall be recorded from the vertical movement of a wheel attached to the frame at mid point.

The California Profilograph shall be calibrated according to the manufacturer's recommendations and California Test 526. All calibration traces and calculations shall be submitted to the Engineer for the project file.

(2) Inertial Profiler. The inertial profiler shall be either an independent device or a system that can be attached to another vehicle using one or two non-contact sensors to measure the pavement profile. The inertial profiler shall be capable of performing a simulation of the California Profilograph to provide results in the Profile Index format.

The inertial profiler shall be calibrated according to the manufacturer's recommendations. All calibration traces and calculations shall be submitted to the Engineer for the project file.

(3) Trace Analysis. The Contractor shall reduce/evaluate these traces using a 0.00 in. (0.0 mm) blanking band and determine a Profile Index in in./mile (mm/km) for each section of finished pavement surface. Traces produced using a computerized profile testing device will be evaluated without further reduction. When using a manual profile testing device, the Contractor shall provide an electronic scanner, a computer, and software to reduce the trace. All analysis equipment (electronic scanner, computerized recorder, etc.) shall be able to accept 0.00 in. (0.0 mm) for the blanking band.

All traces from pavement sections tested with the profile testing device shall be recorded on paper with scales of 300:1 longitudinally and 1:1 vertically. Equipment and software settings of the profile testing device and analysis equipment shall be set to those values approved through the PEV Program.

The Engineer may retest the pavement at any time to verify the accuracy of the equipment."

# TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002 Revised: January 1, 2011

Add the following to Article 280.02 of the Standard Specifications to read:

"(k)	Filter Fabric	1080.03
(I)	Urethane Foam/Geotextile	1081.15(i)"

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 products from the Department's approved list, rolled excelsior, 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 6 in. (150 mm) lower than the bottom of the terminating ends of the ditch side slopes.

When rolled excelsior is used, each ditch check shall be installed and maintained such that the device is no less than 10 in. (250 mm) high at the point of overflow. Units installed at a spacing requiring a height greater than 10 in. (250 mm) shall be maintained at the height for the spacing at which they were originally installed."

Revise the last sentence of the first paragraph Article 280.04(b) of the Standard Specifications to read:

"The barrier shall be constructed with rolled excelsior, silt filter fence, or urethane foam/geotextiles."

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 installed according to Article 251.03 except for any reference to seeding."

Add the following to Article 280.04 of the Standard Specifications:

(h) Temporary Erosion Control Blanket. This system consists of temporarily installing erosion control blanket or heavy duty erosion control blanket over areas that are to be reworked during a later construction phase. Work shall be according to Article 251.04 except references to seeding and fertilizer shall not apply.

When an area is to be reworked more than once, the blanket shall be carefully removed, properly stored, and then reinstalled over the same area."

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 to Article 280.07 of the Standard Specifications:

"(g) Temporary Erosion Control Blanket. This work will be measured for payment in place in square yards (square meters) of actual surface covered.

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."

Add the following to Article 280.08 of the Standard Specifications:

"(g) Temporary Erosion Control Blanket. Temporary Erosion Control Blanket will be paid for at the contract unit price per square yard (square meter) for TEMPORARY EROSION CONTROL BLANKET or TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET.

The work of removing, storing, and reinstalling the blanket over areas to be reworked more than once will not be paid for separately but shall be included in the cost of the temporary erosion control blanket or temporary heavy duty erosion control blanket."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

Revise the second sentence of the first paragraph of Article 1081.15(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."

Revise Article 1081.15(f) of the Supplemental Specifications to read:

"(f) Rolled Excelsior. Rolled excelsior shall consist of an excelsior fiber filling totally encased inside netting and sealed with metal clips or knotted at the ends. The fiber density shall be a minimum of 1.24 lb/cu ft (20 kg/cu m) based on a moisture content of 22 percent at manufacturing. The netting shall be composed of a polyester or polypropylene material which retains 70 percent of its strength after 500 hours of exposure to sunlight. The maximum opening of the net shall be 1 x 1 in. (25 x 25 mm)."

Add the following to Article 1081.15 of the Standard Specifications:

- "(i) Urethane Foam/Geotextile. Urethane foam/geotextile shall be triangular shaped having a minimum height of 10 in. (250 mm) in the center with equal sides and a minimum 20 in. (500 mm) base. The triangular shaped inner material shall be a low density urethane foam. The outer cover shall be a woven geotextile fabric placed around the inner material and allowed to extend beyond both sides of the triangle a minimum of 18 in. (450 mm).
  - (1) The geotextile shall meet the following properties:

Property	Value	Test Method
Grab Tensile Strength	124 (550) min.	ASTM D 4632
lb (N) (min.)		
Grab Elongation @ Brake (percent)	15 min.	ASTM D 4632
Burst Strength psi (kPa)	280 (1930) min.	ASTM D 3786
AOS (Sieve No.)	30 min.	ASTM D 4751
UV Resistance (500 hours) (percent)	80 min.	ASTM D 4355

(2) The urethane foam shall meet the following properties:

Property	Value	Test Method
Density lb/cu ft (kg/cu m)	1.0 ± 0.1 (16.0 ± 1.6)	ASTM D 3574
Tensile Strength psi (kPa)	10 (70) min.	ASTM D 3574
Elongation (percent)	125 min.	ASTM D 3574
Tear Resistance lb/in. (N/mm)	1.25 (0.22)	ASTM D 3574"

## TRAFFIC BARRIER TERMINAL, TYPE 6 (BDE)

Effective: January 1, 2010

Delete the fourth paragraph of Article 631.07 of the Standard Specifications.

# TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: August 1, 2011

Revise the third sentence of the third paragraph of Article 105.03(b) of the Standard Specifications to read:

"The daily monetary deduction will be \$2,500."

# TRAFFIC CONTROL SURVEILLANCE (BDE)

Effective: January 1, 2011

Revise the first sentence of the first paragraph of Article 701.10 of the Standard Specifications to read:

"When open holes, broken pavement, trenches over 3 in. (75 mm) deep and 4 in. (100 mm) wide or other hazards are present within 8 ft (2.4 m) of the edge of an open lane, the Contractor shall furnish traffic control surveillance during all hours when the Contractor is not engaged in construction operations."

## **UTILITY COORDINATION AND CONFLICTS (BDE)**

Effective: April 1, 2011

Revise Article 105.07 of the Standard Specifications to read:

"105.07 Cooperation with Utilities. The Department reserves the right at any time to allow work by utilities on or near the work covered by the contract. The Contractor shall conduct his/her work so as not to interfere with or hinder the progress or completion of the work being performed by utilities. The Contractor shall also arrange the work and shall place and dispose of the materials being used so as not to interfere with the operations of utility work in the area.

The Contractor shall cooperate with the owners of utilities in their removal and rearrangement operations so work may progress in a reasonable manner, duplication or rearrangement of work may be reduced to a minimum, and services rendered by those parties will not be unnecessarily interrupted.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer."

Revise the first sentence of the last paragraph of Article 107.19 of the Standard Specifications to read:

"When the Contractor encounters unexpected regulated substances due to the presence of utilities in unanticipated locations, the provisions of Article 107.40 shall apply; otherwise, if the Engineer does not direct a resumption of operations, the provisions of Article 108.07 shall apply."

Revise Article107.31 of the Standard Specification to read:

#### "107.31 Reserved."

Add the following four Articles to Section 107 of the Standard Specifications:

- "107.37 Locations of Utilities within the Project Limits. All known utilities existing within the limits of construction are either indicated on the plans or visible above ground. For the purpose of this Article, the limits of proposed construction are defined as follows:
  - (a) Limits of Proposed Construction for Utilities Paralleling the Roadway.
    - (1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 2 ft (600 mm) distant at right angles from the plan or revised slope limits.
      - In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 4 ft (1.2 m) outside the edges of structure footings or the structure where no footings are required.
    - (2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
    - (3) The lower vertical limits shall be either the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.
  - (b) Limits of Proposed Construction for Utilities Crossing the Roadway in a Generally Transverse Direction.
    - (1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction, unless otherwise required by the regulations governing the specific utility involved.
    - (2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions as indicated in the contract. It is further understood the actual location of the utilities may be located anywhere within the tolerances provided in 220 ILCS 50/2.8 or Administrative Code Title 92 Part 530.40(c), and the proximity of some utilities to construction may require extraordinary measures by the Contractor to protect those utilities.

No additional compensation will be allowed for any delays, inconveniences, or damages sustained by the Contractor due to the presence of or any claimed interference from known utility facilities or any adjustment of them, except as specifically provided in the contract.

**107.38 Adjustments of Utilities within the Project Limits.** The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation, or altering of an existing utility facility in any manner.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting known utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits as described in Article 107.37. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be indicated in the contract.

The Contractor may make arrangements for adjustment of utilities indicated in the contract, but not scheduled by the Department for adjustment, provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any such adjustments shall be the responsibility of the Contractor.

107.39 Contractor's Responsibility for Locating and Protecting Utility Property and Services. At points where the Contractor's operations are adjacent to properties or facilities of utility companies, or are adjacent to other property, damage to which might result in considerable expense, loss, or inconvenience, work shall not be commenced until all arrangements necessary for the protection thereof have been made.

Within the State of Illinois, a State-Wide One Call Notice System has been established for notifying utilities. Outside the city limits of the City of Chicago, the system is known as the Joint Utility Locating Information for Excavators (JULIE) System. Within the city limits of the City of Chicago the system is known as DIGGER. All utility companies and municipalities which have buried utility facilities in the State of Illinois are a part of this system.

The Contractor shall call JULIE (800-892-0123) or DIGGER (312-744-7000), a minimum of 48 hours in advance of work being done in the area, and they will notify all member utility companies involved their respective utility should be located.

For utilities which are not members of JULIE or DIGGER, the Contractor shall contact the owners directly. The plan general notes will indicate which utilities are not members of JULIE or DIGGER.

The following table indicates the color of markings required of the State-Wide One Call Notification System.

Utility Service	Color
Electric Power, Distribution and Transmission	Safety Red
Municipal Electric Systems	Safety Red
Gas Distribution and Transmission	High Visibility Safety Yellow
Oil Distribution and Transmission	High Visibility Safety Yellow
Telephone and Telegraph System	Safety Alert Orange
Community Antenna Television Systems	Safety Alert Orange

Water Systems	Safety Precaution Blue
Sewer Systems	Safety Green
Non-Potable Water and Slurry Lines	Safety Purple
Temporary Survey	Safety Pink
Proposed Excavation	Safety White
1 Toposed Excavation	(Black when snow is on the ground)

The State-Wide One Call Notification System will provide for horizontal locations of utilities. When it is determined that the vertical location of the utility is necessary to facilitate construction, the Engineer may make the request for location from the utility after receipt of notice from the Contractor. If the utility owner does not field locate their facilities to the satisfaction of the Engineer, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or non-execution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

In the event of interruption of utility services as a result of accidental breakage or as a result of being exposed or unsupported, the Contractor shall promptly notify the proper authority and shall cooperate with the said authority in the restoration of service. If water service is interrupted, repair work shall be continuous until the service is restored. No work shall be undertaken around fire hydrants until provisions for continued service have been approved by the local fire authority.

**107.40 Conflicts with Utilities.** Except as provided hereinafter, the discovery of a utility in an unanticipated location will be evaluated according to Article 104.03. It is understood and agreed that the Contractor has considered in the bid all facilities not meeting the definition of a utility in an unanticipated location and no additional compensation will be allowed for any delays, inconveniences, or damages sustained by the Contractor due to the presence of or any claimed interference from such facilities.

When the Contractor discovers a utility in an unanticipated location, the Contractor shall not interfere with said utility, shall take proper precautions to prevent damage or interruption of the utility, and shall promptly notify the Engineer of the nature and location of said utility.

(a) Definition. A utility in an unanticipated location is defined as an active or inactive utility, which is either:

- (1) Located underground and (a) not shown in any way in any location on the contract documents; (b) not identified in writing by the Department to the Contractor prior to the letting; or (c) not located relative to the location shown in the contract within the tolerances provided in 220 ILCS 50/2.8 or Administrative Code Title 92 Part 530.40(c); or
- (2) Located above ground or underground and not relocated as provided in the contract.

Service connections shall not be considered to be utilities in unanticipated locations.

- (b) Compensation. Compensation will not be allowed for delays, inconveniences, or damages sustained by the Contractor from conflicts with facilities not meeting the above definition; or if a conflict with a utility in an unanticipated location does not cause a shutdown of the work applicable to the utility or a documentable reduction in the rate of progress exceeding the limits set herein. The provisions of Article 104.03 notwithstanding, compensation for delays caused by a utility in an unanticipated location will be paid according to the provisions of this Article governing minor and major delays or reduced rate of production which are defined as follows:
  - (1) Minor Delay. A minor delay occurs when the Contractor's operation is completely stopped by a utility in an unanticipated location for more than two hours, but not to exceed three weeks.
  - (2) Major Delay. A major delay occurs when the Contractor's operation is completely stopped by a utility in an unanticipated location for more than three weeks.
  - (3) Reduced Rate of Production Delay. A reduced rate of production delay occurs when the contractor's rate of production decreases by more than 25 percent and lasts longer than seven days.
- (c) Payment. Payment for Minor, Major and Reduced Rate of Production Delays will be made as follows.
  - (1) Minor Delay. Labor idled which cannot be used on other work will be paid for according to Article 109.04(b)(1) and (2) for the time between start of the delay and the minimum remaining hours in the work shift required by the prevailing practice in the area.

Equipment idled which cannot be used on other work will be paid for according to Article 109.04(b)(4). The length of time paid for will be the time between start of delay and eight hours working time from start of shift being worked.

For delays exceeding the initial shift, excluding Saturdays, Sundays, and holidays, Contractor-owned equipment idled by the delay which cannot be used on other work and remaining at the work site, will be paid at one-half the rate permitted in Article 109.04(b)(4) using a maximum eight hours per day for computation purposes. Equipment rented from an independent source will be paid at rates being paid by the Contractor plus move-in move-out costs, but the total amount paid will not exceed three weeks rental.

(2) Major Delay. Labor will be the same as for a minor delay.

Equipment will be the same as for a minor delay, except Contractor-owned equipment will be limited to three weeks plus the cost of move-out to either the Contractor's yard or another job, whichever is less. Rental equipment may be paid for longer than three weeks provided the Contractor presents adequate support to the Department (including lease agreement) to show retaining equipment on the job is the most economical course to follow and in the public interest.

(3) Reduced Rate of Production Delay. The Contractor will be compensated for the reduced productivity for labor and equipment time in excess of the 25 percent threshold for that portion of the delay in excess of seven days. Determination of compensation will be in accordance with Article 104.02, except labor and material additives will not be permitted.

Whether covered by (1), (2) or (3) above, additional traffic control required as a result of the operation(s) delayed will be paid for according to Article 109.04 for the total length of the delay.

If the delay is clearly shown to have caused work, which would have otherwise been completed, to be done after material or labor costs have increased, such increases may be paid. Payment for materials will be limited to increased cost substantiated by documentation furnished by the Contractor. Payment for increased labor rates will include those items in Article 109.04(b)(1) and (2), except the 35 percent and ten percent additives will not be permitted. On a working day contract, a delay occurring between November 30 and May 1, when work has not started, will not be considered as eligible for payment of measured labor and material costs.

Project overhead (not including interest) will be allowed when all progress on the contract has been delayed, and will be calculated as 15 percent of the delay claim.

(d) Other Obligations of Contractor. Upon payment of a claim under this provision, the Contractor shall assign subrogation rights to the Department for the Department's efforts of recovery from any other party for monies paid by the Department as a result of any claim under this Provision. The Contractor shall fully cooperate with the Department in its efforts to recover from another party any money paid to the Contractor for delay damages under this Provision."

#### **WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within **250** working days.

#### 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.

 $CA = (BPI_P - BPI_L) x (%AC_V / 100) x Q$ 

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).

 $G_{mb}$  = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

<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 =  $\{(BPI_1 - BPI_P) \div BPI_1\} \times 100$ 

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

### **RETURN WITH BID**

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# OPTION FOR BITUMINOUS MATERIALS COST ADJUSTMENTS

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.:			_			
Company Name:_						
Contractor's Option	<u>on</u> :					
Is your company or	Is your company opting to include this special provision as part of the contract?					
Yes		No				
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	e contract plans for	r the
Metal Piling	Yes		
Structural Steel	Yes		
Reinforcing Steel	Yes		
Dowel Bars, Tie Bars and Mesh Reinforcement	Yes		
Guardrail	Yes		
Steel Traffic Signal and Light Poles, Towers and Mast Arms	Yes		
Metal Railings (excluding wire fence)	Yes		
Frames and Grates	Yes		
Signature:	Date:		

# 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 66671 (hereinafter, the "Project").

#### **ARTICLE 1 - INTENT AND PURPOSES**

- 1.1. This PLA is entered into in furtherance of Illinois Executive Order No. 2010-03 and P.A. 097-0199. 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.

#### <u>ARTICLE II – APPLICABILITY, RECOGNITION, AND COMMITMENTS</u>

- 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: Thomas F. Gibbons, 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:
  - 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. 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.D 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. 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.

- 8.2 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.
- 8.3 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.
- 8.4 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**

Illinois Department of Transportation			
Christine M. Reed, P.E., Director of Highways			
Matthew R. Hughes, Director - Finance & Adminis	stration		
Ellen Schanzle-Haskins, Chief Counsel			
Ann L. Schneider, Secretary	(Date)		
Illinois AFL-CIO Statewide Proj Committee, representing the loc	S		
Committee, representing the loc	ai umons nsieu below.		
	(Date)		
List Union Locals:			

## \*\* RETURN WITH BID \*\*

Exhibit A – Contractor Letter of Assent	
(Date)	
To All Parties:	
In accordance with the terms and conditing, this Letter of Assent hereby confirms that the unagrees to be bound by the terms and condition and entered into by the Illinois Department of Transport.	s of the Project Labor Agreement established
It is the understanding and intent of the Agreement shall pertain only to the identified I undersigned party to become signatory to a coll otherwise a party in order that it may lawfully make fringe benefit funds, the undersigned party here limits its participation in such collective bargaining	ective bargaining agreement to which it is not ake certain required contributions to applicable by expressly conditions its acceptance of and
	(Authorized Company Officer)
	(Company)

\*\* RETURN WITH BID \*\*

### STORM WATER POLLUTION PREVENTION PLAN



Printed 9/1/2011

#### **Storm Water Pollution Prevention Plan**

BDE 2342 (Rev. 1/28/2011)

Rout	te .	FAP 326	Marked Rte.	IL Route 47
Sect	ion	(5CS, 13C, 108, 109)R	Project No.	
Cou	nty	Kendall	Contract No.	66671
Pern	nit No.	has been prepared to comply with the provisions of the ILR10 (Permit ILR10), issued by the Illinois Environm ruction site activities.		
subr gath am a	ordance nitted. ering t aware	nder penalty of law that this document and all attaching with a system designed to assure that qualified pure Based on my inquiry of the person or persons who must he information, the information submitted is, to the best that there are significant penalties for submitting false in graduations.	ersonnel proper nanage the system of my knowledge	ly gathered and evaluated the information em, or those persons directly responsible for ge and belief, true, accurate and complete. I
		Eric Therkildsen	Eu	ie Therkildsen D.R
		Print Name Acting Regional Engineer		Signature 09/01/2011
		Title	B-14 - 14 - 15 - 15 - 15 - 15 - 15 - 15 -	Date
		Illinois Department of Transportation Agency		
		, igolicy		
ł.	Site I	Description:		
	A.	Provide a description of the project location (include lat	titude and longit	ude):
		The project begins north of IL Route 71 and extend City of Yorkville for a length of 5.235 kilometers. To Center Parkway to Marketplace Drive. The approximately 100, W88°26'30".	he project also	includes a portion of US Route 34 from
	B.	Provide a description of the construction activity which	is the subject of	this plan:
		The work on this project consists of reconstructing center median (raised or flush). The work includes path, traffic signals and seeding. Bridge repairs will portion of US 34 will also be reconstructed.	curb and gutte	er, storm sewer, sidewalk, shared-use
	C.	Provide the estimated duration of this project:		
		The duration of this project is estimated to be 2 year	ars in length.	
	D.	The total area of the construction site is estimated to be	e <u>17.9</u> hectares.	
		The total area of the site estimated to be disturbed by	excavation, grad	ing or other activities is <u>17.9</u> hectares.
	E.	The following is a weighted average of the runoff completed:	coefficient for t	this project after construction activities are
		The weighted average runoff for this project is 0.73	t.	
	F.	List all soils found within project boundaries. Include m	nap unit name, s	lope information, and erosivity:

Page 1 of 9

Lisbon Silt Loam (59A) – A somewhat poorly drained soil with moderately low to moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 0 and 2 percent.

La Rose Silt Loam (60B2) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 2 and 5 percent.

La Rose Silt Loam (60C2) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 5 and 10 percent.

La Rose Clay Loam (60C3) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 5 and 10 percent.

Saybrook Silt Loam (145B) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 2 and 5 percent.

Brenton Silt Loam (149A) – A somewhat poorly drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 0 and 2 percent.

Drummer Silty Clay Loam (152A) – A poorly drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 0 and 2 percent.

Strawn Silt Loam (224C2) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 5 and 10 percent.

Strawn Clay Loam (224C3) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 5 and 10 percent.

Strawn Silt Loam (224D2) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 10 and 18 percent.

Lorenzo Loam (318D2) – A well drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 6 and 12 percent.

Dresden Silt Loam (325A) – A well drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 0 and 2 percent.

Dresden Silt Loam (325B) – A well drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 2 and 4 percent.

Peotone Silty Clay Loam (330A) – A very poorly drained soil with moderately high permeability. This soil has a slight susceptibility to water and a moderate susceptibility to wind erosion with slopes that are between 0 and 2 percent.

Elpaso Silty Clay Loam (356A) – A poorly drained soil with moderately high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 0 and 2 percent.

Waupecan Silt Loam (369A) – A well drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are inted 9/1/2011

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between 0 and 2 percent.

Waupecan Silt Loam (369B) – A well drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 2 and 4 percent.

Somonauk Silt Loam (668B) – A moderately well drained soil with moderately high to high permeability. This soil has a moderate susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 2 and 5 percent.

Rush Silt Loam (791A) – A well drained soil with moderately high to high permeability. This soil has a moderate susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 0 and 2 percent.

Rush Silt Loam (791B) – A well drained soil with moderately high to high permeability. This soil has a moderate susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 2 and 4 percent.

Orthents, Loamy, Undulating (802B) – A well drained soil with moderately high permeability. This soil has a moderate susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 1 and 6 percent.

Casco-Rodman Complex (696F) – A somewhat excessively drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 20 and 30 percent.

Millington Silt Loam (3082A) – A poorly drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a moderate susceptibility to wind erosion with slopes that are between 0 and 2 percent.

Sawmill Silty Clay Loam (3107A) – A poorly drained soil with moderately high to high permeability. This soil has a slight susceptibility to water and a slight susceptibility to wind erosion with slopes that are between 0 and 2 percent.

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

See attached wetland maps.

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

The potential erosive areas for this project are the roadway ditches/swales that will be constructed throughout the project limits. Other areas include the point discharge locations into Blackberry Creek and the Fox River. Particular attention should be paid to the outlets for the storm sewer.

 The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

#### From south project limits to south of US Rte 34

Pre-stage 1: constructing temporary widening, installing storm sewers, and grading for temporary drainage. Erosive factors include no vegetation and steep side slopes.

Stages 1 – 2: pavement removal and constructing NB/SB lanes, sidewalk, bike trail, traffic signals & storm sewer. Erosive factors include bare earth and steep slopes.

Stages 3 - 4: constructing center medians.

From south of US Rte 34 to north of US Rte 34 (including west and east portions of US Rte 34)
Stages 5 – 8: pavement removal and constructing NB/SB lanes, sidewalk, bike trail, traffic signals & storm sewer. Erosive factors include bare earth and steep slopes. Includes the EB & WB lanes of US Rte 34.

Stage 9: constructing center medians.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil

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disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

Identify who owns the drainage system (municipality or agency) this project will drain into:

At various locations private land owners and the City of Yorkville but mostly the State of Illinois.

L. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

#### Blackberry Creek and the Fox River

M. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

There are no areas within the project limits dedicated as protected or that shall remain undisturbed. Nothing outside the limits of construction shall be disturbed without prior approval.

The following sensitive environmental resources are associated with this project, and may have the potential to be

impacted by the proposed development.		
$\boxtimes$	Floodplain	
	Wetland Riparian	
$\boxtimes$	Threatened and Endangered Species	
	Historic Preservation	
$\boxtimes$	303(d) Listed receiving waters for suspended solids, turbidity, or siltation	

 $\boxtimes$ Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation

Applicable Federal, Tribal, State or Local Programs

N.

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

#### Per the Illinois' 2010 303(d) List

The name(s) of the listed water body, and identification of all pollutants causing impairment:

Fox River. Pollutants: total suspended solids & siltation.

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

During construction temporary ditch checks, perimeter erosion barrier and inlet & pipe protection will be used to prevent a discharge of sediment. For permanent erosion and sediment control practices, vegetation swales will be constructed throughout the project to help to filter and slow down storm water discharge, several catch basins/manholes near the Fox River will be constructed with sumps to collect sediment and riprap will be installed at the point discharge locations to the Fox River to reduce storm water velocity.

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

There are 3 locations of direct discharge in to the Fox River via the storm sewer system. Southeast quadrant, Northeast quadrant and Northwest quadrant of SN 047-0048 carrying IL Rte 47 over the Fox River. Riprap will be placed around the end sections.

Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

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

Fox River

Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

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See 1.b. above for erosion and sediment control practices.

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

			provide a description of the nec	cessary steps to	meet th	at allocation:
			N/A			
O. The following pollutants of concern will be associated with this construction pro					construction project:	
			Soil Sediment Concrete Concrete Truck Waste Concrete Curing Compounds Solid Waste Debris Paints Solvents Fertilizers / Pesticides		Antifr Wast Other Other Other	leum (gas, diesel, oil, kerosene, hydraulic oil / fluids) eeze / Coolants e water from cleaning construction equipment ( (specify) ( (specify) ( (specify) ( (specify) ( (specify)
H.	Con	trols:				
	desc will be the in any	ribed in be respo mpleme propose	I.C. above and for all use areas, to onsible for its implementation as in entation of the measures indicated ed changes, maintenance, or modern and for all the second	oorrow sites, and dicated. The Contractions to ke	d wast Contractor, and ep cor	mented for each of the major construction activities to sites. For each measure discussed, the Contractor ctor shall provide to the Resident Engineer a plan for subcontractors, will notify the Resident Engineer of instruction activities compliant with the Permit ILR10 which are attached to, and are a part of, this plan:
	A.	Erosio	on and Sediment Controls			
		1.	including site specific scheduling vegetation is preserved where a practices may include but are no sodding, vegetative buffer strip appropriate measures. Except a initiated as soon as practicable permanently ceased, but in no coof the site has temporarily or permot occur for a period of fourteen	of the implementation and determined to: termined to: ter	entation isturbe inporary of tree ow in II the single seven is on all all all all all all all all all al	•
			Where the initiation of stabilization permanently ceases is preclude practicable thereafter.	on measures bed by snow co	y the s ver, st	seventh day after construction activity temporarily of abilization measures shall be initiated as soon as
			The following stabilization practic	es will be used	for this	project:
			<ul> <li>□ Preservation of Mature Vege</li> <li>□ Vegetated Buffer Strips</li> <li>□ Protection of Trees</li> <li>□ Temporary Erosion Control Stremporary Turf (Seeding, Component Seeding)</li> <li>□ Temporary Mulching</li> <li>□ Permanent Seeding</li> </ul>	Seeding		Erosion Control Blanket / Mulching Sodding Geotextiles Other (specify) Other (specify) Other (specify) Other (specify)
			Describe how the stabilization pra	actices listed ab	ove wi	Il be utilized during construction:
			and other permanent erosion of	control device ulch method 2	s on a	ride permanent seeding, erosion control blanker listurbed areas as soon as possible. Temporary e placed as soon as possible on disturbed areas
			Describe how the stabilization procompleted:	actices listed a	bove v	vill be utilized after construction activities have been
Printe	d 9/1/2	011		Page 5 of 9		BDE 2342 (Rev. 1/28/2011)

Seeding Class 1 with erosion control blanket per IDOT specifications will serve as the permanent erosion control devices.

2. Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following structural practices will be used for this project:

Perimeter Erosion Barrier Temporary Ditch Check Storm Drain Inlet Protection		Rock Outlet Protection Riprap Gabions
Sediment Trap		Slope Mattress
Temporary Pipe Slope Drain	$\boxtimes$	Retaining Walls
Temporary Sediment Basin		Slope Walls
Temporary Stream Crossing		Concrete Revetment Mats
Stabilized Construction Exits		Level Spreaders
Turf Reinforcement Mats	$\boxtimes$	Other (specify) Vegetation Drainage Swales
Permanent Check Dams		Other (specify)
Permanent Sediment Basin		Other (specify)
Aggregate Ditch		Other (specify)
Paved Ditch		Other (specify)

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

Perimeter Erosion Barrier (silt fence) will be used in all areas where runoff from disturbed areas has the potential to travel offsite or into swales, ditches, ponds, wetlands or other natural water bodies.

Temporary Ditch Check will be used in the road side ditch line to reduce the velocity of storm water thus preventing the erosion of the ditch before the areas are reseeded.

Storm Drain Inlet Protection will be placed at drain inlets to protect from sedimentation due to earth excavation and embankment operations, and during pavement removal operations.

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

Riprap will be provided at storm sewer outfalls to dissipate flow velocity and prevent erosion.

Vegetation Drainage Swales will be constructed throughout the project to help to filter and slow down storm water discharge

- Storm Water Management: Provided below is a description of measures that will be installed during the
  construction process to control pollutants in storm water discharges that will occur after construction
  operations have been completed. The installation of these devices may be subject to Section 404 of the
  Clean Water Act.
  - Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).
    - The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.
  - b. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g.

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maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of storm water management controls:

Riprap will be provided at storm sewer outfalls to dissipate flow velocity. Vegetation Drainage Swales will be constructed throughout the project to help to filter and slow down storm water discharge

4. Approved State or Local Laws: The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

#### N/A

- Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
  - The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
    - · Approximate duration of the project, including each stage of the project
    - · Rainy season, dry season, and winter shutdown dates
    - · Temporary stabilization measures to be employed by contract phases
    - Mobilization timeframe
    - Mass clearing and grubbing/roadside clearing dates
    - Deployment of Erosion Control Practices
    - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
    - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
    - Paving, saw-cutting, and any other pavement related operations
    - Major planned stockpiling operations
    - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
    - Permanent stabilization activities for each area of the project
  - b. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
    - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
    - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
    - Stockpile Management Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
    - Waste Disposal Discuss methods of waste disposal that will be used for this project.
    - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
    - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
    - Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
    - Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
    - Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
    - Additional measures indicated in the plan.

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#### III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

During construction the contractor shall clean up and the grade the work area to eliminate concentration of runoff, cover the opens of pipes in trenches and open inlets at the close of each working day. Maintain or replace (if specified by the Engineer) erosion and sediment control items. Temporary erosion control systems shall be left in place with proper maintenance until permanent erosion control is in place and working properly and all proposed turf areas are seeded and established with a proper stand. Prior to any landscaping/restoration work, the contractor shall remove and dispose of silt retained by temporary erosion barrier. Areas of erosion control blanket which fail will be repaired immediately. Temporary seeding shall be placed in accordance to the IDOT Standard Specifications.

All maintenance of erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected periodically. Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of a storm that is 0.5 inches or greater rainfall, or an equivalent snowfall.

Once permanent erosion control systems and items as proposed in the plans are functional and established, temporary items shall be removed, cleaned up and disturbed turf reseeded.

#### IV Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm that is 0.5 inch or greater or equivalent snowfall.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: <a href="mailto:epa.swnoncomp@illinois.gov">epa.swnoncomp@illinois.gov</a>, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Compliance Assurance Section 1021 North Grand East Post Office Box 19276 Springfield, Illinois 62794-9276

#### V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.

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#### **Contractor Certification Statement**

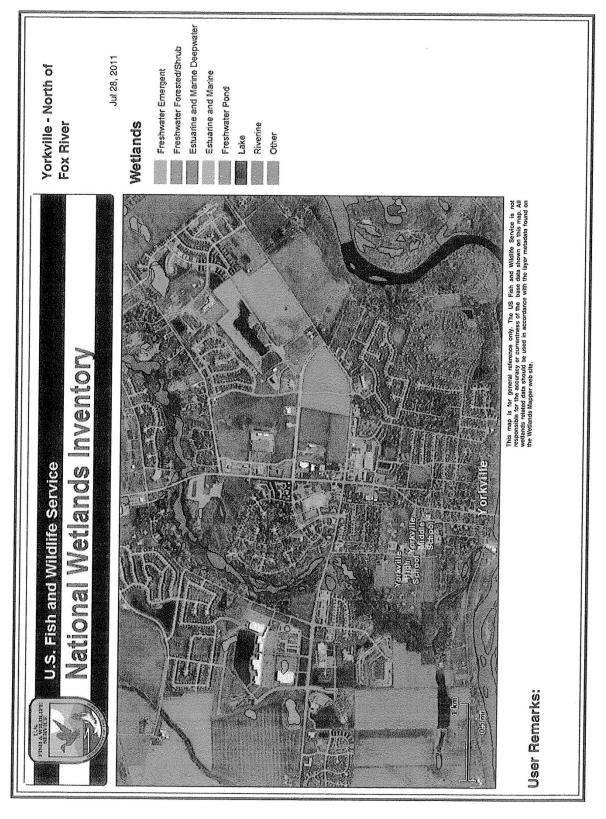
Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.5 of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

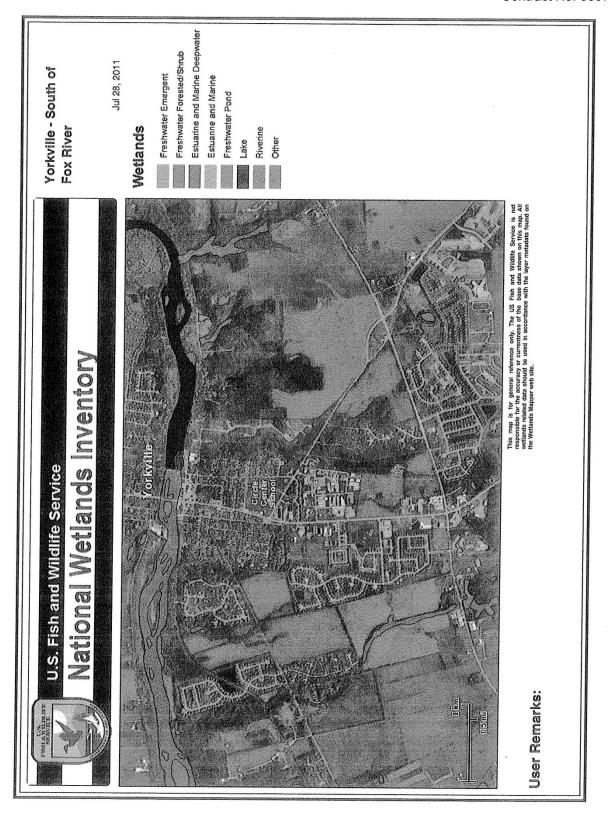
Route	FAP 326	Marked Rte.	US Route 47
Section	(5CS,13C,108,109)R	Project No.	
County	Kendall	Contract No.	66671
This certification statement is a part of the SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.  I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.  In addition, I have read and understand all of the information and requirements stated in the SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.			
☐ Con	tractor		
☐ Sub-Contractor			
***************************************	Print Name	***************************************	Signature
	Title		Date
	Name of Firm		Telephone
	Street Address		City/State/ZIP
Items which this Contractor/subcontractor will be responsible for as required in Section II.5. of the SWPPP:			
11 2 -		4.4 4.40 10.4 10.10	

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#### **404 PERMIT**



DEPARTMENT OF THE ARMY

ROCK ISLAND DISTRICT, CORPS OF ENGINEERS CLOCK TOWER BUILDING - P.O. BOX 2004 ROCK ISLAND, ILLINOIS 61204-2004

FAP 326 (IL 47) Section (SCS, 13C, 108, 109) R Storm Sewer

REPLY TO ATTENTION OF

July 21, 2010

Contract # 666671

Operations Division

SUBJECT: CEMVR-OD-P-2010-829

Mr. George Ryan Illinois Department of Transportation 700 East Norris Drive Ottawa, Illinois 61350

Dear Mr. Ryan:

Our office reviewed your application dated June 17, 2010, concerning the proposed construction of two storm sewers along the Fox River and Blackberry Creek in Sections 29, 32, and 33, Township 37 North, Range 7 East, Kendall County, Illinois.

Your projects are covered under Item 7 of the enclosed Fact Sheet No. 6(IL), provided you meet the permit conditions for the nationwide permits, which are also included in the Fact Sheet. The Corps has also made a determination of no effect on federally threatened and endangered species or critical habitat. The decision regarding this action is based on information found in the administrative record, which documents the District's decision-making process, the basis for the decision, and the final decision. The Illinois Environmental Protection Agency (IEPA) also issued Section 401 Water Quality Certification with conditions for this nationwide permit. Please note these additional conditions included in the Fact Sheet. You must also comply with these conditions.

Bank and shoreline protection shall consist of suitable clean materials, free from debris, trash, and other deleterious materials. If broken concrete is used as riprap, all reinforcing rods must be cut flush with the surface of the concrete, and individual pieces of concrete shall not exceed 3 feet in any dimension. Asphalt and broken concrete containing asphalt are specifically excluded from this authorization.

You are encouraged to conduct your construction activities during a period of low flow. You are required to remove all fill material used as a temporary crossing to an upland, non-wetland site, to seed all disturbed areas with native grasses, and to implement appropriate measures to insure that sediments are not introduced into waters of the United States during construction of this project.

This verification is valid until March 19, 2012, unless the nationwide permit is modified, reissued or revoked. It is your responsibility to remain informed of changes to the nationwide permit program. We will issue a public notice announcing any changes if and when they occur. Furthermore, if you commence or are under contract to commence this activity before the date the nationwide permit is modified or revoked, you will have twelve months from this date to complete your activity under the present terms and conditions of this nationwide permit.

Our office has completed a Preliminary Jurisdictional Determination concerning your project area. A Preliminary jurisdictional Determination is not appealable.

-2-

Although an individual Department of the Army permit and individual IEPA 401 certification will not be required for these projects, this does not eliminate the requirement that you must still acquire other applicable Federal, state, and local permits. If you have not already coordinated your project with the Illinois Department of Natural Resources — Office of Water Resources, please contact them at 217/782-3863 to determine if a floodplain development permit is required for your project.

You are required to complete and return the enclosed "Completed Work Certification" upon completion of your project, in accordance with General Condition No. 14 of the enclosed Fact Sheet.

The Rock Island District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete the attached postcard and return it or go to our Customer Service Survey found on our web site at <a href="http://per2.nwp.usace.army.mil/survey.html">http://per2.nwp.usace.army.mil/survey.html</a>. (Be sure to select "Rock Island District" under the area entitled: Which Corps office did you deal with?)

Should you have any questions, please contact our Regulatory Branch by letter, or telephone me at 309/794-5369.

Sincerely,

Jeffrey W. Sniadach Project Manager Enforcement Section

Enclosures

Copies Furnished: (w/o enclosures)

Mr. Mike Diedrichsen, P.E. Office of Water Resources IL Department of Natural Resources One Natural Resources Way Springfield, Illinois 62701-1271

Mr. Dan Heacock Illinois Environmental Protection Agency Watershed Management Section, Permit Section. 15 1021 North Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

## **COMPLETED WORK CERTIFICATION**

Permit Number:	CEMVR-OD-P-2010-829	
Name of Permittee:	Illinois Department of Tran	sportation
Date of Issuance:	July 21, 2010	
Upon completion of the permit, sign this of	the activity authorized by the certification and return it to	nis permit and any mitigation required by the following address:
Rock Isla ATTN: Re Clock Tow Post Office	Engineer District, and egulatory Branch er Building e Box 2004 d, Illinois 61204-2004	
U.S. Army Corps of E	r permitted activity is subje Engineers representative. ermit suspension, modificat	ect to a compliance inspection by a lf you fail to comply with this permit, ion, or revocation.
completed in accorda	ance with the terms and co	above reference permit has been and the said permit, and ce with the permit conditions.
Signature of Permitte	<del></del>	Date

JS

#### NATIONWIDE PERMITS AND CONDITIONS

The following information presents the requirements for nationwide Section 404/10 permits most often used on highway projects. The information in this guidance reflects the requirements associated with the nationwide permits that were published in the March 12, 2007 *Federal Register*.

Permittees wishing to conduct activities under the nationwide permits must comply with the terms of the applicable permit and the conditions in Section C of this document.

### **B.** Nationwide Permits

- 3. <u>Maintenance</u>. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.
- (b) This NWP also authorizes the removal of accumulated sediments and debris in the vicinity of and within existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and the placement of new or additional riprap to protect the structure. The removal of sediment is limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an upland area unless otherwise specifically approved by the district engineer under separate authorization. The placement of riprap must be the minimum necessary to protect the structure or to ensure the safety of the structure. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the district engineer.
- (c) This NWP also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation or beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). Where maintenance dredging is proposed, the pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Sections 10 and 404)

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

- 13. <u>Bank Stabilization</u>. Bank stabilization activities necessary for erosion prevention, provided the activity meets all of the following criteria:
- (a) No material is placed in excess of the minimum needed for erosion protection;
- (b) The activity is no more than 500 feet in length along the bank, unless this criterion is waived in writing by the district engineer;
- (c) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line, unless this criterion is waived in writing by the district engineer;
- (d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless this criterion is waived in writing by the district engineer;
- (e) No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the United States;
- (f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and,
- (g) The activity is not a stream channelization activity.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) involves discharges into special aquatic sites; (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot along the bank below the plane of the ordinary high water mark or the high tide line. (See general condition 27.) (Sections 10 and 404)

14. <u>Linear Transportation Projects</u>. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project.

Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

- 23. <u>Approved Categorical Exclusions</u>. Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where:
- (a) That agency or department has determined, pursuant to the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (40 CFR part 1500 et seq.), that the activity is categorically excluded from environmental documentation, because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment; and
- (b) The Office of the Chief of Engineers (Attn: CECW-CO) has concurred with that agency's or department's determination that the activity is categorically excluded and approved the activity for authorization under NWP 23.

The Office of the Chief of Engineers may require additional conditions, including preconstruction notification, for authorization of an agency's categorical exclusions under this NWP.

Notification: Certain categorical exclusions approved for authorization under this NWP require the permittee to submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). The activities that require pre-construction notification are listed in the appropriate Regulatory Guidance Letters. (Sections 10 and 404)

Note: The agency or department may submit an application for an activity believed to be categorically excluded to the Office of the Chief of Engineers (Attn: CECW-CO). Prior to approval for authorization under this NWP of any agency's activity, the Office of the Chief of Engineers will solicit public comment. As of the date of issuance of this NWP, agencies with approved categorical exclusions are the: Bureau of Reclamation, Federal Highway Administration, and U.S. Coast Guard. Activities approved for authorization under this NWP as of the date of this notice are found in Corps Regulatory Guidance Letter 05-07, which is available at: http://www.usace.army.mil/inet/functions/cw/cecwo/reg/rglsindx.htm.

Any future approved categorical exclusions will be announced in Regulatory Guidance Letters and posted on this same web site.

33. Temporary Construction, Access, and Dewatering. Temporary structures, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard. This NWP also authorizes temporary structures, work, and discharges, including cofferdams, necessary for construction activities not otherwise subject to the Corps or U.S. Coast Guard permit requirements. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if the district engineer determines that it will not cause more than minimal adverse effects on aquatic resources. Following completion of construction, temporary fill must be entirely removed to upland areas, dredged material must be returned to its original location, and the affected areas must be restored to pre-construction elevations. The affected areas must also be revegetated, as appropriate. This permit does not authorize the use of cofferdams to dewater wetlands or other aguatic areas to change their use. Structures left in place after construction is completed require a section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322.)

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). The pre-construction notification must include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. (Sections 10 and 404)

### C. Nationwide Permit General Conditions

<u>Note</u>: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP.

- 1. <u>Navigation</u>. (a) No activity may cause more than a minimal adverse effect on navigation.
- (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States.

No claim shall be made against the United States on account of any such removal or alteration.

- 2. <u>Aquatic Life Movements</u>. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
- 3. <u>Spawning Areas</u>. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. <u>Migratory Bird Breeding Areas</u>. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. <u>Shellfish Beds</u>. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48.
- 6. <u>Suitable Material</u>. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. <u>Water Supply Intakes</u>. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. <u>Adverse Effects From Impoundments</u>. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. <u>Management of Water Flows</u>. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. <u>Fills Within 100-Year Floodplains</u>. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. <u>Equipment</u>. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. <u>Soil Erosion and Sediment Controls</u>. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.

- 13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. <u>Proper Maintenance</u>. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.
- 15. <u>Wild and Scenic Rivers</u>. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 16. <u>Tribal Rights</u>. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.
- (c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.
- (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA.

Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world-wide Web pages at http://www.fws.gov/ and http://www.noaa.gov/fisheries.html respectively.

- 18. <u>Historic Properties</u>. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(q)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.
- (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.
- (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

- 19. <u>Designated Critical Resource Waters</u>. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 20. <u>Mitigation</u>. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns.

Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

- (g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 21. <u>Water Quality</u>. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 22. <u>Coastal Zone Management</u>. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 23. <u>Regional and Case-By-Case Conditions</u>. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 24. <u>Use of Multiple Nationwide Permits</u>. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- 25. <u>Transfer of Nationwide Permit Verifications</u>. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature: "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property.

To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)			
			•

(Date)

- 26. <u>Compliance Certification</u>. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
  - (c) The signature of the permittee certifying the completion of the work and mitigation.
- 27. <u>Pre-Construction Notification</u>. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty-five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or
- (b) <u>Contents of Pre-Construction Notification</u>: The PCN must be in writing and include the following information:

revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);
- (4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
- (6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and
- (7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.
- (c) <u>Form of Pre-Construction Notification</u>: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.
  - (d) Agency Coordination:
- (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.
- (2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS).

With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

- (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.
- (5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.
- (e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN. the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit;

- (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.
- 28. <u>Single and Complete Project</u>. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

### IEPA REGIONAL CONDITIONS



### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276 – (217) 782-3397
James R. Thompson Center, 100 West Randolph, Suite 11-300, Chicago, IL 60601 – (312) 814-6026

ROD R. BLAGOIEVICH, GOVERNOR

DOUGLAS P. SCOTT, DIRECTOR

217/782-3362

MAY 1 4 2007 CEMVR-OD-P

MAY 1 0 2007

Rock Island District Corps of Engineers Clock Tower Building Rock Island, IL 61201

Re:

Final Notice of Issuance of Nationwide Permits, March 12, 2007 Section 401 Certifications, Denials, and Regional Conditions

#### Gentlemen:

On March 12, 2007 the Corps of Engineers issued the final notice concerning the disposition of the expiring Nationwide Permits (NWPs) under Section 10 of the 1899 Rivers and Harbors Act and Section 404 of the Clean Water Act.

Based on our review of the final rules, Section 401 certifications are hereby issued for the following NWPs without conditions:

NWP 4 - Fish and Wildlife Harvesting, Enhancement, and Attraction Device and Activities

NWP 5 - Scientific Measuring Devices

NWP 7 - Outfall Structures and Associated Intake Structures

NWP 20 - Oil Spill Cleanup

NWP 22 - Removal of Vessels

NWP 36 - Boat Ramps

NWP 45 - Emergency Repair Activities

In addition, the following NWPs are hereby issued Section 401 certifications subject to the regional conditions as indicated below:

NWP 3 - Maintenance. Refer to Regional Conditions contained in Attachment 1

NWP 6 - Survey Activities. Refer to Regional Conditions contained in Attachment 2

NWP 12 - Utility Line Activities. Refer to Regional Conditions contained in Attachment 3

NWP 13 - Bank Stabilization. Refer to Regional Conditions contained in Attachment 4

ROCKFORD - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760 

DES PLAINES - 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000

ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 
PEORIA - 5415 N. University St., Peoria, IL 61614 - (309) 693-5463

BUREAU OF LAND - PEORIA - 7620 N. University St., Peoria, IL 61614 - (309) 693-5462

SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892

MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200

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NWP 14 - Linear Transportation Projects. Refer to Regional Conditions contained in Attachment 5

NWP 27 - Aquatic Habitat Restoration, Establishment, and Enhancement Activities. All activities conducted under NWP 27 shall be in accordance with the provisions of 35 Il. Adm. Code 405.108. Work in reclaimed surface coal mine areas are required to obtain prior authorization from the Illinois EPA for any activities that result in the use of acid-producing mine refuse.

NWP 33 - Temporary Construction, Access and Dewatering. Refer to Regional Conditions contained in Attachment 6

NWP 38 - Cleanup of Hazardous and Toxic Waste. Refer to Regional Conditions contained in Attachment 7

NWP 41 - Reshaping Existing Drainage Ditches. Refer to Regional Conditions contained in Attachment 8

NWP 46 - Discharges into Ditches. Refer to Regional Conditions contained in Attachment 9

NWP 47 - Pipeline Safety Program Designated Time Sensitive Inspections and Repairs. Refer to Regional Conditions contained in Attachment 10

### Section 401 Certification is denied for the following NWPs:

NWP 15 - U.S. Coast Guard Approved Bridges

NWP 16 - Return Water from Upland Contained Disposal Areas

NWP 17 - Hydropower Projects

NWP 18 - Minor Discharges

NWP 19 - Minor Dredging

NWP 21 - Surface Coal Mining Activities

NWP 23 - Approved Categorical Exclusions

NWP 25 - Structural Discharges

NWP 29 - Residential Development

NWP 30 - Moist Soil Management for Wildlife

NWP 31 - Maintenance of Existing Flood Control Facilities

NWP 32 - Completed Enforcement Actions

NWP 34 - Cranberry Production Activities

NWP 37 - Emergency Watershed Protection and Rehabilitation

NWP 39 - Commercial, and Institutional Developments

NWP 40 - Agricultural Activities

NWP 42 - Recreational Facilities

NWP 43 - Stormwater Management Facilities

NWP 44 - Mining Activities

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NWP 48 - Commercial Shellfish Aquaculture Activities

NWP 49 - Coal Remining Activities

NWP 50 - Underground Coal Mining Activities

Should you have any questions or comments regarding the content of this letter, please contact me or my staff at the above telephone number and address.

Sincerely

Bruce J. Yurdin

Manager, Watershed Management Section

Bureau of Water

cc: Records Unit

CoE, Chicago District

CoE, Louisville District

CoE, Memphis District

CoE, St. Louis District

IDNR, OWR, DWRM, Schaumburg and Springfield

USEPA, Region 5

USFWS, Rock Island, Barrington and Marion

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#### Attachment 1

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statues, as determined by the Illinois EPA.
- Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- The applicant for Nationwide Permit shall provide adequate planning and supervision during the
  project construction period for implementing construction methods, processes and cleanup
  procedures necessary to prevent water pollution and control erosion.
- 5. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant for Nationwide 3 shall undertake necessary measures and procedures to reduce crosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant for Nationwide 3 shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- The applicant for Nationwide 3 shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
- 7. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- 8. The applicant for Nationwide 3 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.

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#### Attachment 2

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- Material resulting from trench excavation within surface waters of the State may be temporarily sidecast adjacent to the trench excavation provided that:
  - Sidecast material is not placed within a creek, stream, river or other flowing water body such that material dispersion could occur;
  - B. Side cast material is not placed within ponds or other water bodies other than wetlands; and
  - C. Sidecast material is not placed within a wetland for a period longer than twenty (20) calender days. Such sidecast material shall either be removed from the site, or used as backfill (refer to Condition 4 and 5).
- 4. Backfill used within trenches passing through surface water of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation. Excavated material may be used only if:
  - A. Particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using a #230 U.S. sieve; or
  - B. Excavation and backfilling are done under dry conditions.
- Backfill used within trenches passing through wetland areas shall consist of clean material which
  will not cause siltation. Excavated material shall be used to the extent practicable, with the upper six
  (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 6. Temporary work pads shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- The applicant for Nationwide 6 that uses temporary work pads in order to perform work in creeks, streams, or rivers shall maintain flow in the these waters by utilizing dam and pumping, fluming, culverts or other such techniques.

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### Attachment 3

# ILLINOIS EPA WATER QUALITY CERTIFICATION REGIONAL CONDITIONS FOR NATIONWIDE PERMIT 12

The Illinois Environmental Protection Agency hereby issues Section 401 water quality certification applicable to Nationwide Permit 12. Department of the Army (DA) authorization pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) under Nationwide 12 will be subject to the Illinois EPA conditions in addition to the conditions imposed by the Corps of Engineers, issued with the Nationwide Permits. The affected geographical area is the entire State of Illinois and all waters of the United States on the border and therein.

- Case-specific water quality certification from the Illinois EPA will be required for activities in the following waters:
  - A. Chicago Sanitary and Ship Canal
  - B. Calumet-Sag Channel
  - C. Little Calumet River
  - D. Grand Calumet River
  - E. Calumet River
  - F. South Branch of the Chicago River (including the South Fork)
  - G. North Branch of the Chicago River (including the East and West Forks and the Skokie Lagoons)
  - H. Chicago River (Main Stem)
  - I. Lake Calumet
  - J. Des Plaines River
  - K. Fox River (including the Fox Chain of Lakes)
  - L. Saline River (in Hardin County)
  - M. Richland Creek (in St. Clair and Monroe Counties)
  - N. Lake Michigan
  - O. Rock River (in Winnebago County)
  - P. Illinois River upstream of mile 229.6 (Illinois Route 178 bridge)
  - Q. Illinois River between mile 140.0 and 182.0
  - R. Pettibone Creek (in Lake County)
  - S. DuPage River (including the East and West Branches)
  - T. Salt Creek (Des Plaines River Watershed)
  - U. Waukegan River (including the South Branch)
  - V. All Public and Food Processing Water Supplies with surface intake facilities. The Illinois EPA's Bureau of Water, Watershed Management Section at 217/782-3362 may be contacted for information on these water supplies.
- 2. Section 401 is hereby issued for all other waters, with the following conditions:
  - A. The applicant for Nationwide Permit 12 shall not cause:
    - i. violation of applicable provisions of the Illinois Environmental Protection Act;
    - ii. water pollution defined and prohibited by the Illinois Environmental Protection Act;
    - violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or

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- iv. interference with water use practices near public recreation areas or water supply intakes.
- B. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- C. Material resulting from trench excavation within surface waters of the State may be temporarily sidecast adjacent to the trench excavation provided that:
  - Sidecast material is not placed within a creek, stream, river or other flowing water body such that material dispersion could occur;
  - Side cast material is not placed within ponds or other water bodies other than wetlands; and
  - iii. Sidecast material is not placed within a wetland for a period longer than twenty (20) calender days. Such sidecast material shall either be removed from the site (refer to Condition 2.F), or used as backfill (refer to Condition 2.D and 2.E).
- D. Backfill used within trenches passing through surface water of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
  - i. Particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using a #230 U.S. sieve; or
  - ii. Excavation and backfilling are done under dry conditions.
- E. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- F. All material excavated which is not being used as backfill as stipulated in Condition 2.D and 2.E shall be stored or disposed in self-contained areas with no discharge to waters of the State. Material shall be disposed of appropriately under the regulations at 35 II. Adm. Code Subtitle G.
- G. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant for Nationwide 12 shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant for Nationwide 12 shall be responsible for obtaining an NPDES Storm Water Permit required by the federal Clean Water Act prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- H. The applicant for Nationwide 12 shall implement erosion control measures consistent with

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the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).

- The use of directional drilling to install utility pipelines below surface waters of the State is hereby certified provided that;
  - All pits and other construction necessary for the directional drilling process are located outside of surface waters of the State;
  - All drilling fluids shall be adequately contained such that they cannot make their
    way to surface waters of the State. Such fluids shall be treated as stipulated in
    Condition 2.F; and
  - Erosion and sediment control is provided in accordance with Conditions 2.B, 2.G, and 2.H.
- J. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Material excavated or dredged from the surface water or wetland shall not be used to construct the temporary facility. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- K. The applicant for Nationwide 12 that uses temporary work pads, cofferdams, access roads or other temporary fills in order to perform work in creeks, streams, or rivers for construction activities shall maintain flow in the these waters during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
- L. Permanent\_access roads shall be constructed of clean-coarse aggregate or non-crodible non-earthen fill material that will not cause siltation. Material excavated or dredged from the surface water or wetland shall not be used to construct the access road in waters of the state. The applicant for Nationwide 12 that constructs access roads shall maintain flow in creeks, streams and rivers by installing culverts, bridges or other such techniques.
- M. Case specific water quality certification from Illinois EPA will be required for projects that involve dredge and fill activities in bogs, fens or forested wetlands defined as follows:
  - A bog is a low nutrient peatland, usually in a glacial depression, that is acidic in the surface stratum and often dominated at least in part by the genus Sphagnum. P.
  - A fen is a peatland, herbaceous (including calcareous floating mats) or wooded, with calcareous groundwater flow.
  - iii. A forested wctland is a wetland dominated by native woody vegetation with at least one of the following species or genera present: Carya spp., Cephalanthus occidetalis, Cornus alternifolia, Fraxinus nigra, Juglans cinerea, Nyssa sylvatica, Querus spp., Thuja occidentalius, Betula nigra, Betula alleghaniensis, Betula papyrifera, Fagus grandfolia.

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### Attachment 4

- 1. The bank stabilization activities shall not exceed 500 linear feet.
- Asphalt, bituminous material and concrete with protruding material such as reinforcing bars or mesh shall not be:
  - A. used for backfill;
  - B. placed on shorelines/streambanks; or
  - C. placed in waters of the State.
- Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statues, as determined by the Illinois EPA.
- Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 5. The applicant shall consider installing bioengineering practices in lieu of structural practices of bank stabilization to minimize impacts to the lake, pond, river or stream and enhance aquatic habitat. Bioengineering techniques may include, but are not limited to:
  - A. adequately sized riprap or A-Jack structures keyed into the toe of the slope with native plantings on the banks above;
  - B. vegetated geogrids;
  - C. coconut fiber (coir) logs;
  - D. live, woody vegetative cuttings, fascines or stumps;
  - E. brush layering; and
  - F. soil lifts.

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#### Attachment 5

- The affected area of the stream channel shall not exceed 100 linear feet, as measured along the stream corridor.
- Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statues, as determined by the Illinois EPA
- Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 5. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
- 7. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- 8. The applicant for Nationwide Permit 14 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.
- Case specific water quality certification from Illinois EPA will be required for projects that involve dredge and fill activities in bogs, fens or forested wetlands defined as follows:

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- A. A bog is a low nutrient peatland, usually in a glacial depression, that is acidic in the surface stratum and often dominated at least in part by the genus *Sphagnum*. P.
- B. A fen is a peatland, herbaceous (including calcareous floating mats) or wooded, with calcareous groundwater flow.
- C. A forested wetland is a wetland dominated by native woody vegetation with at least one of the following species or genera present: Carya spp., Cephalanthus occidetalis, Cornus alternifolia, Fraxinus nigra, Juglans cinerea, Nyssa sylvatica, Querus spp., Thuja occidentalius, Betula nigra, Betula alleghaniensis, Betula papyrifera, Fagus grandfolia.

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#### Attachment 6

- Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statues, as determined by the Illinois EPA.
- Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 3. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim-measures to prevent-erosion during construction-shall-be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
- 6. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- 7. The applicant for Nationwide Permit 33 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.

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#### Attachment 7

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 2. In addition to any actions required of the NWP applicant with respect to the "Notification" General Condition 27, the applicant shall notify the Illinois EPA, Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL), for all cleanup activities under BOL jurisdiction or for which authorization or approval is sought from BOL for no further remedial action.
- This certification for Nationwide Permit 38 is not valid for activities that do not require or will not receive authorization or approval from the BOL.

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#### Attachment 8

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statues, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
- The applicant is advised that the following permit(s) must be obtained from the Agency: permits to construct sanitary sewers, water mains and related facilities prior to construction.
- The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, straw bales, etc.) to prevent transport of sediment and materials to the adjoining wetlands and/or streams

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#### Attachment 9

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statues, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
- The applicant is advised that the following permit(s) must be obtained from the Agency: permits to construct sanitary sewers, water mains and related facilities prior to construction.
- The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, straw bales, etc.) to prevent transport of sediment and materials to the adjoining wetlands and/or streams.
- The applicant shall not sever the connection between upstream and downstream surface waters of the State by the discharge of dredged or fill material into ditches.

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#### Attachment 10

# ILLINOIS EPA WATER QUALITY CERTIFICATION REGIONAL CONDITIONS FOR NATIONWIDE PERMIT 47

The Illinois Environmental Protection Agency hereby issues Section 401 water quality certification applicable to Nationwide Permit 47. Department of the Army (DA) authorization pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) under Nationwide 47 will be subject to the Illinois EPA conditions in addition to the conditions imposed by the Corps of Engineers, issued with the Nationwide Permits. The affected geographical area is the entire State of Illinois and all waters of the United States on the border and therein.

- Case-specific water quality certification from the Illinois EPA will be required for the discharge of dredged materials in the following waters:
  - A. Chicago Sanitary and Ship Canal
  - B. Calumet-Sag Channel
  - C. Little Calumet River
  - D. Grand Calumet River
  - E. Calumet River
  - F. South Branch of the Chicago River (including the South Fork)
  - G. North Branch of the Chicago River (including the East and West Forks and the Skokie Lagoons)
  - H. Chicago River (Main Stem)
  - I. Lake Calumet
  - J. Des Plaines River
  - K. Fox River (including the Fox Chain of Lakes)
  - L. Saline River (in Hardin County)
  - M. Richland Creek (in St. Clair and Monroe Counties)
  - N. Lake Michigan
  - O. Rock River (in Winnebago County)
  - P. Illinois River upstream of mile 229.6 (Illinois Route 178 bridge)
  - Q. Illinois River between mile 140.0 and 182.0
  - R. Pettibone Creek (in Lake County)
  - S. DuPage River (including the East and West Branches)
  - T. Salt Creek (Des Plaines River Watershed)
  - U. Waukegan River (including the South Branch)
  - V. All Public and Food Processing Water Supplies with surface intake facilities. The Illinois EPA's Bureau of Water, Watershed Management Section can be contacted at 217-782-3362 for further information on these water supplies.

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- Section 401 is hereby issued for all other waters and for projects in the waters identified in Condition 1 that do not involve discharge of dredged materials, with the following conditions:
  - A. The applicant shall not cause:
    - i. violation of applicable provisions of the Illinois Environmental Protection Act;
    - ii. water pollution defined and prohibited by the Illinois Environmental Protection Act;
    - violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
    - iv. interference with water use practices near public recreation areas or water supply intakes.
  - B. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
  - C. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit required by the Clean Water Act prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section
  - D. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
  - E. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
  - F. All material excavated which is not being used as backfill as stipulated in Condition 2.F and 2.G shall be stored or disposed in self-contained areas with no discharge to waters of the State. Material shall be disposed of appropriately under the regulations at 35 II. Adm. Code Subtitle G.
  - G. The use of directional drilling to install utility pipelines below surface waters of the State is hereby certified provided that:
    - All pits and other construction necessary for the directional drilling process are located outside of surface waters of the State;
    - All drilling fluids shall be adequately contained such that they cannot make their way to surface waters of the State. Such fluids shall be treated as stipulated in Condition 2.H; and
    - Erosion and sediment control is provided in accordance with Conditions 2.B, 2.C, and 2.D.

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- H. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Material dredged or excavated from the surface water or wetland shall not be used to construct the temporary facility. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- I. The applicant for Nationwide 47 that uses temporary work pads, cofferdams, access roads or other temporary fills in order to perform work in creeks, streams, or rivers for construction activities shall maintain flow in the these waters during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.

## TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be  $\underline{\mathbf{5}}$ . In the event the Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

Method of Measurement. The unit of measurement is in hours.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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#### **ATTACHMENTS**

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

#### I. GENERAL

- 1. These contract provisions shall apply to all word performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract
- **4.** A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4 and 7; Section V, paragraphs 1 and 2a through 2g.

- **5.** Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.
- **6.** Selection of Labor: During the performance of this contract, the contractor shall not:
  - **a.** Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or
  - **b.** Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

### II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
  - **a.** The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
  - **b.** The contractor will accept as his operating policy the following statement: "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."
- **2. EEO Officer:** The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
  - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
  - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
    c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
  - **d.** Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
  - **e.** The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
  - **a.** The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred

to the contractor for employment consideration.

- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
- **c.** The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
  - **a.** The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
  - **b.** The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
  - **c.** The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
  - **d.** The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

### 6. Training and Promotion:

- **a.** The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- **b.** Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- **c.** The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- **d.** The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
  - a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women

- for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
- **b.** The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
- **8.** Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
  - **a.** The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
  - b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
  - **c.** The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
- **9. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
  - a. The records kept by the contractor shall document the following:
  - (1) The number of minority and non-minority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
  - **(4)** The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.
  - b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the

contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

#### **III. NONSEGREGATED FACILITIES**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- **b.** As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- **c.** The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

#### IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

#### 1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred

- during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.
- b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- **c.** All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

#### 2. Classification:

- **a.** The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- **b.** The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- **(2)** the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- **(4)** with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- **e.** The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

### 3. Payment of Fringe Benefits:

**a.** Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as

appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## 4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

#### a. Apprentices:

- (1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.
- (3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
- (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

### **b**. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and

individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.
- (4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

### c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

### 5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

## 6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take

such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

#### 8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

#### 9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

### V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

### 1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

#### 2. Payrolls and Payroll Records:

- **a.** Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- **b.** The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of

contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for submitting payroll copies of all subcontractors.
- **d**. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- **e**. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such

actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

### VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
  - a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
  - **b.** Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
  - **c.** Furnish, upon the completion of the contract, to the SHA resident engineer on /Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- 2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

## VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractors' own organization (23 CFR 635).
  - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
  - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

#### **VIII. SAFETY: ACCIDENT PREVENTION**

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

#### IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

# NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

# X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- **3.** That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- **4.** That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

# XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in

this transaction.

- c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible,""lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- **g.** The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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# Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from

covered transactions by any Federal department or agency; b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property:

- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- **2**. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

# 2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- **a**. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- **b.** The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- **c.** The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- **e.** The prospective lower tie participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- **g.** A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not

required to, check the Nonprocurement List.

- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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# Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier Covered Transactions:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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## XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
  - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not

more than \$100,000 for each such failure.

**3.** The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

#### MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

#### NOTICE

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at http://www.dot.state.il.us/desenv/delett.html.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <a href="http://www.dot.state.il.us/desenv/subsc.html">http://www.dot.state.il.us/desenv/subsc.html</a>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.