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

#### **PREQUALIFICATION**

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

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

Contractors downloading and/or ordering CD-ROM's and are wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124INT) and the ORIGINAL, signed and notarized, "Affidavit of Availability" (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date.

#### WHO CAN BID?

Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction.

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

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

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

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

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that bidder check IDOT's website <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 related failures.

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

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

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

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

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

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

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

Questions Regarding	Call
Prequalification and/or Authorization to Bid	(217)782-3413
Preparation and submittal of bids	(217)782-7806
Mailing of plans and proposals	(217)782-7806
Electronic plans and proposals	(217)524-1642

### ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

# 149

**BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAI** 

See instructions inside front cover)

KETOKK WITH BIB	
Proposal Submitted By	
Name	
Address	
City	

### Letting April 28, 2006

### NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction. (SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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



Springfield, Illinois 62764

Contract No. 76300 ST. CLAIR County Section 27-1R Route FAP 103 Project ACF-103(63) District 8 Construction Funds

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

Prepared by

F

Checked by

(Printed by authority of the State of Illinois)

#### **INSTRUCTIONS**

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

**WHO CAN BID**?: Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction. To request authorization, a potential bidder <u>must complete and submit Part B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124 INT) and submit an original Affidavit of Availability (BC 57).</u>

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Request for Proposal Forms and Plans" he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a Proposal Denial and/or Authorization Form, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Proposal Denial and/or Authorization Form will indicate the reason for denial. If a contractor has requested to bid but has not received a Proposal Denial and/or Authorization Form, they should contact the Central Bureau of Construction in advance of the letting date.

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

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

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

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

Call

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

**Questions Regarding** 

Prequalification and/or Authorization to Bid	217/782-3413
Preparation and submittal of bids	217/782-7806
Mailing of CD-ROMS	217/782-7806



### **PROPOSAL**

#### TO THE DEPARTMENT OF TRANSPORTATION

**District 8 Construction Funds** 

1. Pr	oposal of
•	yer Identification Number (Mandatory) the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 76300 ST. CLAIR County Section 27-1R Project ACF-103(63) Route FAP 103

- 3.54 miles of pavement widening and reconstruction on IL Route 13/15 from Green Mount Road to Rogers Drive also includes drainage improvements, all located in Freeburg.
- 2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents shall govern performance and payments.

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

<u> </u>	Amount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount c	Prop <u>f Bid</u> <u>Guar</u>	
Up to		\$5,000	\$150	\$2,000,000	to	\$3,000,000\$100	0,000
\$5,000	to	\$10,000	\$300	\$3,000,000	to	\$5,000,000\$150	0,000
\$10,000	to	\$50,000	\$1,000	\$5,000,000	to	\$7,500,000 \$250	0,000
\$50,000	to	\$100,000	\$3,000	\$7,500,000	to	\$10,000,000\$400	0,000
\$100,000	to	\$150,000	\$5,000	\$10,000,000	to	\$15,000,000\$500	0,000
\$150,000	to	\$250,000	\$7,500	\$15,000,000	to	\$20,000,000\$600	0,000
\$250,000	to	\$500,000	\$12,500	\$20,000,000	to	\$25,000,000\$700	0,000
\$500,000	to	\$1,000,000	\$25,000	\$25,000,000	to	\$30,000,000\$800	0,000
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000\$900	0,000
\$1,500,000	to	\$2,000,000	\$75,000	over		\$35,000,000 \$1,000	0,000

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 dam	ages due to delay and other cause	es suffered by the State because of the
failure to execute said contract and contract bond; otherwise, the bid bond sh	all become void or the proposal g	uaranty check shall be returned to the
undersigned		•

### 

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

BD 354 (Rev. 11/2001)

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

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

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

#### **Schedule of Combination Bids**

Combination		Combination Bid	Combination Bid				
No.	No. Sections Included in Combination		Cents				

- 7. SCHEDULE OF PRICES. The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. **CERTIFICATE OF AUTHORITY.** The undersigned bidder, if a business organized under the laws of another State, assures the Department that it will furnish a copy of its certificate of authority to do business in the State of Illinois with the return of the executed contract and bond. Failure to furnish the certificate within the time provided for execution of an awarded contract may be cause for cancellation of the award and forfeiture of the proposal guaranty to the State.

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
A2001014	T-ACER RUBRM 1-3/4	EACH	14.000				
A2006814	T-QUERCUS MUEH 1-3/4	EACH	3.000				
A2006914	T-QUERCUS PALUS 1-3/4	EACH	20.000				
A2007114	T-QUERCUS RUBRA 1-3/4	EACH	6.000				
B2000412	T-ACER GRIS TF 1-1/2	EACH	214.000				
B2001114	T-CERCIS CAN TF 1-3/4	EACH	277.000				
B2003114	T-MALUS CRLB TF 1-3/4	EACH	78.000				
B2004114	T-MALUS PF TF 1-3/4	EACH	59.000				
XX005223	INCID BIT SUR SUP N90	TON	473.000				
X0322729	MATL TRANSFER DEVICE	TON	11,192.000				
X0325110	BIAXIAL GEOGRID	SQ YD	5,635.000				
X0325111	PAVED DITCH MODIFIED	FOOT	250.000				
X3560164	BC BC WIDE SUPER 12.5	SQ YD	2,659.000				
X4066428	BC SC SUPER "D" N90	TON	4,902.000				
X4066618	BCBC SUP IL-19.0 N90	TON	19,106.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
X4066775	LEV BIND MM SUPER N90	TON	1,606.000				
X4073061	BIT C PVT FD SUP 9	SQ YD	26,458.000				
X4073161	BIT C PVT FD SUP 14	SQ YD	55,265.000				
X4421000	PARTIAL DEPTH PATCH	TON	18.000				
X4510125	WIDE CR ROUTING (PVT)	FOOT	264.000				
X4510150	WIDE CRACK FILLING	POUND	504.000				
X5400650	PCBC 3.5X1.5	FOOT	190.000				
X7015000	CHANGEABLE MESSAGE SN	CAL MO	90.000				
X7200400	WK ZONE PUB INFO SGNS	EACH	4.000				
Z0007601	BLDG REMOV NO 1	L SUM	1.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0013825	CONTR LOW-STRENG MATL	CU YD	286.000				
Z0017100	DOWEL BARS	EACH	1,458.000				
Z0022800	FENCE REMOVAL	FOOT	2,981.000				
Z0030250	IMP ATTN TEMP NRD TL3	EACH	14.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
Z0030350	IMP ATTN REL NRD TL3	EACH	6.000				
Z0032900	LAND SECTION MARKERS	EACH	8.000				
Z0049901	R&D NON-FR ASB BLD 1	L SUM	1.000				
Z0064225	SEAL ABAN WATER WELLS	EACH	2.000				
Z0070100	SURV MONUMENT COV ASY	EACH	7.000				
Z0075300	TIE BARS	EACH	129.000				
Z0076600	TRAINEES	HOUR	1,500.000		0.800		1,200.000
20100110	TREE REMOV 6-15	UNIT	709.000				
20100210	TREE REMOV OVER 15	UNIT	675.000				
20100500	TREE REMOV ACRES	ACRE	6.750				
20200100	EARTH EXCAVATION	CU YD	182,203.000				
20201200	REM & DISP UNS MATL	CU YD	307.000				
20700220	POROUS GRAN EMBANK	CU YD	307.000				
20900110	POROUS GRAN BACKFILL	CU YD	80.000				
25000200	SEEDING CL 2	ACRE	55.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
25000400	NITROGEN FERT NUTR	POUND	3,355.000				
25000500	PHOSPHORUS FERT NUTR	POUND	3,355.000				
25000600	POTASSIUM FERT NUTR	POUND	3,355.000				
25100115	MULCH METHOD 2	ACRE	55.000				
25100630	EROSION CONTR BLANKET	SQ YD	6,928.000				
25200100	SODDING	SQ YD	9,825.000				
25200200	SUPPLE WATERING	UNIT	442.100				
28000250	TEMP EROS CONTR SEED	POUND	1,375.000				
28000300	TEMP DITCH CHECKS	EACH	597.000				
28000400	PERIMETER EROS BAR	FOOT	2,730.000				
28000500	INLET & PIPE PROTECT	EACH	128.000				
28001000	AGGREGATE - EROS CONT	TON	64.200				
28100105	STONE RIPRAP CL A3	SQ YD	418.000				
28100107	STONE RIPRAP CL A4	SQ YD	231.000				
28100111	STONE RIPRAP CL A6	SQ YD	114.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

ST CLAIR- -163 - -

 Code 163 - 

 District 8 - 

 Section Number 27-1R

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
28100113	STONE RIPRAP CL A7	SQ YD	432.000				
28100709	STONE DUMP RIP CL A5	SQ YD	2,136.000				
28100713	STONE DUMP RIP CL A7	SQ YD	158.000				
28200200	FILTER FABRIC	SQ YD	3,218.000				
30200650	PROCESS MOD SOIL 12	SQ YD	142,772.000				
30201500	LIME	TON	2,751.000				
31100100	SUB GRAN MAT A	TON	142.000				
31101000	SUB GRAN MAT B	TON	16,852.000				
31101900	SUB GRAN MAT C	TON	17,696.000				
35101400	AGG BASE CSE B	TON	1,026.000				
35101600	AGG BASE CSE B 4	SQ YD	1,225.000				
35102000	AGG BASE CSE B 8	SQ YD	1,749.000				
35800100	PREPARATION OF BASE	SQ YD	6,556.000				
40200100	AGG SURF CSE A	TON	606.000				
40200800	AGG SURF CSE B	TON	2,421.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
40600200	BIT MATLS PR CT	TON	116.900				
40600300	AGG PR CT	TON	358.000				
40600895	CONSTRUC TEST STRIP	EACH	2.000				
40600980	BIT SURF REM BUTT JT	SQ YD	198.000				
40600985	PCC SURF REM BUTT JT	SQ YD	309.000				
40600990	TEMPORARY RAMP	SQ YD	146.000				
42300200	PCC DRIVEWAY PAVT 6	SQ YD	87.000				
42300400	PCC DRIVEWAY PAVT 8	SQ YD	618.000				
42400100	PC CONC SIDEWALK 4	SQ FT	234.000				
42400610	TEMP SIDEWALK	SQ FT	234.000				
4400006	BIT SURF REM 1 1/2	SQ YD	34,228.000				
44000010	BIT SURF REM 3 1/2	SQ YD	97.000				
44000030	BIT SURF REM VAR DP	SQ YD	4,737.000				
44000100	PAVEMENT REM	SQ YD	14,538.000				
44000200	DRIVE PAVEMENT REM	SQ YD	4,367.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Code - 163 - - District - 8 - -

Section Number - 27-1R

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
44000300	CURB REM	FOOT	95.000				
44000500	COMB CURB GUTTER REM	FOOT	1,774.000				
44000600	SIDEWALK REM	SQ FT	1,495.000				
44002020	CONC MEDIAN SURF REM	SQ FT	7,483.000				
44004250	PAVED SHLD REMOVAL	SQ YD	13,659.000				
44200188	PAVT PATCH T1 16	SQ YD	16.000				
44200192	PAVT PATCH T2 16	SQ YD	403.000				
44200196	PAVT PATCH T3 16	SQ YD	172.000				
44200198	PAVT PATCH T4 16	SQ YD	121.000				
44200956	CL B PATCH T2 9	SQ YD	373.000				
44200964	CL B PATCH T4 9	SQ YD	38.000				
44201043	CL B PATCH T2 16	SQ YD	24.000				
44201047	CL B PATCH T3 16	SQ YD	34.000				
44201048	CL B PATCH T4 16	SQ YD	368.000				
44213100	PAVEMENT FABRIC	SQ YD	406.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
44213200	SAW CUTS	FOOT	4,261.000				
44300200	STRIP REF CR CON TR	FOOT	26,758.000				
48100500	AGGREGATE SHLDS A 6	SQ YD	401.000				
48201200	BIT SHLD REPAIR	TON	550.000				
48202400	BIT SHLD SUPER 6	SQ YD	676.000				
48202600	BIT SHLD SUPER 8	SQ YD	59,188.000				
48202840	BIT SHLD SUPER 12	SQ YD	3,864.000				
50100300	REM EXIST STRUCT N1	EACH	1.000				
50100400	REM EXIST STRUCT N2	EACH	1.000				
50100500	REM EXIST STRUCT N3	EACH	1.000				
50105200	REM EXIST CULVERTS	EACH	7.000				
50105220	PIPE CULVERT REMOV	FOOT	2,726.000				
51205200	TEMP SHT PILING	SQ FT	3,600.000				
51500100	NAME PLATES	EACH	1.000				
54001001	BOX CUL END SEC C1	EACH	2.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route		
ACF-0103/063/000	FAP 103		

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
54001002	BOX CUL END SEC C2	EACH	2.000				
54001003	BOX CUL END SEC C3	EACH	2.000				
54001004	BOX CUL END SEC C4	EACH	2.000				
54001005	BOX CUL END SEC C5	EACH	2.000				
54001006	BOX CUL END SEC C6	EACH	4.000				
54001007	BOX CUL END SEC C7	EACH	2.000				
54001008	BOX CUL END SEC C8	EACH	2.000				
54001009	BOX CUL END SEC C9	EACH	1.000				
54001010	BOX CUL END SEC C10	EACH	1.000				
54001011	BOX CUL END SEC C11	EACH	1.000				
54001012	BOX CUL END SEC C12	EACH	2.000				
54010202	PCBC 2X2	FOOT	161.000				
54010302	PCBC 3X2	FOOT	276.000				
54010303	PCBC 3X3	FOOT	270.000				
54010402	PCBC 4X2	FOOT	760.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
54010403	PCBC 4X3	FOOT	182.000				
54010602	PCBC 6X2	FOOT	408.000				
54010606	PCBC 6X6	FOOT	191.000				
54011010	PCBC 10X10	FOOT	307.500				
54020202	PCBC 2X2 (M273)	FOOT	30.000				
54020402	PCBC 4X2 (M273)	FOOT	100.000				
542C0220	P CUL CL C 1 15	FOOT	72.000				
54200430	P CUL 1 RCCP 15	FOOT	269.000				
54200433	P CUL 1 RCCP 18	FOOT	309.000				
54200439	P CUL 1 RCCP 24	FOOT	1,793.000				
54200451	P CUL 1 RCCP 36	FOOT	110.000				
54200640	P CUL 1 CS/A CP 15	FOOT	597.000				
54200643	P CUL 1 CS/A CP 18	FOOT	180.000				
54200649	P CUL 1 CS/A CP 24	FOOT	229.000				
54200655	P CUL 1 CS/A CP 30	FOOT	154.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

 Code 163 - 

 District 8 - 

 Section Number 27-1R

Project Number	Route
ACF-0103/063/000	FAP 103

Item Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
54200661	P CUL 1 CS/A CP 36	FOOT	111.000				
54201279	P CUL 2 RCCP 24	FOOT	202.000				
54206739	P CUL 1 RC EQV R-S 24	FOOT	128.000				
5421C012	P CUL CL C 1 12 TEMP	FOOT	518.000				
5421C015	P CUL CL C 1 15 TEMP	FOOT	563.000				
5421C018	P CUL CL C 1 18 TEMP	FOOT	161.000				
5421C024	P CUL CL C 1 24 TEMP	FOOT	264.000				
5421C030	P CUL CL C 1 30 TEMP	FOOT	74.000				
54213660	PRC FLAR END SEC 15	EACH	7.000				
54213663	PRC FLAR END SEC 18	EACH	12.000				
54213669	PRC FLAR END SEC 24	EACH	29.000				
54213681	PRC FLAR END SEC 36	EACH	4.000				
54213687	PRC FLAR END SEC 42	EACH	2.000				
54214719	PRCF END S EL EQRS 24	EACH	3.000				
54214725	PRCF END S EL EQRS 30	EACH	1.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
54215424	CIP RC END SEC 24	EACH	1.000				
54215430	CIP RC END SEC 30	EACH	1.000				
54215550	MET END SEC 15	EACH	10.000				
54215559	MET END SEC 24	EACH	6.000				
54215565	MET END SEC 30	EACH	4.000				
54215571	MET END SEC 36	EACH	4.000				
54246305	INLET BOX 542526 SPL	EACH	1.000				
54247110	GRATING-C FL END S 18	EACH	10.000				
54247130	GRATING-C FL END S 24	EACH	15.000				
54248130	GRT-C FL END S EQV 24	EACH	1.000				
55019500	SS 1 RCP CL 4 12	FOOT	195.000				
55019900	SS 1 RCP CL 4 24	FOOT	15.000				
55034200		FOOT	503.000				
55034500		FOOT	64.000				
55100500		FOOT	197.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
55101200	STORM SEWER REM 24	FOOT	437.000				
55101300	STORM SEWER REM 27	FOOT	58.000				
60100060	CONC HDWL FOR P DRAIN	EACH	149.000				
60107700	PIPE UNDERDRAINS 6	FOOT	59,071.000				
60107800	PIPE UNDERDRAINS 8	FOOT	661.000				
60108200	PIPE UNDERDRAIN 6 SP	FOOT	2,009.000				
60108300	PIPE UNDERDRAIN 8 SP	FOOT	34.000				
60218400	MAN TA 4 DIA T1F CL	EACH	3.000				
60218500	MAN TA 4 DIA T3F&G	EACH	2.000				
60219540	MAN TA 4 DIA T24F&G	EACH	1.000				
60220105	MAN TA 4D M IN 604106	EACH	3.000				
60223800	MAN TA 6 DIA T1F CL	EACH	2.000				
60223810	MAN TA 6 DIA T3F&G	EACH	4.000				
60240220	INLETS TB T3F&G	EACH	6.000				
60240301		EACH	5.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACE-0103/063/000	FAP 103

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
60240366	INLET TB M INL 604106	EACH	6.000				
60246605	MED INLET (604101)	EACH	5.000				
60246805	MED INLET (604106)	EACH	3.000				
60406100	FR & LIDS T1 CL	EACH	3.000				
60500040	REMOV MANHOLES	EACH	3.000				
60500060	REMOV INLETS	EACH	4.000				
60600605	CONC CURB TB	FOOT	530.000				
60600805	CONC CURB TB DOW	FOOT	1,284.000				
60605000	COMB CC&G TB6.24	FOOT	3,209.000				
60617800	PAVED FLUME	FOOT	10.000				
60618300	CONC MEDIAN SURF 4	SQ FT	11,683.000				
60619000	CONC MED TSB MOD	SQ FT	3,606.000				
63000000	SPBGR TY A	FOOT	512.500				
63100045	TRAF BAR TERM T2	EACH	2.000				
63100167	TR BAR TRM T1 SPL TAN	EACH	2.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

 Code 163 - 

 District 8 - 

 Section Number 27-1R

 Project Number
 Route

 ACF-0103/063/000
 FAP 103

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
63200310	GUARDRAIL REMOV	FOOT	2,803.000				
63500105	DELINEATORS	EACH	162.000				
64200105	SHOULDER RUMBLE STRIP	FOOT	59,327.000				
66600105	FUR ERECT ROW MARKERS	EACH	172.000				
66700095	PERM SURV MKRS	EACH	29.000				
66900200	NON SPL WASTE DISPOSL	CU YD	349.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	1.000				
67000400	ENGR FIELD OFFICE A	CAL MO	30.000				
67000600	ENGR FIELD LAB	CAL MO	30.000				
67100100	MOBILIZATION	L SUM	1.000				
70100309	TRAF CONT-PROT 701421	EACH	3.000				
70100320	TRAF CONT-PROT 701422	L SUM	1.000				
70100450	TRAF CONT-PROT 701201	L SUM	1.000				
70100460	TRAF CONT-PROT 701306	L SUM	1.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
70100500	TRAF CONT-PROT 701326	L SUM	1.000				
70102620	TR CONT & PROT 701501	L SUM	1.000				
70103815	TR CONT SURVEILLANCE	CAL DA	35.000				
70300100	SHORT-TERM PAVT MKING	FOOT	15,322.000				
70300210	TEMP PVT MK LTR & SYM	SQ FT	625.000				
70300220	TEMP PVT MK LINE 4	FOOT	139,240.000				
70300240	TEMP PVT MK LINE 6	FOOT	1,360.000				
70300250	TEMP PVT MK LINE 8	FOOT	165.000				
70300260	TEMP PVT MK LINE 12	FOOT	431.000				
70300280	TEMP PVT MK LINE 24	FOOT	362.000				
70301000	WORK ZONE PAVT MK REM	SQ FT	17,615.000				
70400500	TEMP CON BAR (ST OWN)	FOOT	1,140.000				
70400600		FOOT	430.000				
72000100		SQ FT	1,064.000				
72000200	SIGN PANEL T2	SQ FT	234.000				

State Job # - C-98-089-03
PPS NBR - 8-88970-0100
County Name - ST CLAIR- -

Project Number	Route
ACF-0103/063/000	FAP 103

ltem Number	Pay Item Description	Unit of Measure	Quantity	X	Unit Price	=	Total Price
72400100	REMOV SIN PAN ASSY TA	EACH	6.000				
72400200	REMOV SIN PAN ASSY TB	EACH	11.000				
72400310	REMOV SIGN PANEL T1	SQ FT	343.000				
72400320	REMOV SIGN PANEL T2	SQ FT	34.000				
72500100	OBJECT MARKER T1	EACH	15.000				
72900200	METAL POST TY B	FOOT	580.000				
73000100	WOOD SIN SUPPORT	FOOT	2,313.000				
78000100	THPL PVT MK LTR & SYM	SQ FT	960.000				
78000200	THPL PVT MK LINE 4	FOOT	135,899.000				
78000500	THPL PVT MK LINE 8	FOOT	997.000				
78000600	THPL PVT MK LINE 12	FOOT	650.000				
78000650	THPL PVT MK LINE 24	FOOT	604.000				
78100100	RAISED REFL PAVT MKR	EACH	1,510.000				
78200100	MONODIR PRIS BAR REFL	EACH	11.000				
78200300	PRISMATIC CURB REFL	EACH	60.000				

State Job # - C-98-089-03 PPS NBR - 8-88970-0100

County Name - ST CLAIR- -

Project Number	Route	
ACF-0103/063/000	FAP 103	

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78200405	GUARDRAIL MARKERS	EACH	20.000				
78200500	BARRIER WALL MARKERS	EACH	342.000				
78201000	TERMINAL MARKER - DA	EACH	4.000				
78300100	PAVT MARKING REMOVAL	SQ FT	12,824.000				
78300200	RAISED REF PVT MK REM	EACH	382.000				
81400115	HANDHOLE TO BE ADJUST	EACH	1.000				
88600100	DET LOOP T1	FOOT	710.000				

$\sim$		$\sim$ T I	 IDED
CUN	IIKA	U I	IBER

76300

THIS IS THE TOTAL BID	\$

#### NOTES:

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

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

#### I. GENERAL

- **A.** Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.
- **B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- **C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for termination of the contract and the suspension or debarment of the bidder.

#### **II. ASSURANCES**

**A.** The assurances hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous assurance, and the surety providing the performance bond shall be responsible for the completion of the contract.

#### B. Felons

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any state agency from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

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

#### C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

The current salary of the Governor is \$150,700.00. Sixty percent of the salary is \$90,420.00.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

#### D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

- (a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.
- 2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

#### E. Inducements

1. The Illinois Procurement Code provides:

Section 50-25. Inducement. Any person who offers or pays any money or other valuable thing to any person to induce him or her not to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

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

#### F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

#### G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the chief procurement officer.

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

#### H. Confidentiality

1. The Illinois Procurement Code provides:

Section 50-45. Confidentiality. Any chief procurement officer, State purchasing officer, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

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

#### I. Insider Information

1. The Illinois Procurement Act provides:

Section 50-50. Insider information. It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

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

#### **III. CERTIFICATIONS**

**A.** The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous certification, and the surety providing the performance bond shall be responsible for completion of the contract.

#### B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
  - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
  - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
  - (1) the business has been finally adjudicated not guilty; or
  - (2) the business demonstrates to the governmental entity with which it seeks to contract, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The bidder certifies that it is not barred from being awarded a contract under Section 50.5.

#### C. Educational Loan

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

#### D. Bid-Rigging/Bid Rotating

- 1. Section 33E-11 of the Criminal Code of 1961 provides:
- § 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.

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

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

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

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

#### E. International Anti-Boycott

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

#### F. Drug Free Workplace

- 1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.
- 2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:
- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- (b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.
- (c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.
- (d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.
- (e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.
- (f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.
- (g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

#### G. Debt Delinquency

1. The Illinois Procurement Code provides:

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

The contractor or bidder certifies that it, or any affiliate, is not barred from being awarded a contract under 30 ILCS 500. Section 50-11 prohibits a person from entering into a contract with a State agency if it knows or should know that it, or any affiliate, is delinquent in the payment of any debt to the State as defined by the Debt Collection Board. Section 50-12 prohibits a person from entering into a contract with a State agency if it, or any affiliate, has failed to collect and remit Illinois Use Tax on all sales of tangible personal property into the State of Illinois in accordance with the provisions of the Illinois Use Tax Act. The contractor further acknowledges that the contracting State agency may declare the contract void if this certification is false or if the contractor, or any affiliate, is determined to be delinquent in the payment of any debt to the State during the term of the contract.

#### H. Sarbanes-Oxley Act of 2002

1. The Illinois Procurement Code provides:

Section 50-60(c).

The contractor certifies in accordance with 30 ILCS 500/50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 for a period of five years prior to the date of the bid or contract. The contractor acknowledges that the contracting agency shall declare the contract void if this certification is false.

#### I. ADDENDA

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

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

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

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

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

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.

#### TO BE RETURNED WITH BID

#### **IV. DISCLOSURES**

**A.** The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The Department may terminate the contract if it is later determined that the bidder rendered a false or erroneous disclosure, and the surety providing the performance bond shall be responsible for completion of the contract.

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

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$10,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

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

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies. **The forms must be included with each bid or incorporated by reference.** 

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

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

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may sign the following certification statement indicating that the information previously submitted by the bidder is, as of the date of signature, current and accurate. The Certification must be signed and dated by a person who is authorized to execute contracts for the bidding company. Before signing this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder signs the Certification, the Bidder should proceed to Form B instructions.

#### CERTIFICATION STATEMENT

I have determined that the Form A disclosure informaccurate, and all forms are hereby incorporated by forms or amendments to previously submitted for	y reference in this bid. Any necessary additional
(Bidding 0	Company)
Name of Authorized Representative (type or print)	Title of Authorized Representative (type or print)
Signature of Autho	prized Representative Date

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

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

	1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
:	2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$90,420.00? YES NO
;	3.	Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES NO
4	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 \$90,420.00? 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.)
biddir autho	ig ei rize	answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the ntity's parent company that would cause the questions to be answered "Yes". Each form must be signed and dated by a person that is d to execute contracts for your organization. <b>Photocopied or stamped signatures are not acceptable</b> . The person signing can be, but have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.
		wer 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 that is authorized to execute contracts for your company.
biddir APPL	ig ei ICA	Identifying Other Contracts & Procurement Related Information  Disclosure Form B must be completed for each bid submitted by the ntity. It must be signed by an individual who is authorized to execute contracts for the bidding entity. Note: Signing the NOT BLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder considered nonresponsive and the bid will not be accepted.
ongoi	ng p	er shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:
agend attach and a	cy po ned : re n	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 ending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts ot to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development list be included. Bidders who submit Affidavits of Availability are suggested to use Option II.
"See agend	Affic cy po	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 davit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois ending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the f Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.
Bidde	ers	Submitting More Than One Bid
	e in	ubmitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. dicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms are.
•		e bid submitted for letting item contains the Form A disclosures or Certification Statement and the Form B closures. The following letting items incorporate the said forms by reference:
_		

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

### **ILLINOIS DEPARTMENT OF TRANSPORTATION**

### Form A **Financial Information & Potential Conflicts of Interest Disclosure**

			-
Contractor Name			
Legal Address			
City, State, Zip			
Telephone Number		Email Address	Fax Number (if available)
LCS 500). Vend potential conflict coublicly available contracts. <b>A pub</b>	ors desiring to enter into a of interest information as s contract file. This Form A licly traded company ma	a contract with the State of Illinois specified in this Disclosure Form. A must be completed for bids in e	50-35 of the Illinois Procurement Code (3 must disclose the financial information an This information shall become part of the excess of \$10,000, and for all open-ende quivalent if applicable) in satisfaction of
	DISCLO	SURE OF FINANCIAL INFORM	<u>IATION</u>
terms of ownersh (60% of the Gove Form A for each	nip or distributive income sl	nare in excess of 5%, or an interest (Make copies of this form as ned e requirements)	interest in the BIDDER (or its parent) in which has a value of more than \$90,420.0 cessary and attach a separate Disclosur
NAME:			
ADDRES	ss		
Type of or	wnership/distributable incor	me share:	
stock	sole proprietorship	Partnership	other: (explain on separate sheet):
	ue of ownership/distributable in		outor. (explain on departite energy.
			ndicate which, if any, of the following s "Yes", please attach additional pages and
(a) State er	mployment, currently or in t	he previous 3 years, including cont	ractual employment of services.  Yes No
If your a	answer is yes, please answ	er each of the following questions.	
1.	Are you currently an office Highway Authority?	r or employee of either the Capitol	Development Board or the Illinois Toll YesNo
	currently appointed to or exceeds \$90,420.00, (609)	ed to or employed by any agency mployed by any agency of the State of the Governor's salary as of 7/employed and your annual salary.	e of Illinois, and your annual salary

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

3.	If you are currently appointed to or employed by any agency of the salary exceeds \$90,420.00, (60% of the Governor's salary as of (i) more than 7 1/2% of the total distributable income of your fit corporation, or (ii) an amount in excess of the salary of the Governor	7/1/01) are you entitled to receive rm, partnership, association or
4.	If you are currently appointed to or employed by any agency of the salary exceeds \$90,420.00, (60% of the Governor's salary as of or minor children entitled to receive (i) more than 15% in aggregate of your firm, partnership, association or corporation, or (ii) an amosalary of the Governor?	7/1/01) are you and your spouse e of the total distributable income
	employment of spouse, father, mother, son, or daughter, including coprevious 2 years.	ontractual 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 employed Board or the Illinois Toll Highway Authority?	ee 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 appoint agency of the State of Illinois, and his/her annual salary exceeds Governor's salary as of 7/1/01) provide the name of the spouse ar of the State agency for which he/she is employed and his/her annual	ed to or employed by any \$90,420.00, (60% of the nd/or minor children, the name
3.	If your spouse or any minor children is/are currently appointed to or State of Illinois, and his/her annual salary exceeds \$90,420.00, (6 as of 7/1/01) are you entitled to receive (i) more than 71/2% of the t firm, partnership, association or corporation, or (ii) an amount ir Governor?	0% of the salary of the Governor otal distributable income of your
	If your spouse or any minor children are currently appointed to or State of Illinois, and his/her annual salary exceeds \$90,420.00, (609,7/1/01) are you and your spouse or any minor children entitled to reaggregate of the total distributable income from your firm, partnersh (ii) an amount in excess of 2 times the salary of the Governor?	% of the Governor's salary as of eceive (i) more than 15% in the
unit of I	e status; the holding of elective office of the State of Illinois, the gove local government authorized by the Constitution of the State of Illin currently or in the previous 3 years.	
` '	onship to anyone holding elective office currently or in the previous 2 daughter.	years; spouse, father, mother, YesNo
America of the S	tive office; the holding of any appointive government office of the State, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in excharge of that office currently or in the previous 3 years.	ne State of Illinois or the statues
	nship to anyone holding appointive office currently or in the previous daughter.	2 years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any registered lo	bbyist of the State government. YesNo

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

(h) Relationship to a son, or daughter.	nyone who is or was a registered lobbyist in the previous 2		spouse, father, mother, No
committee registe	reployment, currently or in the previous 3 years, by any regred with the Secretary of State or any county clerk of the Stregistered with either the Secretary of State or the Federal I	ate of I Board of	llinois, or any political
last 2 years by any county clerk of the	yone; spouse, father, mother, son, or daughter; who was a y registered election or re-election committee registered wit state of Illinois, or any political action committee registered cal Board of Elections.	h the Se ed with	ecretary of State or any
		163_	NO
	APPLICABLE STATEMENT		
This Disclosure Fo	rm A is submitted on behalf of the INDIVIDUAL named	on prev	ious page.
Completed by:			
•	Name of Authorized Representative (type or print)		
Completed by:			
	Title of Authorized Representative (type or print)		
Completed by:			
	Signature of Individual or Authorized Representative		Date
	NOT APPLICABLE STATEMENT		
	hat no individuals associated with this organization me tion of this Form A.	et the o	criteria that would
This Disclosure Fo	rm A is submitted on behalf of the CONTRACTOR listed	d on the	previous page.
	Name of Authorized Representative (type or print)		_
	,		
	Title of Authorized Representative (type or print)		
	Signature of Authorized Representative		Date

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

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name			
Legal Address			
City, State, Zip			
Telephone Number	Email Address	Fax Number (if avail	able)
- Cooperation Comments	2		35.57
Disclosure of the information contained	in this Form is required by the	ne Section 50-35 of the Illinoi	s Procurement
Act (30 ILCS 500). This information sha	Ill become part of the public	ly available contract file. This F	Form B must
be completed for bids in excess of \$10,0	000, and for all open-ended	contracts.	
DISCLOSURE OF OTH	ER CONTRACTS AND PR	OCUREMENT RELATED INF	ORMATION
1. Identifying Other Contracts & Prohas any pending contracts (including leany other State of Illinois agency: Yes "No" is checked, the bidder only ne	eases), bids, proposals, or c ⁄es No	other ongoing procurement rela	ationship with
2. If "Yes" is checked. Identify each information such as bid or project number INSTRUCTIONS:			
THE	FOLLOWING STATEMEN	NT MUST BE SIGNED	
	Name of Authorized Representa	ative (type or print)	
	Title of Authorized Representat	tive (type or print)	
	Signature of Authorized Re	epresentative	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.



Contract No. 76300 ST. CLAIR County Section 27-1R Project ACF-103(63) Route FAP 103 District 8 Construction Funds

District o Construction 1 unido
Duration of Project:

#### PART II. WORKFORCE PROJECTION

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

TABLE A

TABLE B

		TOTA	AL Wo	rkforce	Projec	tion for	Contr	act					1 [	C	URRENT	EN	IPLOYEE	S
										TD /	VINIEEO						SIGNED	
				MINORITY EMPLOYEES TRAINEES		MINO							TO CC	ו אכ		D.IT. (		
JOB		TAL						THER				HE JOB			TAL		MINO	
CATEGORIES		OYEES		CK	HISP			NOR.	TIC			INEES			OYEES		EMPLO	
	М	F	M	F	М	F	M	F	M	F	M	F		M	F		М	F
OFFICIALS (MANAGERS)																		
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		

	TAE	BLE C							
T	OTAL Tra	aining Pro	ojection	n for C	ontract				
EMPLOYEES IN	_	TOTAL EMPLOYEES BLAC		ACK	HISP	ANIC	*OTHER MINOR.		
TRAINING	M	F	M	F	M	F	M	F	
APPRENTICES									
ON THE JOB TRAINEES									

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

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

Note: See instructions on the next page

FOR DEPARTMENT USE ONLY

BC 1256 - Pg 1 (Rev. 3/98) IL 494-0454

Contract No. 76300 ST. CLAIR County Section 27-1R Project ACF-103(63) Route FAP 103 District 8 Construction Funds

#### PART II. WORKFORCE PROJECTION - continued

В.	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 recruited from the area in which the contract project is located; and/or (number) new hires would be recruited from the area in which the bidder's principal
	office or base of operation is located.
C.	Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.
	The undersigned bidder estimates that (number) persons will be directly employed by the prime contractor and that (number) persons will be employed by subcontractors.
PART	II. AFFIRMATIVE ACTION PLAN
A.	The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under <b>PART II</b> is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the <b>Department of Human Rights</b> .
B.	The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.
Comp	any Telephone Number
Addre	
	NOTICE REGARDING SIGNATURE
	The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required.
	Signature: Title: Date:
Instruct	ons: All tables must include subcontractor personnel in addition to prime contractor personnel.
Table A	- Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.
Table B	- Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.
Table C	- Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.  BC-1256-Pg. 2 (Rev. 3/98)

#### **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</u>, <u>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. 76300 ST. CLAIR County Section 27-1R Project ACF-103(63) Route FAP 103 District 8 Construction Funds

#### PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)		
		Name and Address of All Members of the Firm:
<del>-</del>		
	Corporate Name	
(IF A CORPORATION)	Бу	Signature of Authorized Representative
(IF A CORPORATION)		
		Typed or printed name and title of Authorized Representative
	Attest	
(IF A JOINT VENTURE, USE THIS SECTION		Signature
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
SECOND FAIRT GROUD GION BELOW)		
	Corporato Namo	_
(IF A JOINT VENTURE)	Ву	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	
	, most	Signature
	Business Address	
If more than two parties are in the joint venture,	please attach an addit	ional signature sheet.



#### Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

	Item No.
	Letting Date
KNOW ALL MEN BY THESE PRESENTS, That We	
MICOW TEE MEN DT THESE TRESERTS, That We	
as PRINCIPAL, and	
as FRECH 712, and	_
Article 102.09 of the "Standard Specifications for Road and Bridge	as SURETY, are GOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well ent of which we bind ourselves, our heirs, executors, administrators, successors and assigns.
	S SUCH, That Whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF e improvement designated by the Transportation Bulletin Item Number and Letting Date
the bidding and contract documents, submit a DBE Utilization Plan PRINCIPAL shall enter into a contract in accordance with the terms coverages and providing such bond as specified with good and suff labor and material furnished in the prosecution thereof; or if, in the into such contract and to give the specified bond, the PRINCIPAL I	proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in that is accepted and approved by the Department; and if, after award by the Department, the softhe bidding and contract documents including evidence of the required insurance ficient surety for the faithful performance of such contract and for the prompt payment of event of the failure of the PRINCIPAL to make the required DBE submission or to enterpays to the Department the difference not to exceed the penalty hereof between the amount Department may contract with another party to perform the work covered by said bid nall remain in full force and effect.
Surety shall pay the penal sum to the Department within fifteen (15	has failed to comply with any requirement as set forth in the preceding paragraph, then ) days of written demand therefor. If Surety does not make full payment within such mount owed. Surety is liable to the Department for all its expenses, including attorney's or in part.
In TESTIMONY WHEREOF, the said PRINCIPAL and the s day of A	aid SURETY have caused this instrument to be signed by their respective officers this
PRINCIPAL	SURETY
(Company Name)	(Company Name)
By:	By:
(Signature & Title)	(Signature of Attorney-in-Fact)
Notary	y Certification for Principal and Surety
STATE OF ILLINOIS, COUNTY OF	, occurrence
I.	, a Notary Public in and for said County, do hereby certify that
and	
(Insert names of individua	ls signing on behalf of PRINCIPAL & SURETY)
	se names are subscribed to the foregoing instrument on behalf of PRINCIPAL and d respectively, that they signed and delivered said instrument as their free and voluntary
Given under my hand and notarial seal this day	of, A.D
My commission expires	
	Notary Public
	the Principal may file an Electronic Bid Bond. By signing below the Principal is ensuring total and Surety are firmly bound unto the State of Illinois under the conditions of the bid
Electronic Bid Bond ID# Company/Bidder Name	Signature and Title

### PROPOSAL ENVELOPE



## **PROPOSALS**

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

Item No.	Item No.	Item No.

#### Submitted By:

Name:	
Address:	
Phone No.	

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

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

#### **NOTICE**

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

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

#### **NOTICE**

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

Contract No. 76300 ST. CLAIR County Section 27-1R Project ACF-103(63) Route FAP 103 District 8 Construction Funds



# Illinois Department of Transportation

#### **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., April 28, 2006. 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. 76300 ST. CLAIR County Section 27-1R Project ACF-103(63) Route FAP 103 District 8 Construction Funds

3.54 miles of pavement widening and reconstruction on IL Route 13/15 from Green Mount Road to Rogers Drive also includes drainage improvements, all located in Freeburg.

- 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

Timothy W. Martin, Secretary

BD 351 (Rev. 01/2003)

#### INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS Adopted March 1, 2005

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-02) (Revised 3-1-05)

#### SUPPLEMENTAL SPECIFICATIONS

Std. S	pec. Sec.	<u>Page No.</u>
101	Definition of Terms	1
105	Control of Work	2
205	Embankment	3
251	Mulch	4
281	Riprap	5
282	Filter Fabric for Use With Riprap	
285	Concrete Revetment Mats	
311	Granular Subbase	
351	Aggregate Base Course	
440	Removal of Existing Pavement and Appurtenances	16
442	Pavement Patching	17
449	Removal and Replacement of Preformed Elastomeric Compression Joint Seal	
481	Aggregate Shoulders	
501	Removal of Existing Structures	
503	Concrete Structures	
505	Steel Structures	
506	Cleaning and Painting Metal Structures	
508	Reinforcement Bars	
512	Piling	
540	Box Culverts	
589	Elastic Joint Sealer	30
602	Catch Basin, Manhole, Inlet, Drainage Structures and Valve Vault	0.4
	Construction, Adjustment and Reconstruction	31
603	Adjusting Frames and Grates of Drainage and Utility Structures	
610	Shoulder Inlets with Curb	
665	Woven Wire Fence	
669	Removal and Disposal of Regulated Substances	
671	Mobilization	
702	Work Zone Traffic Control Devices	37
1003	Fine Aggregates	38
1004	Coarse Aggregate	39
1005	Stone, Concrete Blocks and Broken Concrete for Erosion Protection,	
	Sediment Control and Rockfill	42
1006	Metals	
1007	Timber and Preservative Treatment	49
1012	Hydrated Lime	
1020	Portland Cement Concrete	
1021	Concrete Admixtures	
1022	Concrete Curing Materials	
1024	Nonshrink Grout	
1041	Brick	
1043	Precast Reinforced Concrete Manhole Sections and Adjusting Rings	
1056	Preformed Flexible Gaskets and Mastic Joint Sealer for Sewer and Culvert Pipe	66
1059	Elastic Joint Sealers	
1060	Waterproofing Materials	
1069	Pole and Tower	
1009	Foundation and Breakaway Devices	
1070	Post and Foundation	
1077	Fabric Materials	
1081	Materials For Planting	
1083	Elastomeric Bearings	
1094	Overhead Sign Structures	
1103	Pomano Gemeni Concreie Foulomeni	79

#### **RECURRING SPECIAL PROVISIONS**

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

CHE	CK	SHEET#	E NO.
		State Required Contract Provisions All Federal-aid Construction Contracts (Eff. 2-1-69) (Rev. 10-1-83)	
		Subletting of Contracts (Federal-aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	
3	X	EEO (Eff. 7-21-78) (Rev. 11-18-80)	. 83
4		Specific Equal Employment Opportunity Responsibilities NonFederal-aid Contracts	
		(Eff. 3-20-69) (Rev. 1-1-94)	94
5	X	Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 4-1-93)	100
6		Reserved	
7		Asphalt Quantities and Cost Reviews (Eff. 7-1-88)	
8	X	National Pollutant Discharge Elimination System Permit (Eff. 7-1-94) (Rev. 1-1-03)	107
9		Haul Road Stream Crossings, Other Temporary Stream Crossings and In-Stream Work Pads	
		(Eff. 1-2-92) (Rev. 1-1-98)	. 108
10		Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-02)	
11	X	Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-02)	. 112
12		Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-97)	. 115
13		Asphaltic Emulsion Slurry Seal and Fibrated Asphaltic Emulsion Slurry Seal (Eff. 8-1-89) (Rev. 2-1-97)	
14		Bituminous Surface Treatments Half-Smart (Eff. 7-1-93) (Rev. 1-1-97)	
15	X	Quality Control/Quality Assurance of Bituminous Concrete Mixtures (Eff. 1-1-00) (Rev. 3-1-05)	
16		Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 2-1-95)	
17		Bituminous Surface Removal (Cold Milling) (Eff. 11-1-87) (Rev. 10-15-97)	
		Resurfacing of Milled Surfaces (Eff. 10-1-95)	
		PCC Partial Depth Bituminous Patching (Eff. 1-1-98)	
20	X	Patching with Bituminous Overlay Removal (Eff. 10-1-95) (Rev. 7-1-99)	
21		Reserved	. 159
22		Protective Shield System (Eff. 4-1-95) (Rev. 1-1-03)	
23		Polymer Concrete (Eff. 8-1-95) (Rev. 3-1-05)	
		Controlled Low-Strength Material (CLSM) (Eff. 1-1-90) (Rev. 3-1-05)	
25	X	Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-98)	. 169
	X	Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-97)	. 170
27		Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-97)	
28		Reserved	
29		Reserved	
30		Reserved	
31		Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	. 180
32		Reserved	. 181
33		English Substitution of Metric Bolts (Eff. 7-1-96)	
34		English Substitution of Metric Reinforcement Bars (Eff. 4-1-96) (Rev. 1-1-03)	183
35	.,	Polymer Modified Emulsified Asphalt (Eff. 5-15-89) (Rev. 1-1-04)	
36	Х		
37		Quality Control of Concrete Mixtures at the Plant-Single A (Eff. 8-1-00) (Rev. 1-1-04)	
38		Quality Control of Concrete Mixtures at the Plant-Double A (Eff. 8-1-00) (Rev. 1-1-04)	
		Quality Control/Quality Assurance of Concrete Mixtures (Eff. 4-1-92) (Rev. 3-1-05)	
	X	Traffic Barrier Terminal Type 1, Special (Eff. 8-1-94) (Rev. 1-1-03)	
41	v	Reserved	
42		Reserved	

### **TABLE OF CONTENTS**

LOCATION OF PROJECT	1
DESCRIPTION OF PROJECT	1
PAYROLLS AND PAYROLL RECORDS (BDE)	1
MONTHLY LABOR SUMMARY AND ACTIVITY REPORTING SYSTEM	3
EMBANKMENT	5
SEEDING	6
TREE DAMAGE	6
D-8 TEMPORARY EROSION CONTROL	7
SURVEY MONUMENT COVER ASSEMBLY	8
BITUMINOUS SURFACE REMOVAL W/SKETCH OF ILLINOIS STANDARD W8-I106	8
GUARDRAIL REMOVAL	11
OFFICE COPY MACHINE	11
TELEPHONE ANSWERING MACHINE	11
TRAFFIC CONTROL AND PROTECTION STANDARD 701501	12
TRAFFIC CONTROL PLAN	12
INSTALLATION OF TEMPORARY CONCRETE BARRIERS AND/OR TEMPORARY BRIDGE RAIL	13
CONSTRUCTION AND MAINTENANCE SIGN SUPPORTS	15
STATUS OF UTILITIES TO BE ADJUSTED	15
FENCE REMOVAL	17
TEMPORARY SIDEWALK	17
BITUMINOUS SHOULDER REPAIR	18
REMOVAL OF EXISTING STRUCTURES	18
INLET BOX, STANDARD 542526 (SPECIAL)	19
HANDHOLE TO BE ADJUSTED	19
PAVED FLUME	19
COOPERATION BETWEEN CONTRACTORS	20
ENVIRONMENTAL COMMITMENT	20
CULVERTS AND STORM SEWERS STAGED CONSTRUCTION	20
REMOVE EXISTING CULVERTS	21
PIPE CULVERT REMOVAL	21
CONCRETE MEDIAN, TYPE SB (MODIFIED)	22
SEQUENCE OF CONSTRUCTION	22
WIDE CRACK ROUTING AND SEALING	23
PARTIAL DEPTH PATCHING	25
PIPE UNDERDRAINS (SPECIAL)	27
GRID REINFORCED SLOPE	27
NON-SPECIAL WASTE WORKING CONDITIONS	29
CONCRETE MEDIAN SURFACE REMOVAL	30

INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE, N 90	30
LAND SECTION MARKERS AND CONCRETE REFERENCE MARKERS	30
DETECTOR LOOP REPLACEMENT	31
TEMPORARY SHEET PILING	32
BITUMINOUS BASE COURSE / WIDENING SUPERPAVE (BDE)	34
BITUMINOUS CONCRETE SURFACE COURSE (BDE)	39
BITUMINOUS EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE)	40
BUILDING REMOVAL - CASE II (NON-FRIABLE ASBESTOS ABATEMENT) (BDE)	40
BUTT JOINTS (BDE)	55
COARSE AGGREGATE FOR TRENCH BACKFILL, BACKFILL AND BEDDING (BDE)	55
CONCRETE ADMIXTURES (BDE)	62
CORRUGATED METAL PIPE CULVERTS (BDE)	66
CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)	67
DETECTABLE WARNINGS (BDE)	74
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION	75
EPOXY COATING ON REINFORCEMENT (BDE)	83
EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)	83
EXPANSION JOINTS (BDE)	83
FLAGGER VESTS (BDE)	84
FREEZE-THAW RATING (BDE)	84
IMPACT ATTENUATORS, TEMPORARY (BDE)	85
LIME GRADATION REQUIREMENTS (BDE)	86
LIME STABILIZED SOIL MIXTURE (BDE)	87
LIME STABILIZED SOIL MIXTURE (BDE)	87
MATERIAL TRANSFER DEVICE (BDE)	91
MINIMUM LANE WIDTH WITH LANE CLOSURE (BDE)	92
MULCHING SEEDED AREAS (BDE)	93
MULTILANE PAVEMENT PATCHING (BDE)	94
NOTCHED WEDGE LONGITUDINAL JOINT (BDE)	94
PARTIAL PAYMENTS (BDE)	95
PAVEMENT AND SHOULDER RESURFACING (BDE)	96
PAVEMENT THICKNESS DETERMINATION FOR PAYMENT (BDE)	97
PAYMENTS TO SUBCONTRACTORS (BDE)	104
PERSONAL PROTECTIVE EQUIPMENT (BDE)	105
PLASTIC BLOCKOUTS FOR GUARDRAIL (BDE)	105
PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)	
PORTLAND CEMENT (BDE)	
PORTLAND CEMENT CONCRETE (BDE)	106
PORTLAND CEMENT CONCRETE PATCHING (BDE)	107

PRECAST CONCRETE PRODUCTS (BDE)	110
PREFORMED RECYCLED RUBBER JOINT FILLER (BDE)	111
RAP FOR USE IN BITUMINOUS CONCRETE MIXTURES (BDE)	111
SEEDING AND SODDING (BDE)	115
SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)	117
SHOULDER RUMBLE STRIPS (BDE)	
SOIL MODIFICATION (BDE)	
STABILIZED SUBBASE AND BITUMINOUS SHOULDERS SUPERPAVE (BDE)	125
SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)	131
SUBGRADE PREPARATION (BDE)	131
SUPERPAVE BITUMINOUS CONCRETE MIXTURES (BDE)	132
TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)	138
TRUCK BED RELEASE AGENT (BDE)	139
WEIGHT CONTROL DEFICIENCY DEDUCTION	139
WORK ZONE PUBLIC INFORMATION SIGNS (BDE)	140
WORK ZONE SPEED LIMIT SIGNS (BDE)	141
WORK ZONE TRAFFIC CONTROL (BDE)	141
TRAINING SPECIAL PROVISIONS	143
AGGREGATE SHIPPING TICKETS (BDE)	
PLANTING WOODY PLANTS (BDE)	145
REFLECTIVE CRACK CONTROL TREATMENT (BDE)	146
REINFORCEMENT BARS (BDE)	
SEALING ABANDONED WATER WELLS (BDE)	151
SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)	151
STEEL PLATE BEAM GUARDRAIL (BDE)	156
WATER BLASTER WITH VACUUM RECOVERY (BDE)	156
WORKING DAYS (BDE)	157
STEEL COST ADJUSTMENT (BDE)	157
STORM WATER POLLUTION PREVENTION PLAN	161
WORK ZONE TRAFFIC CONTROL DEVICES (BDF)	197

### STATE OF ILLINOIS

#### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2002, 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 Route 103 (IL Route 13/15); Section 27-1R; St. Clair County; Contract No. 76300 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**

IL Route 13/15 from Green Mount Road to Rogers Drive in Freeburg.

#### **DESCRIPTION OF PROJECT**

The proposed improvement will convert the existing 2-lane section of FAP Route 103 (IL Rte. 13/15) into a 4-lane divided expressway from Green Mount Road to Peabody Road and into a 5-lane section from Peabody Road to Town & Country Lane. There will be a transition from the 5-lane section to a 3-lane section near Rogers Drive. This project will also consist of constructing access roads at various locations along the proposed rural 4-lane expressway and replacement of the existing drainage structure at Sugar Creek with a double 10' x 10' concrete box culvert.

The proposed improvement shall also consist of milling and resurfacing the existing pavement, constructing new full-depth bituminous pavement, constructing bituminous base course (widening) on both sides of the existing pavement, earth excavation, miscellaneous box culverts, pipe culverts, storm sewers, bituminous shoulders, entrances, seeding, signing and other incidental items.

#### PAYROLLS AND PAYROLL RECORDS (BDE)

Effective: August 10, 2005

<u>FEDERAL AID CONTRACTS</u>. Add the following State of Illinois requirements to the Federal requirements contained in Section V of Form FHWA-1273:

"The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid.

The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form."

STATE CONTRACTS. Revise Section IV of Check Sheet #5 of the Recurring Special Provisions to read:

#### "IV. COMPLIANCE WITH THE PREVAILING WAGE ACT

- 1. Prevailing Wages. All wages paid by the Contractor and each subcontractor shall be in compliance with The Prevailing Wage Act (820 ILCS 130), as amended, except where a prevailing wage violates a federal law, order, or ruling, the rate conforming to the federal law, order, or ruling shall govern. The Contractor shall be responsible to notify each subcontractor of the wage rates set forth in this contract and any revisions thereto. If the Department of Labor revises the wage rates, the Contractor will not be allowed additional compensation on account of said revisions.
- 2. Payroll Records. The Contractor and each subcontractor shall make and keep, for a period of three years from the date of completion of this contract, records of the wages paid to his/her workers. The payroll records shall include each worker's name, address, telephone number, social security number, classification, rate of pay, number of hours worked each day, starting and ending times of work each day, total hours worked each week, itemized deductions made, and actual wages paid. Upon two business days' notice, these records shall be available, at all reasonable hours at a location within the State, for inspection by the Department or the Department of Labor.
- 3. Submission of Payroll Records. The Contractor and each subcontractor shall submit payroll records to the Engineer each week from the start to the completion of their respective work. The submittals shall be on the Department's form SBE 48, or an approved facsimile. When there has been no activity during a work week, a payroll record shall still be submitted with the appropriate box ("No Work", "Suspended", or "Complete") checked on the form.

Each submittal shall be accompanied by a statement signed by the Contractor or subcontractor which avers that: (i) such records are true and accurate; (ii) the hourly rate paid to each worker is not less than the general prevailing rate of hourly wages required by the Act; and (iii) the Contractor or subcontractor is aware that filing a payroll record that he/she knows to be false is a Class B misdemeanor.

4. Employee Interviews. The Contractor and each subcontractor shall permit his/her employees to be interviewed on the job, during working hours, by compliance investigators of the Department or the Department of Labor."

#### MONTHLY LABOR SUMMARY AND ACTIVITY REPORTING SYSTEM

Effective: 1-1-1995 Revised June 2001

I. Monthly Labor Summary Report, Form SBE 148

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

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

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

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

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

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

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

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

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

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

Monthly Labor Summary and Activity Reporting System Codes and Formats

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

I.) Monthly Labor Summary Report, Form SBE 148

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

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

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

3. Work Classification: OF - Official SU - Supervisor FO - Foremen CL - Clerical CA - Carpenter EO - Operator ME - Mechanic

**TD** - Truck Driver **IW** - Ironworker **PA** - Painter **OT** - Other **EL** - Electrician **PP** - Pipefitter **TE** - Technical **LA** - Laborer

CM - Cement Mason

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

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

Specific "Fixed Length Comma Delimited ASCII File Format"

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

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

#### II.) Monthly Contract Activity Report, Form SBE 248

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

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

4 - Suspended 5 - Complete

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

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

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

This Special Provision must be included in each subcontract agreement.

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

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

This Special Provision must be included in each subcontract agreement.

#### **EMBANKMENT**

Revised January 2002

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

- 1. It must fall in one of the following Highway Research Board Classifications: A-1, A-2, A-3, A-4, A-6, or A-7-6.
- 2. It shall have a Liquid Limit of 49 or less.
- 3. Any A-4, A-6 or A-7-6 material to be used as borrow for embankment construction shall not have an organic content greater than 7%.
- 4. Classification of the material for points 1 and 2 shall be determined in accordance with the latest AASHTO Designation: M 145.

5. When tested for density in place, any soil classified as an A-4 shall not contain more than 100% of optimum moisture content determined according to AASHTO T-99.

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

Those portions of the lime modified soil layer shall be constructed with a minimum of 450 mm (18 inches) of "reactive" soil as defined by Section 310.02 of the Standard Specifications.

#### SEEDING

Effective: February 5, 1975 Revised: March 1, 2004

All disturbed areas are to be seeded.

When Class 2 seeding is done between April 1<sup>st</sup> and October 15<sup>th</sup>, the seed mixture shall also include 55kg/ha (48 pounds per acre) of Spring Oats.

When Class 2 seeding is done between October 15<sup>th</sup> and April 1<sup>st</sup>, the seed mixture shall also include 63kg/ha (56 pounds per acre) of Balboa Farm Rye or 67kg/ha (60 pounds per acre) of Winter Wheat.

Mulch shall conform to the requirements of Section 251 of the Standard Specifications for Road and Bridge Construction except the Contractor will have the option of using either Method 2 or Method 3 for placing the mulch, except that no emulsified asphalt shall be used. The rate of application of the mulch shall be 4.5 metric tons/ha (two tons per acre).

The cost for performing this work will be paid for at the contract unit price per hectare (acre) for SEEDING CLASS 2, which price shall include the seeding and all necessary incidental work as directed by the Engineer.

The amount of Seeding Class 2 shown in the contract has been estimated. The Contractor will be paid for the amount actually seeded, at the contract unit price bid per hectare (acre), as directed by the Engineer.

#### TREE DAMAGE

Effective: July 1, 1995

This work shall be done in accordance with Article 253.14 of the Standard Specifications except as herein modified:

When the Resident Engineer/Technician inspects the trees at the end of the period of establishment, he/she should direct the Contractor to remove the posts and wire used for bracing.

#### **D-8 TEMPORARY EROSION CONTROL**

Effective: August 1, 2002

Revise the fifth sentence of the third paragraph of Article 280.04(a) of the Standard Specifications to read:

"This work may be constructed of extruded UV resistant high density polyethylene panels, erosion control blanket, mulch barrier, aggregate barriers, excavation, seeding, or mulch used separately or in combination, as approved, by the Engineer."

Add the following paragraphs after the fifth paragraph of Article 280.04(a) of the Standard Specifications.

"A ditch check constructed of extruded, UV resistant, high density polyethylene panels, "M" pins and erosion control blanket shall consist of the following materials:

Extruded, UV resistant, high density polyethylene panels shall have a minimum height of 250 mm (10 in.) and minimum length of 1.0 m (39.4 in.). The panels shall have a 51 mm (2 in.) lip along the bottom of the panel. Each panel shall have a single rib thickness of 4 mm (5/32 in.) with a 12 mm (1/2 in.) distance between the ribs. The panels shall have an average apparent opening size equal to 4.75 mm (No. 4) sieve, with an average of 30 percent open area. The tensile strength of each panel shall be 26.27 kN/m (1800 lb/ft) in the machine direction and 7.3 kN/m (500 lb/ft) in the transverse direction when tested according to ASTM D 4595.

"M" pins shall be at least 76 mm (3 in.) by 686 mm (27 in.), constructed out of deformed grade C1008 D3.5 rod (0.211 in. diameter). The rod shall have a minimum tensile strength of 55 MPa (8000 psi).

Erosion control blanket shall conform to Article 251.04.

A section of erosion control blanket shall be placed transverse to the flowline direction of the ditch prior to the construction of the polyethylene ditch check. The length of the section shall extend from the top of one side of the ditch to the top of the opposite side of the ditch, while the width of the section shall be one roll width of the blanket. The upstream edge of the erosion control blanket shall be secured in a 100 mm (4 in.) trench. The blanket shall be secured in the trench with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge before the trench is backfilled. Once the upstream edge of the blanket is secured, the downstream edge shall be secured with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge. The polyethylene ditch check shall be installed in the middle of the erosion control blanket, with the lip of each panel facing outward.

The ditch check shall consist of two panels placed back to back forming a single row. Placement of the first two panels shall be at the toe of the backslope or sideslope, with the panels extending across the bottom of the ditch. Subsequent panels shall extend both across the bottom of the ditch and up the opposite sideslope, as well as up the original backslope or sideslope at the distance determined by the Engineer.

The M pins shall be driven through the panel lips to secure the panels to the ground. M pins shall be installed in the center of the panels with adjacent panels overlapping the ends a minimum of 50 mm (2 in.). The pins shall be placed through both sets of panels at each overlap. They shall be installed at an interval of three M pins per one meter (39 in.) length of ditch check. The panels shall be wedged into the M pins at the top to ensure firm contact between the entire bottom of the panels and the soil."

#### SURVEY MONUMENT COVER ASSEMBLY

Effective: February 5, 1975 Revised: February 16, 1996

This item shall consist of furnishing and placing a survey monument cover assembly as shown and specified in the plans at all section, sub-section monuments, landmarks, and pavement alignment control points that might occur in the pavement.

The Contractor may be directed by the Engineer to remove existing bituminous surface in trying to relocate and re-establish such monuments or landmarks in the original pavement. All exploration work will not be paid for separately, but shall be considered incidental to the cost of the contract.

The Survey Monument Cover Assembly as shown on the plans may require modifications to accommodate the total thickness of bituminous surface, existing and/or proposed, on the concrete pavement. In the event the total thickness is greater than 76 mm (3 in), the Contractor may attach a metal cylinder, in a manner meeting the approval of the Engineer, to accommodate the additional height required. In the event the thickness of proposed resurfacing is less than 76 mm (3 in) the Contractor shall have the option of coring the existing pavement to the depth required to install the assembly or the Contractor may remove the bottom portion of the assembly and attach a metal flange 25 mm (1 in) minimum in width to insure proper seating.

The cost of furnishing and placing each assembly as herein specified will be paid for at the contract unit price each for SURVEY MONUMENT COVER ASSEMBLY.

The quantity shown in the plans is estimated and has been included to establish a contract unit price.

The final pay quantity will be adjusted to the number of assemblies actually needed as determined by the Engineer at the contract unit price bid.

#### BITUMINOUS SURFACE REMOVAL W/SKETCH OF ILLINOIS STANDARD W8-I106

Effective: October 1, 1985 Revised: August 13, 1997

This work shall consist of removing bituminous surface to the limits specified on the plans in accordance with Section 440 of the Standard Specifications except as herein modified.

The cuttings from the bituminous surface removal shall become the property of the Contractor and their salvage value shall be reflected in the contract unit price for BITUMINOUS SURFACE REMOVAL.

Concrete patches which have to be partially removed will be paid for as BITUMINOUS SURFACE REMOVAL; and, no additional compensation will be allowed.

Manholes and valve vaults which are exposed by the bituminous surface removal and transverse cuts at the end of the day which are more than 12 mm (1/2 inch) deep shall be tamped with a bituminous cold mix. The cost of this temporary taper shall be incidental to BITUMINOUS SURFACE REMOVAL; and, no additional compensation will be allowed.

When the removal width of the machine is less than the width of the lane, the operations shall be planned such that after the bituminous surface for a portion of the lane has been removed the remaining portion shall have been removed by the end of the day so that the two passes begin and terminate even with each other.

If the depth of removal is greater than 12 mm (1/2 inch), the removal shall be tapered at the terminating point at the end of each day's operation when the lane is open to traffic.

All materials, equipment, and labor necessary to complete the work and maintenance of the tapers as specified above will be included in the contract unit bid price for BITUMINOUS SURFACE REMOVAL.

Where bituminous surface removal has been performed and water would be pocketed on the pavement prior to resurfacing, the Contractor shall construct temporary ditches through the shoulder to permit drainage as directed by the Engineer. Where the existing shoulders are bituminous, narrow strips of surface removal to permit drainage will be done only on the specific instructions from the Engineer. The Contractor shall repair the shoulder to its original condition after the resurfacing is completed.

After any bituminous removal operation has been performed, the Contractor shall erect special "ROUGH GROOVED SURFACE" signs, as shown on the attached sheet, in advance of the construction zone in both directions, if applicable. In addition, these signs shall also be erected along major side streets in advance of the construction zone.

These signs shall remain in place until they are no longer applicable as determined by the Engineer. They shall then be removed by the Contractor and become his property.

The cost of furnishing, erecting, maintaining, and removing these signs will not be paid for separately, but shall be considered in the cost of the BITUMINOUS SURFACE REMOVAL.

At the end of each day's work, temporary pavement marking line shall be in place on the planed surface in accordance with Section 703 of the Standard Specifications.

## ILLINOIS STANDARD W8-I106



COLOR: LEGEND AND BORDER — BLACK NON-REFLECTORIZED BACKGROUND — ORANGE REFLECTORIZED

SIGN	DIMENSIONS							
SIZE	A	В	С	D	E	F	G	Ħ
36X36	36.0	17.2	2.2	24.3	23.5	5.5	10.5	2.5
48X48	48.0	24.1	3.0	34.0	33.0	6,0	13.0	3.5

	100	SERIES		MAR-	BOR-	R- BLAN	
SIGN		LINES			DER.	STD.	
SIZE	1	2	3				
36X36	5C	5C	5C	0.6	0.8	B4-36D	
48X48	7C	7C	7C	0.8	1.2	B4-48D	

All dimensions in Inches.

#### **GUARDRAIL REMOVAL**

Effective: February 11, 1981 Revised: August 14, 2002

This work shall be done in accordance with Section 632 of the Standard Specifications except as herein modified.

The salvaged material shall be hauled to the Belleville Sector Maintenance Yard for storage.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per meter (foot) for GUARDRAIL REMOVAL, measured from center-to-center of end post, which price shall include hauling the salvaged material to the maintenance yard.

#### **OFFICE COPY MACHINE**

Effective: January 1, 1987 Revised: October 15, 1996

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

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

#### TELEPHONE ANSWERING MACHINE

Effective: January 11, 1990 Revised: June 7, 1996

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

- (1) Time/Day Indication A computerized voice records the date and time that each message is received.
- (2) Beeperless Remote Any remote touch-tone phone can be used to review all messages by the use of an access code.
- (3) Dual-Cassette System Pre-recorded and received messages are managed on separate cassettes.
- (4) Conversation Record The operator can record any phone call.
- (5) Remote Turn-On Any remote touch-tone phone can be used to turn on the answering machine by the use of an access code.

- (6) Tape-Full Message The Caller is advised if the message tape is too loaded to record the call.
- (7) Battery Back-Up The settings and messages are protected from power failures.
- (8) Two-Line Capacity Projects that have a second phone line through the provision of a 670.05 Engineer's Field Laboratory shall provide a single phone answering machine that services both lines.

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

#### TRAFFIC CONTROL AND PROTECTION STANDARD 701501

Effective: October 1, 1984 Revised: April 3, 2002

This work shall conform to the applicable portions of Section 700 of the Standard Specifications, the details as shown on the plans, and as specified herein.

Traffic control and protection during patching operations will be in accordance with TRAFFIC CONTROL AND PROTECTION STANDARD 701501 except when the distance between successive patches is less than 210 m (700 ft), the entire operation may be considered as one work area for signing purposes; and, when the distance between successive patches exceeds 210 m (700 ft), additional warning signs and taper shall be placed as shown on the plans.

This work shall be measured in accordance with Article 701.07(c) of the Standard Specifications.

This work will be paid for in accordance with Article 701.08(b) at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION STANDARD 701501.

#### TRAFFIC CONTROL PLAN

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

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

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

701001	701006	701011	701101	701106	701201
701301	701306	701311	701321	701326	701421
701422	701426	701501	702001	704001	

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

Construction and Maintenance Sign Supports

Cooperation Between Contractors

Flagger Vests

Culverts and Storm Sewers Staged Construction

Minimum Lane Width with Lane Closure

Portable Changeable Message Signs

Sequence of Construction

Installation of Temporary Concrete Barriers and/or Temporary Bridge Rail

Traffic Control and Protection Standard 701501

Traffic Control Deficiency Deduction

Work Zone Public Information Signs

Work Zone Speed Limit Signs

Work Zone Traffic Control

Work Zone Traffic Control Devices

## INSTALLATION OF TEMPORARY CONCRETE BARRIERS AND/OR TEMPORARY BRIDGE RAIL

Revised: May 18, 1993 Revised: October 15, 1996

The following procedure and traffic control shall be used for the placement, relocation and removal of temporary concrete barrier and/or temporary bridge rail on this project:

- A. Placement of Temporary Concrete Barrier and/or Temporary Bridge Rail:
  - 1. Erect Traffic Control and Protection Standard 701321 as shown on the plans for Stage I Construction except for the temporary concrete barrier and/or temporary bridge rail.
  - 2. Place the temporary traffic signals in the red flash mode.
  - Close the Stage I Construction lane to traffic and route two-way traffic over the Stage I traffic lane. One flagman will be required at each end of the lane closure, at all times, to direct traffic.
  - 4. Erect the temporary concrete barrier and/or temporary bridge rail in the Stage I location, beginning at the approach end of the lane closure and proceeding to the departure end.

- B. Relocation of Temporary Concrete Barrier and/or Temporary Bridge Rail:
  - 1. When Stage I Construction is complete, relocate temporary concrete barrier tapers parallel to the roadway centerline beginning at the departure end and proceeding to the approach end. Place cones at 8 meters (25 ft) centers to establish temporary tapers to close the Stage II Construction lane to traffic and route traffic over the Stage I traffic lane.
  - 2. Place the temporary concrete barrier and/or temporary bridge rail in the Stage II location starting with the approach end and proceed to the departure end.
  - 3. This procedure shall be followed for any adjustment of temporary concrete barrier and/or bridge rail during any stage.
- C. Removal of the Temporary Concrete Barrier and/or Temporary Bridge Rail:
  - When Stage II Construction is completed, remove the temporary concrete barrier and/or temporary bridge rail beginning at the departure end of the lane closure and proceeding to the approach end. Place cones at 8 meters (25 ft) centers to delineate the closed lane until all the temporary concrete barrier and/or bridge rail is removed.
  - 2. Remove the Traffic Control and Protection Standard 701321 and route two-way traffic over the structure.
- D. Additional Requirements During Placement, Relocation and Removal of Temporary Concrete Barrier and/or Temporary Bridge Rail:
  - 1. One lane of traffic shall be maintained at all times.
  - 2. Men and equipment will not be permitted to encroach on the lane open to traffic.
  - 3. Any length of temporary concrete barrier and/or temporary bridge rail not complete in one-day time period shall be protected by barricades with steady-burning lights at 8 meters (25 ft) centers until the barrier work is complete. A temporary concrete barrier terminal section shall be placed on the end of any length of temporary concrete barrier and/or temporary bridge rail not completed.

4. Traffic control devices, as specified on the plans for Traffic Control and Protection Standard 701321 shall be placed on all temporary concrete barrier and/or temporary bridge rail in use overnight.

The cost of complying with this procedure shall be considered a part of the price of TEMPORARY CONCRETE BARRIER, RELOCATING TEMPORARY CONCRETE BARRIER, and/or TEMPORARY BRIDGE RAIL outlined in the plans; and, no additional compensation will be allowed.

#### CONSTRUCTION AND MAINTENANCE SIGN SUPPORTS

Effective: April 21, 1981 Revised: October 15. 1996

This work shall be done in accordance with Article 1084.04 of the Standard Specifications and Highway Standard 702001 except as herein modified.

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

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

This work shall not be measured and paid for but shall be considered incidental to the contract.

#### STATUS OF UTILITIES TO BE ADJUSTED

NAME AND ADDRESS OF UTILITY	TYPE	LOCATION	ESTIMATED DATE RELOCATION COMPLETED	
AmerenIP 1050 West Blvd. P. O. Box 428 Belleville, IL 62222 Contact: Mr. Kelly Bauza Phone: (618) 236-4309	Electric	Aerial electric thoughout the project from Greenmount Rd. to Deerfield Ct. on the east side of IL 15/13. Relocation plans available from R.E. upon request.	June 1, 2006	
AmerenIP 1050 West Blvd. P. O. Box 428 Belleville, IL 62222 Contact: Mr. Kelly Bauza Phone: (618) 236-4309	Gas	Buried Gas main along the west side of IL Route 15/13 from Sta. 316+00 to Sta. 318+00 and Sta. 330+45 to Sta. 334+30 crossing at Sta 333+00. Gas Relocation Plans available from R.E. upon Request.	June 1, 2006	

Charter Communications, Inc. 508 Niagara Street Attached to AmerenIP power poles. East Alton, IL 62024 Transfer to new poles when AmerenIP CTV June 1, 2006 Contact: Mr. Dave Gresham is completed with relocation. Phone: (618) 779-5153 Village of Freeburg Aerial electric from Jefferson Rd. to 14 Southgate Center Peabody Rd. on the east side of IL Freeburg, IL 62243 Electric June 1, 2006 13/15. Relocation plans available from Contact: Mr. Ron Dintelmann R.E. upon request. Phone: (618) 539-3112 **FSH Water Commission** c/o Rhutasel & Associates, Inc. 4 Industrial Drive No utilities to be P. O. Box 97 Water adjusted. Freeburg, IL 62243-0097 Contact: Mr. Frank Heiligenstein Phone: (618) 539-5771 SBC Buried copper telephone cable from 203 Goethe Greenmount Rd. to Rogers Dr. Fiber Telephone, from Greenmount Rd. to Turkey Bluff Collinsville, IL 62234 June 1, 2006 Fiber Optic Contact: Ms. Janet Burns Rd. Relocation plans available from Phone: (618) 346-6494 R.E. upon request. MCI Network Services, Inc. Dept. 42864/107 2400 N. Glenville No utilities to be Fiber Optic Richardson, TX 75082 adjusted. Contact: Mr. John Bachelder Phone: (972) 729-6016 360 Networks 867 Coal Creek Circle No utilities to be Suite 160 Fiber Optic adjusted. Louisville, CO 80027 Contact: Mr. Bob Boyeson Phone: (303) 854-5132 Village of Freeburg Water main from Jefferson Rd. to 14 Southgate Center Rogers Dr. Relocation plans available from R.E. upon request. Meters, Freeburg, IL 62243 Water June 1, 2006 valves, and services adjusted in Contact: Mr. Ron Dintelmann Phone: (618) 539-3112 coordination with Construction.

Illinois American Water Co. 100 N. Water Works Drive P. O. Box 24040

Belleville, IL 62223-9040 Contact: Mr. Grant Evitts Phone: (618) 239-3250

Water

Sewer

No utilities to be adjusted.

City of Belleville 101 S. Illinois Street

Belleville, IL 62220-2105 Contact: Mr. Richard L. Wilson

Phone: (618) 233-6810

No utilities to be adjusted.

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Sections 102, 103, and Articles 105.07 and 107.20 of the Standard Specifications for Road and Bridge Construction shall apply.

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

#### FENCE REMOVAL

This item shall consist of furnishing all labor and equipment necessary to remove existing fences that conflict with the proposed improvements in accordance with applicable portions of Section 201 of the "Standard Specifications".

The Contractor shall remove and dispose of all fences within the proposed right of way, permanent drainage easements and temporary construction easements at various locations shown on the plans and as directed by the Engineer.

This work will be paid for at the contract unit price per foot for FENCE REMOVAL, regardless of type or size and no additional compensation will be allowed.

#### TEMPORARY SIDEWALK

This item shall consist of furnishing all labor, materials and equipment necessary to construct aggregate sidewalks for temporary access at various locations in accordance with applicable portions of Section 402 of the "Standard Specifications".

The Contractor shall construct, maintain and remove the temporary sidewalks at various locations shown on the plans and as directed by the Engineer. The temporary sidewalks shall be four inches thick and a minimum of four feet wide. Course aggregate conforming to Article 1004.04, Aggregate Surface Course, Type B shall be required for this item of work.

This work will be paid for at the contract unit price per square foot for TEMPORARY SIDEWALK and no additional compensation will be allowed.

#### **BITUMINOUS SHOULDER REPAIR**

This item shall consist of furnishing all labor, materials, and equipment necessary to repair bituminous shoulders as required for the duration of the contract in accordance with applicable portions of Section 442 of the "Standard Specifications".

The Contractor shall remove damaged shoulders at various locations as directed by the Engineer and replace the area with bituminous mixtures to a depth of six inches, prior to constructing the final two inches of surfacing. Bituminous mixtures shall conform to the requirement for BITUMINOUS SHOULDERS SUPERPAVE as specified within these contract documents.

This work will be paid for at the contract unit price per ton for BITUMINOUS SHOULDER REPAIR and no additional compensation will be allowed.

#### **REMOVAL OF EXISTING STRUCTURES**

This item shall consist of furnishing all labor and equipment necessary to remove and dispose of various drainage structures as shown on the plans in accordance with Section 501 of the "Standard Specifications".

STRUCTURE NO. 1 consists of an 83.8 feet long 4' x 4' reinforced concrete box culvert with a reinforced concrete flared wing wall on the upstream end of the box, located at Sta. 195+76 left.

STRUCTURE NO. 2 consists of a 70.7 feet long double 10' x 6' reinforced concrete box culvert with reinforced concrete flared wing walls on the upstream and downstream ends of the box. Structure No. 1 also "shares" the downstream headwall of this box culvert, which is located at Sta. 196+32 left.

STRUCTURE NO. 3 consists of a 50.4 feet long 6' x 6' reinforced concrete box culvert with reinforced concrete headwalls on the upstream and downstream ends of the box, located at Sta. 216+54 left.

This work will be paid for at the contract unit price per each for REMOVAL OF EXISTING STRUCTURES, for the identified structure number and no additional compensation will be allowed.

#### **INLET BOX, STANDARD 542526 (SPECIAL)**

This item shall consist of furnishing all labor, materials, and equipment necessary to construct an inlet box for median drainage in accordance with applicable portions of Section 504 of the "Standard Specifications" and Highway Standard 542526.

The Contractor shall construct this inlet box located at Sta. 274+50, in accordance with the Highway Standard except the opening shall be modified to accommodate an 18" RCP rather than the standard 24" RCP.

This work will be paid for at the contract unit price per each for INLET BOX, STANDARD 542526 (SPECIAL) and no additional compensation will be allowed.

#### HANDHOLE TO BE ADJUSTED

This item shall consist of furnishing all labor, materials and equipment necessary to adjust existing traffic signal handholes in accordance with applicable portions of Section 602 of the "Standard Specifications" and Highway Standard 814001.

The Contractor shall adjust the existing handhole in the median at Sta. 148+95 to accommodate Stage 1 Construction Traffic. Upon completion of Stage 1, the handhole shall be re-adjusted to conform to the final proposed median elevation as shown on the plans.

This work will be paid for at the contract unit price per each for HANDHOLE TO BE ADJUSTED, regardless of the number of times the handhole is adjusted and no additional compensation will be allowed.

#### **PAVED FLUME**

This item shall consist of furnishing all labor, materials and equipment necessary to construct a concrete gutter discharge flume in accordance with applicable portions of Section 606 of the "Standard Specifications" and Highway Standard 606401.

The Contractor shall construct a paved flume at Sta. 329+63 right in accordance with applicable portions of Highway Standard 606401 and the detail shown on the plans.

This work will be paid for at the contract unit price per foot for PAVED FLUME and no additional compensation will be allowed.

#### COOPERATION BETWEEN CONTRACTORS

It is anticipated that this project will be constructed concurrently with other highway projects for the same area. The projects that may be under contract concurrent with this project are:

FAP Route 103 Section 27-1R-1 St. Clair County, Illinois

The Contractor shall schedule his/her work in order to minimize any conflicts that may arise between contracts as specified in Article 105.08 of the Standard Specifications.

#### **ENVIRONMENTAL COMMITMENT**

The Contractor shall note that the Illinois Department of Natural Resources, Natural Heritage Database has records of the state endangered Indiana bat (Myotis Sodalis) nesting in trees near Sugar Creek. The Contractor shall be responsible for informing and educating the supervisors and workers that any bats encountered during the execution of this contract must not be killed or harmed. The Indiana bats are legally protected under Illinois Endangered Species Protection Act and a violation is a Class A misdemeanor (Class A misdemeanors carry a fine of up to \$1,000 and up to 364 days in Jail). Tree removal and clearing operations near Sugar Creek may only be accomplished between September 30<sup>th</sup> and April 1<sup>st</sup> of any given construction season, when bats are not breeding and occupying nursery trees within the project limits.

No extra compensation shall be allowed for complying with this commitment.

#### **CULVERTS AND STORM SEWERS STAGED CONSTRUCTION**

Across road culverts and storm sewers shall be constructed in half lengths at locations shown on the plans and as designated by the Engineer. During this operation, one-way daytime traffic will be permitted when flagmen are present. No night time lane closures will be permitted.

These culverts and storm sewers shall be constructed in half lengths and in accordance with the applicable portions of Sections 542 and 550 of the Standard Specifications. This work shall be accomplished by laying the first half length, backfilling to the top of the subgrade, and then placing either a temporary or permanent patch. Permanent patches shall conform to the applicable portions of Section 442 of the Standard Specifications and to these special provisions. Temporary patches shall consist of CA-6 compacted to the satisfaction of the Engineer and graded to within 2" below the existing surface, and a 2" lift of bituminous material meeting the approval of the Engineer used for the top 2" lift. The patches shall be placed before opening to traffic.

If temporary patches are used they will be placed, maintained and removed as directed by the Engineer at no additional cost to the Department. Temporary patches will not be paid for separately but will be considered included in the drainage item involved. Any delays or inconveniences caused the Contractor due to complying with this requirement will be considered incidental to the contract and no additional compensation will be allowed.

It is understood and agreed that the Contractor has taken the above stipulations into account into his bid, and no additional compensation will be allowed due to these requirements.

#### **REMOVE EXISTING CULVERTS**

This work consists of removal and disposal of existing reinforced concrete box culverts as shown on the plans and in accordance with Section 501 of the Standard Specifications and as herein specified.

The existing box culverts to be removed vary in size and consist of concrete barrels, collars and headwalls. These concrete headwalls and all concrete collars around the culverts shall also be removed and considered included in this pay item.

Backfill of excavation shall conform to Article 502.10 of the Standard Specifications and will not be paid for separately but should be included in the cost of removal.

This work will be paid for at the contract unit price per foot as specified for REMOVE EXISTING CULVERTS.

#### PIPE CULVERT REMOVAL

This work shall consist of furnishing all labor and equipment for removal and disposal of existing pipe culverts as shown on the plans. Removal and disposal of culverts shall be in accordance with Section 501 of the Standard Specifications.

Portions of the existing 24" RCP culverts at Jefferson Road and at Old Freeburg Road shall be removed to the edge of pavement and the remaining sections sealed as noted on the stage construction plans. The cost of sealing the ends of the culverts will not be paid for separately and will be considered included in the cost of this work. The total culvert length as shown on the plan will be measured for payment, which includes the abandoned in-place section under the existing pavement.

Culverts to be removed will be measured in place and the length computed in feet without distinction as to size or material.

Culverts will be paid for at the contract unit price per foot for PIPE CULVERT REMOVAL.

## **CONCRETE MEDIAN, TYPE SB (MODIFIED)**

This item shall consist of furnishing all labor, materials and equipment necessary to construct solid concrete medians at various locations shown on the plans in accordance with Section 606 of the "Standard Specifications" and Highway Standard 606301-02.

The Contractor shall construct a concrete median from Sta. 148+85 to Sta. 151+35 and from Sta. 292+58 to Sta. 297+49 as shown on the plans. The median shall be "dowelled" to the existing or previously constructed bituminous pavement with vertical 12" No. 7 reinforcement bars on 48" centers. The median shall be constructed to a height required, such that after completion of the bituminous surfacing, the exposed median is 6" above final profile grade.

This work will be paid for at the contract unit price per square foot for CONCRETE MEDIAN, TYPE SB (MODIFIED) and no additional compensation will be allowed.

#### SEQUENCE OF CONSTRUCTION

The following sequence of construction is a suggestion only. The Contractor may select and use his own sequence of operations provided it is approved by the Engineer before any work involved in the sequence is initiated.

#### Stage 1

Divert eastbound traffic to the north, east of Green Mount Road and construct the new eastbound lanes and access roads from project beginning to Sta. 233+00. With traffic on existing pavement, construct the new westbound lanes and access roads from Sta. 223+00 to Sta. 265+10 and eastbound lanes and access roads from Sta. 266+50 to Sta. 290+00. Widen the west side of the existing pavement from Sta. 290+00 to Sta. 338+10. Construct temporary pavement for crossovers at Stations 150+00, 160+00, 223+00, 265+00 and at Stations 215+55.78, 288+32.00, and 300+81.00 for culvert installations. Construct pavement connection from existing pavement to the centerline of FAP 103 for new access roads at Stations 163+20 RT., 180+56, 206+36, 232+13, 251+78, and 276+84. Construct culverts at Sta. 328+17 and 333+85 with one-lane traffic and flaggers during daytime operation only.

Refer to Sheets 76 through 82 for traffic control plans for Stage 1 construction signing and other requirements.

#### Stage 2

Divert eastbound traffic to the proposed eastbound lanes east of Green Mount Road and widen, resurface and reconstruct westbound lanes from Sta. 162+50 to Sta. 223+00 and from Sta. 265+10 to Sta. 292+57\*. Maintain traffic on the proposed eastbound lanes and widen the east side of the existing pavement from Sta. 292+57\* to Sta. 338+10. Complete culverts at Stations 167+81.52, 185+16.12, 196+21.58, 215+55.78, 274+50.00, 288+32.00 and 300+82.43 left of centerline and construct access road LT1 at Sta. 163+20 LT.

## \* WB EOP Base Line Stationing

Refer to Sheets 84 through 90 for traffic control plans for Stage 2 construction signing and other requirements.

#### Stage 3

Divert traffic to outside lanes of proposed eastbound and westbound pavements from Sta. 153+92 to Sta. 162+50 and the outside lane of proposed eastbound pavement from Sta. 212+80 to 218+00 to allow temporary pavement removal and median work in these areas. Maintain traffic on proposed westbound lanes from Sta. 223+00 to Sta. 298+00. Widen, resurface and reconstruct eastbound lanes from Sta. 223+00 to Sta. 266+50.

Refer to Sheets 92 through 98 for traffic control plans for Stage 3 construction signing and other requirements.

## Stage 4

Remove temporary median cross-over at Sta. 223+00, final grade median and fill temporary pipe at Sta. 224+00. Overlay entire project with bituminous surface on pavement and 2 inches on the shoulders. Maintain traffic according to Standard 701421.

In addition to the suggested sequence of construction noted above, the contractor shall maintain temporary access to all adjacent properties, private drives and public roadways throughout the length of the construction contract. All earthwork and subgrade preparation required for maintaining temporary access will not be measured and paid for separately but shall be considered included in the contract unit price per ton for AGGREGATE SURFACE COURSE TYPE B.

Removal of temporary access materials including: temporary aggregate, access pipe culverts and earth embankments will not be measured and paid for separately but shall be considered included in the contract unit price per ton for AGGREGATE SURFACE COURSE TYPE B, per foot for PIPE CULVERTS (TEMPORARY) and per cubic yard for EARTH EXCAVATION.

The Contractor shall maintain drainage by constructing temporary ditches and culverts as shown on the plans and cross sections and as necessary to avoid flooding of roadway and adjacent properties.

#### WIDE CRACK ROUTING AND SEALING

<u>Description.</u> This work consists of routing, cleaning and sealing transverse and longitudinal cracks reflected in the existing bituminous surface or longitudinal shoulder joints, transverse and longitudinal random cracks, centerline joints, contraction joints and transverse expansion joints in portland cement concrete pavement. This work shall be done in accordance with Section 451 and 452 of the Standard Specifications except as specified herein.

<u>Materials.</u> The material shall be a hot, pourable, self-adhesive pavement repair material, which has no voids and requires no compaction. The material shall contain a highly polymer modified

binder and an aggregate ratio that allows for sufficient load bearing characteristics at high ambient temperatures yet maintains flexibility in cold temperatures.

Material shall be supplied in a homogenous prepackaged form. Field mixing or addition of components in the field to achieve the product shall not be permitted. Aggregate shall be lightweight and from a select source capable of passing a maximum 28% L.A. abrasion test results. The material shall weigh 10.4 pounds per gallon. It shall be able to be reheated to application temperature at least once after the initial heat up without degradation of product. Product shall have a minimum pot life of 12 hours, which can be extended by adding fresh product to the melter. Material shall be supplied in solid form in self-release strippable kegs not exceeding 40 lbs. Material shall be a thick grainy appearing slurry at application temperature which requires no compaction.

The material shall have the following properties when heated in accordance with ASTM D5167:

Climatic Temperature Moderate Pourability (viscosity @ 400° F) (PTM1) 1000-1400gm Stability @ 158° F (PTM2) 0.5" max. Flexibility @ Low Temperature (PTM3) Pass @ 0° F Tensile Adhesion @ 77° F (PTM4) 20 psi min Specific Gravity (ASTM D792) 1.35 max. Skid Resistance BPM (ASTM E303) 40 min Minimum Application Temperature 375° F Maximum application Temperature 410° F

Note: Due to unique characteristics of material, modified test procedures are required to indicate properties. Test methods PTM 1, 2, 3 and 4 are available upon request.

### General.

## **Concrete Pavement**

Cracks 2" or greater without surface depressions shall be routed  $\frac{1}{2}$ " deep and no less than 3" to either side of the crack. An additional 1  $\frac{1}{2}$ " (min) deep by 2" wide route shall be provided at the crack location to insure that all unstable material is removed. This routing operation shall be performed to create a reservoir for the filler product and to insure surrounding surface is intact for product adhesion.

#### Bituminous Surface

Cracks 1" wide or greater with depressions on either side of the crack shall be routed  $\frac{1}{2}$ " deep and no less than 3" to either side of the crack. An additional 1  $\frac{1}{2}$ " (min) deep by 2" wide route shall be provided at the crack location to insure that all unstable material is removed.

The area to be filled shall be cleaned to the satisfaction of the Engineer. Cleaning shall consist of removing all dirt, incompressibles and vegetation from existing cracks. This shall be accomplished with sufficient compressed air and a hand tool if necessary. Following the cleaning operation, all cracks and routed area shall be heat lanced to clean and remove moisture. Heat lancing shall proceed just ahead of the filling operations. On concrete pavements, a primer shall be applied prior to the placement of the sealant.

The primer shall be applied evenly using a clean, well-coated brush. Do no over apply. Surface temperature shall be between 5°C and 80°C. The primer shall be dried till it is tacky before the sealant can be applied.

The container shall be stripped from the product and the material placed in the melter/applicator. The material shall be applied in two separate lifts. With the first lift, the crack and routed area shall be filled from bottom to top, to within ½" of surrounding surfaces. After the material has cooled, a second lift shall be applied over the crack and into the routed area. The material shall be leveled to surrounding pavement surface with an appropriate leveling device. A tight band-aid of material on the edges of the repair will be allowed. The two-lift approach is to allow for approximate 5% shrinkage of material. The material shall be vigorously agitated at all times.

Equipment. The crack routing machine shall be a Crafco Model 200 Crack Cleaner or equal. The machine shall be portable and capable of routing the existing bituminous and concrete surfaces along and adjacent to the joint and crack. The unit shall be capable of following random cracks. The unit shall have an adjustable depth control and be capable of cutting width modification. The machine shall be capable of cutting approximately 1,000 to 1,200 lin ft / hour of cracks or joints with an experienced operator.

The heat lance shall be capable of producing air temperatures up to 2500° F and be constructed of stainless steel. It shall have separate valves to control propane, burner air and lance air. The fuel and the burner air shall be mixed only at the point of combustion before leaving the burner tube. A separate air lance tube shall pass inside the burner chamber and be orificed to a maximum of ¼". At the fuel source, the propane shall be controlled by a high-pressure regulator to control fuel pressure from 5 PSI to 30 PSI and to prevent flashback. Burner BTU should range from 20,000 to 450,000 BTU. A wheel kit constructed to keep the unit at the proper height and angle from the pavement and to prevent debris from striking the operator shall be used.

The material melter/applicator shall be designed to effectively melt, heat, and apply the product. Melters other than that described shall not be used due to application difficulties, pump systems damage and extreme wear. Standard crack sealing melter or any other unproven applicator shall not be used unless approved by the Engineer.

<u>Method of Measurement.</u> Routed cracks will be measured for payment in feet, measured along the routed crack. Perimeter routing on the bituminous wide cracks will not be paid for separately, but shall be included in the price for WIDE CRACK ROUTING (PAVEMENT). Filling of cracks will be measured for payment in pounds of sealant used.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per foot for WIDE CRACK ROUTING (PAVEMENT) and at the contract unit price per pound for WIDE CRACK FILLING.

## **PARTIAL DEPTH PATCHING**

<u>Description.</u> This work shall consist of partial depth removal of the existing bituminous resurfaced pavement structure, and replacement with bituminous concrete at the locations shown on the plans, or as directed by the Engineer.

<u>Materials.</u> The bituminous prime coat and bituminous concrete mixture shall be according to Section 406 of the Standard Specifications. The mixture for the bituminous concrete for partial depth patches shall be binder or surface mixture, Class I, of the same Type as the proposed resurfacing.

Equipment. The machine used for milling shall be a self-propelled milling machine capable of milling to the specified depth without damaging the adjacent pavement that is to remain in place. A wheel saw according to Article 442.03 (h) of the Standard Specifications may also be used for partial depth pavement removal. When required, the concrete saw shall be according to Article 442.03 (g) of the Standard Specifications, except it shall be equipped with a blade of sufficient diameter to saw the pavement to the thickness required in the plans. Rollers used to compact the bituminous concrete mixture shall be according to Article 442.03 of the Standard Specifications. Cleaning equipment shall be a mechanical sweeper according to Article 1101.03 of the Standard Specifications or air equipment capable of applying compressed air, at a minimum 690 kPa (100 psi), and shall have sufficient flow rate to remove all disturbed pavement debris. Air equipment shall meet the requirements of ASTM D 4285.

#### CONSTRUCTION REQUIREMENTS

<u>General</u>. Disposal of waste materials shall be according to Article 202.03 of the Standard Specifications.

Partial depth removal of the pavement shall be accomplished by the use of a milling machine and/or the wheel saw. The minimum patch dimension shall be 24 inch x 24 inch. Debris from the milling or wheel saw operation shall be removed from the patch area by air equipment or mechanical sweeper and shall remove all disturbed pavement debris and any loose and/or unsound bituminous concrete.

When the Engineer determines the exposed pavement will be suitable for a partial depth patch, a bituminous prime coat shall be applied according to Article 406.06(b) of the Standard Specifications.

The prepared patch shall be filled with bituminous concrete with a maximum lift thickness of 3 inches. Where more than one lift is needed, the top lift shall be a minimum of 2 inches thick. At the option of the Contractor, the 2 inch top layer may be constructed using bituminous concrete surface course. The bituminous concrete shall be compacted to the satisfaction of the Engineer.

Patches opened to traffic which are high or become rough by rutting, shoving, or heaving shall be corrected by trimming off high areas and/or filling depressions. Filled areas shall be rolled again. Trimming high patches or filling in depressions on rough patches shall be at the Contractor's expense.

When the Engineer determines the exposed pavement will not be suitable for a partial depth patch, or removal is one half or more of the pavement thickness, the Contractor shall remove the remaining portion of the pavement and place a full depth patch according to Section 442 of the Standard Specifications for the Class of full depth patches included in the contract.

<u>Method of Measurement.</u> Partial depth removal of the bituminous overlay will be measured in square yards of the thickness specified.

Bituminous concrete mixtures for partial depth patching of the pavement will be measured in square yards according to Article 442.10 of the Standard Specifications.

<u>Basis of Payment.</u> Partial depth removal of the bituminous overlay will be paid for at the contract unit price per square yard for BITUMINOUS SURFACE REMOVAL 3 ½".

Partial depth patching will be paid for at the contract unit price per ton for BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE.

When the Engineer determines to convert any partial depth patch to a full depth patch after the partial depth removal of the bituminous has begun, the partial depth removal shall be paid for at the contract unit price for BITUMINOUS SURFACE REMOVAL 3 ½". The removal for the full depth patch will be considered as included in the appropriate full depth patching pay item.

## PIPE UNDERDRAINS (SPECIAL)

This item shall consist of furnishing all labor, materials and equipment necessary to construct pipe underdrain outlets at various locations shown on the plans in accordance with Section 601 of the "Standard Specifications" and Highway Standard 601001.

The Contractor shall construct pipe underdrain outlets in accordance with the Highway Standard and make connections to various structures as shown on the plans. This work shall conform to Articles 601.04(a), 601.04(e) and 601.05 of the "Standard Specifications".

The contractor shall provide pavement markings on the bituminous shoulder at each outlet headwall to identify these locations for future maintenance operations by the Department. The pavement markings and headwalls will be measured and paid for separately. This work will be paid for at the contract unit price per foot for PIPE UNDERDRAINS (SPECIAL) of the size specified, regardless of the outlet requirement and no additional compensation will be allowed.

## **GRID REINFORCED SLOPE**

<u>Description:</u> This work shall be done as shown on the plans, as directed by the Engineer, and in accordance with Section 205 of the Standard Specifications, and as herein specified.

Biaxial geogrid shall be placed in horizontal layers with a 1.0 foot vertical separation between layers. The geogrid shall have a minimum embedment length of 9.0 feet. The geogrid reinforcement shall conform to the properties listed below.

Property	Test Method	Units	Value
Perture Size	I.D. Callipered	inch	<sup>3</sup> ⁄ <sub>4</sub> - 1 ½
Open Area	ea Corps of Engineers % CW-02215		70 min
Rib Thickness	ASTM D-1777	inch	0.03 nom
Junction Thickness	ASTM D-1777	inch	0.11 nom
Flexural Rigidity			
Machine Direction	ASTM D-1388	mg-cm	250,000 min
Tensile Modulus	GRI GG1-87	lb/ft	14,000 min – Machine Direction 20,000 min – Cross Machine Direction
Junction Strength	GRI GG2-87	lb/ft	765 min
Junction Efficiency	GRI GG2-87	%	90 min

Alternate geogrid materials will be considered. Such alternate material specifications must be provided to the Engineer on the pre-job date. Alternate material packages must be submitted to the Engineer a minimum of 20 days prior to beginning construction of the grid reinforced slope. Submittal packages must include, as a minimum, the following:

- 1. A list of 5 comparable projects, in terms of size and applications, in the United States, where the results of the specific results of the alternate geogrid's use can be verified after a minimum of 1 year of service life.
- 2. A sample of the geogrid and certified specification sheets.
- 3. Recommended installation instructions.

<u>Construction Requirements:</u> The geogrid shall be pulled taut, staked in place and the embankment placed outward toward the toe of the slope to minimize development of slack or distortion in the subgrade reinforcement. Lap splicing shall be done in accordance with manufacturer's recommendations.

<u>Method of Measurement:</u> Measurement of the BIAXIAL GEOGRID is on a square yard basis. Each layer of grid shall be measured in place. Any embedment beyond that required by the plans and special provisions and not required by the Engineer will not be included in measurement for payment. Payment shall include supply and installation of geogrid and all incidentals.

<u>Basis of Payment:</u> The biaxial geogrid shall be paid for at the contract unit price per square yard, measured in place, for BIAXIAL GEOGRID. Furnishing, preparing, and placing the geogrid and all equipment, tools, and incidentals necessary to complete the item will be included in the contract unit price for BIAXIAL GEOGRID.

#### **NON-SPECIAL WASTE WORKING CONDITIONS**

This work shall be according to Article 669 of the Standard Specifications for Road and Bridge Construction adopted January 1, 2002 and the following:

Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is prequalified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval.

<u>General.</u> Implementation of this Special Provision will likely require the Contractor to subcontract for the execution of certain activities. It will be the Contractor's responsibility to assess the working conditions and adjust anticipated production rates accordingly.

The Contractor shall manage all contaminated materials as non-special waste as previously identified. This work shall include monitoring and potential sampling, analytical testing, and management ofpetroleum contaminated material.

The Contractor shall excavate and dispose of any soil classified as a non-special waste as directed by this project or the Engineer. Any excavation or disposal beyond what is required by this project or the Engineer shall be at the Contractor's expense. The preliminary site investigation (PSI) report, available through the District's Environmental Studies Unit, estimated the excavation quantity of non-special waste at the following location. The information available at the time of plan preparation determined the limits of the contamination and the quantities estimated were based on soil excavation for construction purposes only. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit which ever is less. The Environmental Firm shall continuously monitor for worker protection and the Contractor shall manage and dispose of all soils excavated within the following areas as classified below. Any soil samples or analysis without the approval of the Engineer shall be at the Contractor's expense.

- 1. Station 330+70 to Station 332+50 0 to 35 feet LT (Casey's General Store 800 North State Street) non-special waste. Contaminants of concern sampling parameters: TCLP Lead.
- 2. Station 332+85 to Station 333+65 0 to 65 feet LT (Casey's General Store 800 North State Street) non-special waste. Contaminants of concern sampling parameters: TCLP Lead.

Some of the soils identified above requiring management as a non-special waste can be managed on-site as fill. Although the soil concentrations exceed a residential property's Tier 1 soil remediation objective for the ingestion exposure pathway, they can be utilized on-site as fill because the roadway is not considered a residential property. All storm sewer excavated soils can be placed back into the excavated trench as backfill unless trench backfill is specified. If the soils cannot be utilized on-site as fill then they must be managed off-site as a non-special waste. The following areas can be managed on-site as fill.

- 1. Station 330+70 to Station 332+50 0 to 35 feet LT (Casey's General Store 800 North State Street) non-special waste. Contaminants of concern sampling parameters: TCLP Lead.
- 2. Station 332+85 to Station 333+65 0 to 65 feet LT (Casey's General Store 800 North State Street) non-special waste. Contaminants of concern sampling parameters: TCLP Lead.

#### **CONCRETE MEDIAN SURFACE REMOVAL**

This item shall consist of furnishing all labor, materials, and equipment necessary to remove and dispose of concrete median surface in accordance with Section 440 of the "Standard Specifications".

The Contractor shall remove the existing concrete median surface from Sta. 148+85 to Sta. 157+01 to facilitate stage construction of the mainline pavements east of Green Mount Road. This median surface shall be removed in its entirety, regardless of thickness to allow for subsequent construction items.

This work will be paid for at the contract unit price per square foot for CONCRETE MEDIAN SURFACE REMOVAL and no additional compensation will be allowed.

#### **INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE, N 90**

This item shall consist of furnishing all labor, materials and equipment necessary to construct bituminous surfacing for private and commercial entrances in accordance with Section 408 of the "Standard Specifications."

The Contractor shall construct various entrances as shown on the plans with bituminous mixtures conforming to "Surface, Mix "D" Superpave", as specified within these contract documents.

This work will be paid for at the contract unit price per ton for INCIDENTAL BITUMINOUS SURFACING, SUPERPAVE, N90 and no additional compensation will be allowed.

#### LAND SECTION MARKERS AND CONCRETE REFERENCE MARKERS

This work consists of furnishing materials and labor for erection of section corner marker(s) and concrete reference markers at locations shown on the plans. The present marker(s) will be disturbed by the construction work under this contract.

A licensed Illinois Professional Land Surveyor, acceptable to the Department, shall be obtained by the Contractor to set concrete reference markers and section corner marker(s). Marker record(s) of the section corner(s) shall be filed with the St. County Recorder of Deeds in

accordance with the Land Survey Monument Act, Chapter 765, Act 220, and Section 0.01 through 11 of the Illinois Compiled Statutes. Markers shall be of the type shown on the drawings and be set as prescribed by U.S. Public Act 79-649.

Concrete reference markers shall be set by the surveyor prior to commencement of construction work at the location of the section corner marker. Reference markers shall be set clear of proposed ditch bottoms, side slopes, back slopes, and utility lines, and shall be a minimum of 1.5 m (5 feet) within the right of way line. Reference markers, once set, shall be protected by the Contractor from disturbance by construction work. Any reference marker disturbed by construction work shall be reset by the surveyor at the Contractor's expense.

The section corner marker shall be set after the construction work is complete, and there is no possibility of disturbance of the marker. Marker(s) shall be set as shown on the drawings.

The surveyor's records shall indicate distances and angles between adjacent concrete reference markers and distances from reference markers to the section corner marker.

Basis of Payment. The cost of furnishing materials, constructing and maintaining the markers as shown on the plans, or as ordered by the Engineer, shall be paid for at the contract unit price each for LAND SECTION MARKERS or CONCRETE REFERENCE MARKERS.

#### **DETECTOR LOOP REPLACEMENT**

This work shall consist of furnishing and installing a detector loop, of the type specified in the plans, in the pavement in conformance with the requirements of the plans, Section 886 and 873 of the Standard Specifications, and Standards 886001 and 886006, with the following exceptions:

Replace the third paragraph of Article 886.04(a) with the following:

The loop wire shall be held tightly in the bottom of the sawed slot by means of a plastic foam type material. The "backer rod" shall completely cover the wire and provide a barrier between the wire and the sealant. The loop wires not imbedded in the pavement shall be evenly twisted approximately 5 turns per foot. The depth of the sawed slot shall be as required to provide a minimum of one inch clearance between the surface of the pavement and the top of the backer rod. When loops are place in the binder or base course of bituminous pavement and will be covered by an additional surface course, the clearance may be reduced to one-half inch.

Each detector loop lead-in shall be installed in a separate conduit as shown in the plans. This conduit extends from the edge of the pavement to the nearest handhole. At all locations where pavement joints that are not dowelled or pavement separation cracks (including areas where bituminous pavement abuts concrete pavement) are encountered by the slots sawed for the placement of the detector loops or lead-in, a cored expansion hole shall be made per Standard 8860021. The cored expansion holes are included in this pay item and no additional compensation will be made. The location of all detector loops and number of turns shall be approved by the Engineer before any slots are sawed in the pavement.

After rotomilling the Engineer shall contact the Bureau of Operations of I.DO.T. to determine if the existing loop is operational. If the loop is damaged it shall be re-cut, reconnected, and fully operational within five (5) working days. Detector loops shall be placed in the pavement after milling and prior to resurfacing.

Detector loops shall be spliced into the existing lead-in cables in the handhole. The splices shall be made per Section 873 of the Standard Specifications. Conductors shall be spliced in a rigid mold. Rosin-core solder shall be used. The cost of labor and material for removing existing detector loop cables from the conduit and splicing into the existing lead-in cables shall be included in the pay item DETECTOR LOOP REPLACEMENT. This work will be paid for at the contract unit price per foot for DETECTOR LOOP REPLACEMENT, measured along the sawed slot in the pavement containing the loops and lead in, rather than the actual length of wire in the slot, which price shall be payment in full for furnishing, installing, and testing the detector loop complete in place.

#### **TEMPORARY SHEET PILING**

Effective: September 2, 1994 Revised: December 13, 2002

<u>Description.</u> This work shall consist of furnishing, driving, adjusting for stage construction when required and subsequent removal of the sheet piling according to the dimensions and details shown on the plans and according to the applicable portions of Section 512 of the Standard Specifications.

This work shall also include furnishing, installing and subsequent removal of all miscellaneous steel shapes, plates and connecting hardware when required to attach the sheeting to an existing substructure unit and/or to facilitate stage construction.

<u>General.</u> The Contractor may propose other means of supporting the sides of the excavation provided they are done so at no extra cost to the department. If the Contractor elects to vary from the design requirements shown on the plans, the revised design calculations and details shall be submitted to the Engineer for approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer. This approval will not relieve the Contractor of responsibility for the safety of the excavation. Approval shall be contingent upon acceptance by all involved utilities and/or railroads.

<u>Material.</u> The sheet piling shall be made of steel and may be new or used material, at the option of the Contractor. The sheet piling shall have a minimum section modulus as shown on the plans or in the approved Contractor's alternate design. The sheeting shall have a minimum yield strength of 265 MPa (38.5 ksi) unless otherwise specified. The sheeting, used by the Contractor, shall be identifiable and in good condition free of bends and other structural defects. The Contractor shall furnish a copy of the published sheet pile section properties to the Engineer for verification purposes. The Engineer's approval will be required prior to driving any sheeting. All driven sheeting not approved by the Engineer shall be removed at the Contractor's expense.

<u>Construction.</u> The Contractor shall verify locations of all underground utilities before driving any sheet piling. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the

Engineer at no additional cost to the Department. The Contractor shall be responsible for determining the appropriate equipment necessary to drive the sheeting to the tip elevation(s) specified on the plans or according to the Contractor's approved design. The sheet piling shall be driven, as a minimum, to the tip elevation(s) specified, prior to commencing any related excavation. If unable to reach the minimum tip elevation, the adequacy of the sheet piling design will require re-evaluation by the Department prior to allowing excavation adjacent to the sheet piling in question. The Contractor shall not excavate below the maximum excavation line shown on the plans without the prior permission of the Engineer. The sheet piling shall remain in place until the Engineer determines it is no longer required.

The sheet piling shall be removed and disposed of by the Contractor when directed by the Engineer. When allowed, the Contractor may elect to cut off a portion of the sheet piling leaving the remainder in place. The remaining sheet piling shall be a minimum of 300 mm (12 in.) below the finished grade or as directed by the Engineer. Removed sheet piling shall become the property of the Contractor.

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

<u>Method of Measurement</u>. The temporary sheet piling will be measured for payment in place in square meters (square feet). Any temporary sheet piling cut off, left in place, or driven to dimensions other than those shown on the contract plans without the written permission of the Engineer, shall not be measured for payment but shall be done at the contractor's expense.

If the Contractor is unable to drive the sheeting to the specified tip elevation(s) and can demonstrate that any further effort to drive it would only result in damaging the sheeting, then the Contractor shall be paid based on the plan quantity of temporary sheeting involved. However, no additional payment will be made for any walers, bracing, or other supplement to the temporary sheet piling, which may be required as a result of the re-evaluation in order to insure the original design intent was met.

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

Payment for any excavation performed in conjunction with this work will not be included in this item but shall be paid for as specified elsewhere in this contract.

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

## BITUMINOUS BASE COURSE / WIDENING SUPERPAVE (BDE)

Effective: April 1, 2002 Revised: August 1, 2005

<u>Description</u>. This work shall consist of constructing bituminous base course Superpave and bituminous concrete base course widening Superpave according to Sections 355 and 356 respectively, of the Standard Specifications and the special provision, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures" except as modified herein.

Revise Article 355.02(d) of the Standard Specifications to read:

"(d) RAP Material (Note 3)"

Revise Note 2 of Article 355.02 of the Standard Specifications to read:

"Note 2. Unless otherwise specified on the plans, the bituminous material shall be performance graded (PG) asphalt cement (AC) , PG58-22. When more than 15 percent RAP is used, a softer PG binder may be required as determined by the Engineer. When the pavement has a structural number ( $D_t$ ) of 3.00 or less, the low temperature grade of the asphalt cement shall be lowered one grade (i.e. PG58-28 replaces PG58-22)."

Add the following to the end Article 355.02 of the Standard Specifications:

"Note 3. RAP shall meet the requirements of the special provision "RAP for Use in Bituminous Concrete Mixtures"."

Revise Article 355.05 of the Standard Specifications to read:

"355.05 Mixture Design. The Contractor shall submit mix designs for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have completed the course, "Superpave Mix Design Upgrade". The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below:

AASHTO MP 2	Standard Specification for Superpave Volumetric Mix Design
AASHTO R 30	Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)
AASHTO PP 28	Standard Practice for Designing Superpave HMA
AASHTO T 209	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
AASHTO T 312	Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO T 308	Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method

(a) Job Mix Formula (JMF). The JMF shall be according to the following limits:

<u>Ingredient</u>	Percent by Dry Weight
Aggregate	93.0 to 96.0
Asphalt Cement	4.0 to 7.0
Dust/AC Ratio	

When RAP material is being used, the JMF shall be according to the following limits:

<u>Ingredient</u>	Percent by Dry Weight
Virgin Aggregate(s)	46.0 to 96.0
RAP Material(s) (Note 1)	
Mineral Filler (if required)	0 to 5.0
Asphalt Cement	
Dust/AC Ratio	

Note 1. If specified on the plans, the maximum percentage of RAP shall be as specified therein.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.

Bituminous concrete binder course Superpave mixture IL-25.0 or IL-19.0 meeting the requirements of the special provision, "Superpave Bituminous Concrete Mixtures" may also be used. The minimum compacted lift thickness specified therein shall apply.

(b) Volumetric Requirements.

Design Compactive	Design Air Voids
Effort	Target (%)
N <sub>DES</sub> =50	2.0

(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 using 4 in. Marshall bricks. To be considered acceptable by the Engineer as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSR) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSR values less than 0.75 will be considered unacceptable.

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. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.

Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Engineer. The method of application shall be according to Article 406.12 of the Standard Specifications."

Revise Article 355.06 of the Standard Specifications to read:

"355.06 Mixture Production. The asphalt cement shall be transferred to the asphalt tanks and heated to a temperature of 120 °C (250 °F) to 175 °C (350 °F). If the loading temperature exceeds 175 °C (350 °F), the asphalt shall not be used until it has cooled to 175 °C (350 °F). Wide variations in temperature which affect the amount of asphalt delivered will not be permitted.

When a hot-mix plant conforming to Article 1102.01 is used, the aggregate shall be dried and heated in the revolving dryer to a temperature of 120 °C (250 °F) to 175 °C (350 °F).

The aggregate and bituminous material used in the bituminous aggregate mixture shall be measured separately and accurately by weight or by volume. When the aggregate is in the mixer, the bituminous material shall be added and mixing continued for a minimum of 30 seconds and until a homogeneous mixture is produced in which all particles of the aggregate are coated. The mixing period, size of the batch and the production rate shall be approved by the Engineer.

The ingredients shall be heated and combined in such a manner as to produce a mixture which, when discharged from the mixer, shall be workable and vary not more 10  $^{\circ}$ C (20  $^{\circ}$ F) from the temperature set by the Engineer.

When RAP material(s) is used in the bituminous aggregate mixture, the virgin aggregate(s) shall be dried and heated in the dryer to a temperature that will produce the specified resultant mix temperature when combined with the RAP material.

The heated virgin aggregates and mineral filler shall be combined with RAP material in such a manner as to produce a bituminous mixture which when discharged from the mixer shall not vary more than 15 °C (30 °F) from the temperature set by the Engineer. The combined ingredients shall be mixed for a minimum of 35 seconds and until a homogeneous mixture as to composition and temperature is obtained. The total mixing time shall be a minimum of 45 seconds consisting of dry and wet mixing. Variation in wet and dry mixing times may be permitted, depending on the moisture content and amount of salvaged material used. The mix temperature shall not exceed 175 °C (350 °F). Wide variations in the mixture temperature will be cause for rejection of the mix.

(a) Personnel. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".

(b) Required Tests. Testing shall be conducted to control the production of the bituminous mixture using the test methods identified and performed at a frequency not less than indicated in the following table.

Parameter	Frequency of Tests Non-Class I Mixtures	Test Method			
Aggregate Gradation	1 gradation per day of production.	Illinois Procedure (See Manual of			
Hot bins for batch and continuous plants.  Individual cold-feeds or combined belt-feed for drier-drum plants.  (% passing seives: 12.5 mm (1/2 ln.), 4.75 mm (No. 4), 75 µm (No. 200))	The first day of production shall be washed ignition oven test on the mix. Thereafter, the testing shall alternate between dry gradation and washed ignition oven test on the mix.  The dry gradation and the washed ignition oven test results shall be plotted on the same control chart.	Test Procedures for Materials).			
Asphalt Content by ignition oven (Note 1.)	1 per day	Illinois-Modified AASHTO T 308			
Air Voids					
Bulk Specific Gravity of Gyratory Sample	1 per day	Illinois-Modified AASHTO T 312			
Maximum Specific Gravity of Mixture	1 per day	Illinois-Modified AASHTO T 209			

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine AC content.

During production, the ratio of minus 75  $\mu$ m (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.6, and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75  $\mu$ m (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resumption of production.

During production, mixture containing an anti-stripping additive will be tested by the Engineer for stripping according to Illinois Modified AASHTO T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

(c) Control Charts/Limits. Control charts/limits shall be according to QC/QA requirements for Non-Class I Mixtures, except air voids and density shall be plotted on the control charts within the following control limits:

Individual Test Control Limits			
Voids ±1.2%			
Density <sup>1/</sup>	93.0 – 97.4% of G <sub>mm</sub>		

1/ Except when placed as first lift over unimproved subgrade. When the exception applies, the first lift over unimproved subgrade shall be compacted to an average density of not less than 95 percent nor greater than 102 percent of the target density obtained on the growth curve.

Revise Article 355.08 of the Standard Specifications to read:

"355.08 Placing. The bituminous mixture shall be placed with a spreading and finishing machine. The minimum compacted thickness of each lift shall be according to the following table:

Nominal Maximum Aggregate Size of Mixture	Minimum Compacted Lift Thickness		
CA 10 - 19 mm (3/4 in.)	57 mm (2 1/4 in.)		
CA 6 – 25 mm (1 in.)	76 mm (3 in.)		

The maximum compacted thickness of each lift shall be 100 mm (4 in.). If the Contractor elects to substitute an approved vibratory roller for one of the required rollers, the maximum compacted thickness of the each lift, excluding the top lift, may be increased to 150 mm (6 in.) provided the required density is obtained.

The surface of each lift shall be clean and dry before succeeding lifts are placed."

Revise Article 355.13 of the Standard Specifications to read:

"355.13 Basis of Payment. This work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS BASE COURSE SUPERPAVE of the thickness specified."

Revise Article 356.02 of the Standard Specifications to read:

"356.02 Materials. The materials for the bituminous concrete mixture shall meet the requirements of Article 355.02, be designed according to Article 355.05 and produced according to Article 355.06. Bituminous concrete binder course Superpave mixture IL-25.0 or IL-19.0 meeting the requirements of the special provision, "Superpave Bituminous Concrete Mixtures" may also be used. The minimum compacted lift thickness specified therein shall apply."

Revise the first paragraph of Article 356.06 of the Standard Specifications to read:

"356.06 Base Course Widening. The bituminous concrete mixture shall be transported according to Article 406.14."

Revise the second sentence of the fifth paragraph of Article 356.06 of the Standard Specifications to read:

"The minimum compacted thickness of each lift shall be according to the table shown in Article 355.08."

Revise the first paragraph of Article 356.11 of the Standard Specifications to read:

"356.11 Basis of Payment. Where the Department requires that bituminous concrete be used, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE BASE COURSE WIDENING SUPERPAVE of the thickness specified."

## **BITUMINOUS CONCRETE SURFACE COURSE (BDE)**

Effective: April 1, 2001 Revised: April 1, 2003

Replace the fourth paragraph of Article 406.23(b) of the Standard Specifications with the following:

"Mixture for cracks, joints, flangeways, leveling binder (machine method), leveling binder (hand method) and binder course in excess of 103 percent of the quantity specified by the Engineer will not be measured for payment.

Surface course mixture in excess of 103 percent of adjusted plan quantity will not be measured for payment. The adjusted plan quantity for surface course mixtures will be calculated as follows:

Adjusted Plan Quantity = C x quantity shown on the plans or as specified by the Engineer.

$$\text{where C =} \qquad \text{metric:} \quad C = \frac{G_{\text{mb}} \times 24.99}{\text{U}} \qquad \qquad \text{English:} \quad C = \frac{G_{\text{mb}} \times 46.8}{\text{U}}$$

and where:

G<sub>mb</sub> = average bulk specific gravity from approved mix design.

U = Unit weight of surface course shown on the plans in kg/sq m/25 mm (lb/sq yd/in.), used to estimate plan quantity.

24.99 = metric constant.

46.8 = English constant.

If project circumstances warrant a new surface course mix design, the above equations shall be used to calculate the adjusted plan quantity for each mix design using its respective average bulk specific gravity."

## BITUMINOUS EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE)

Effective: January 1, 2005

Revise the fourth paragraph of Article 1102.03 of the Standard Specifications to read:

"The paver shall be equipped with a receiving hopper having sufficient capacity for a uniform spreading operation. The hopper shall be equipped with a distribution system to uniformly place a non-segregated mixture in front of the screed. The distribution system shall have chain curtains, deflector plates, and/or other devices designed and built by the paver manufacturer to prevent segregation during distribution of the mixture from the hopper to the paver screed. The Contractor shall submit a written certification that the devices recommended by; the paver manufacturer to prevent segregation have been installed and are operational. Prior to paving, the Contractor, in the presence of the Engineer, shall visually inspect paver parts specifically identified by the manufacturer for excessive wear and the need for replacement. The Contractor shall supply a completed check list to the Engineer noting the condition of the parts. Worn parts shall be replaced. The Engineer may require an additional inspection prior to the placement of a surface course or at other times throughout the work."

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

Effective: September 1, 1990 Revised: August 1, 2001

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

Bldg. No.	Parcel <u>No.</u>	<u>Location</u>	<u>Description</u>
1	8019013	1656 East Illinois Highway 15 Belleville. IL	Single Family Residential

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

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

PROPERTY ACQUIRED FOR HIGHWAY CONSTRUCTION TO BE DEMOLISHED BY THE

VANDALS WILL BE PROSECUTED

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

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

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

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

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

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

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

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

Sketches indicating the location of Asbestos Containing Material (ACM) are included in the proposal on pages  $\underline{49}$  thru  $\underline{54}$ . Also refer to the Materials Description Table on page  $\underline{47}$  for a brief description and location of the various materials. Also included is a Materials Quantities Table on page  $\underline{47}$ . This table states the ACM is non-friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid.

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

The Contractor shall provide a shipping manifest, similar to the one shown on page <u>193</u>, to the Engineer for the disposal of all ACM wastes.

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

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least 10 days prior to commencement of any asbestos removal or demolition activity. Separate notices shall be sent for the asbestos removal work and the building demolition if they are done as separate operations.

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

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

#### Submittals:

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

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

#### Certificate of Insurance:

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

#### Asbestos Abatement Experience:

A. Company Experience. Prior to starting work, the Contractor shall supply evidence that he/she has been pregualified with the Illinois Capital Development Board and that

he/she has been included on the Illinois Department of Public Health's list of approved Contractors.

## B. Personnel Experience:

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

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

- A. Personal Monitoring. All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits shall be monitored daily. Personal monitoring is the responsibility of the contractor. Additional personal samples may be required by the Engineer at any time during the project.
- B. Interior Non-Friable Asbestos-Containing Materials. The contractor shall perform personal air monitoring during removal of all non-friable Transite and floor tile removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- C. Exterior Non-Friable Asbestos-Containing Materials. The contractor shall perform personal air monitoring during removal of all non-friable cementitious panels, piping, roofing felts, and built up roofing materials that contain asbestos.

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

## D. Air Monitoring Professional

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

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

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

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

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

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

The cost for this work shall be determined as follows:

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

The cost of removing and disposing of the building(s), assuming all non-friable asbestos is removed first, shall be represented by the pay item "BUILDING REMOVAL NO. \_".

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

## SECTION 1

## 1.1 Survey Summary Sheet

# SITE INFORMATION:

Route #:	FAP Route 103	Section:	27-1R	County/Parcel	No.: Belleville 8019013
Date of Co	onstruction:	Jnknown		Address:	1656 East Illinois Highway
Building S	ize (sq. ft.):	,500 sq ft		City, State:	Belleville, IL 62221

			Treft)
1. 31. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	sbestos-Containing	Materials	<b>经事情</b>
Survey Date:	03-14-05		
By Whom:		Firm	s. &c
Dy verioni.	Douglas McCormick		
	100-08904	Certification#	٠
<b>5</b>			·
Results: (Ad	Iditional detail provided	i in Table 1)	205
Number of m	aterial types sampled:	- 14	*.
Number of sa	mples collected	36	*
** : : : : : : : : : : : : : : : : : :	aterials testing positive	1	
Was friable A	CM found?	No	
Were roofing	materials sampled?	Yes	
Are there uni Requiremen	que state or local . ts?	Yes	
Laboratory			*
Name: E	nvironmental Design	international, inc.	* *
Address: 2	200 S. Michigan Ave.		
2	Chicago, Illinois 60604		."
Building Ac	cess Limitations (if a	ny):	
None			

## ACM SURVEY RESULTS - PARCEL NO.: 8019013 1656 East Illinois Highway 15, Belleville, IL

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

MTL#	MATERIAL DESCRIPTION	LOCATION	F/NF <sup>1</sup>	COND. <sup>2</sup>	% ACM <sup>3</sup>	# SAMP.	QUANTITY ENGLISH/ METRIC
01-01 01-02	12"X12" Floor Tile	Kitchen Kitchen Kitchen	NF NF NF	Good Good Good	.*ND . ND . ND	. 3	150 Sq. Ft. 13.95 m <sup>2</sup>
01-03 01-01M 01-02M	12"x12" Floor Tile Mastic	Kitchen Kitchen Kitchen	NF NF NF	Good Good Good	ND ND ND	,3,	150 Sq. Ft. 13.95 m <sup>2</sup>
01-03M 02-04 02-05	12"x12" Floor Tile	1st, Floor Bathroom 1st, Floor Bathroom 1st, Floor Bathroom	NF NF NF	Good . Good Good	*ND ND ND	3	70 Sq. Ft. 6.51 m <sup>2</sup>
02-06 02-04M 02-05M	12"x12" Floor Tile Mastic	1st. Floor Bathroom 1st. Floor Bathroom 1st. Floor Bathroom 1st. Floor Bathroom	NF NF NF	Good Good Good	ND ND ND	3	70 Sq. Ft. -0.51 m <sup>2</sup>
02-06M 03-07 03-08	Drywall	1st. Fl. Bedroom 1 Closet 1st, Fl. Bedroom 2 Closet 1st. Fl. Bedroom 2 Closet	NF NF NF	Good Good Good	ND ND ND	3	100 Sq. ft. 9.30 m <sup>2</sup>
03-09 04-10 04-11	Ceiling Material	Basement Fruit/win Room Basement Fruit/win Room Basement Fruit/win Room Basement Fruit/win Room	NF NF NF	Fair Fair Fair	ND ND ND	3	40 Ln. Ft. 3.72 m
04-12 05-13 05-14	Duct Sealer/Tape	Basement Basement	NF NF NF	Fair Fair Fair	55-60% NA NA	3	70 Ln. Ft. 6.51 m
05-15 06-16 06-17	Insulation	Attic Attic	NF NF NF	Fair Fair Fair	ND . ND ND	3	600 Sq. Ft 55.80 m <sup>2</sup>
06-18 07-19 07- <b>2</b> 0	Insulation	Attic Attic Attic Attic	NF . NF NF	Fair Fair Fair	ND ND ND	3	600 Sq. Ft. 55.80 m <sup>2</sup>
07-21 08-22 08-23	Main House Roofing Material	North East	NF NF NF	Fair Fair Fair	ND ND ND	. 3	1600 Sq. Ft. 148.80 m <sup>2</sup>
08-24 09-25 09-26	Siding Material .	South Garage Garage	NF NF · ·	Fair Fair Fair	ND ND ND	3	200 Sq. Ft. 18.60 m <sup>2</sup>
09-27 10-28 10-29	Drywall and Joint . Compound	Garage Garage Garage	NF . NF NF	Fair Fair Fair	ND ND ND	3	20Sq. Ft. 1.86 m <sup>2</sup>
10-30 11-31 11-32	Door Insulation	Garage Garage	NF NF NF NF	Fair Fair Fair	ND ND ND	3 .	15 Sq. Ft. 1.39 m <sup>2</sup>
11-33 12-34 12-35	Window Caulk	Garage Outside window Outside window Outside window	NF NF NF	Fair Fair Fair	ND ND ND	. 3	30 Ln. Ft. 2,79 m
12-36 ·	UANTITY OF ACM	Outside window -		1 441		<del>'                                    </del>	70 Ln. Ft. 6.51 m

F = Friable; NF = Non triable Friability is further defined on section 4 Cond: = Condition Of Materials Either good, fair or poor.

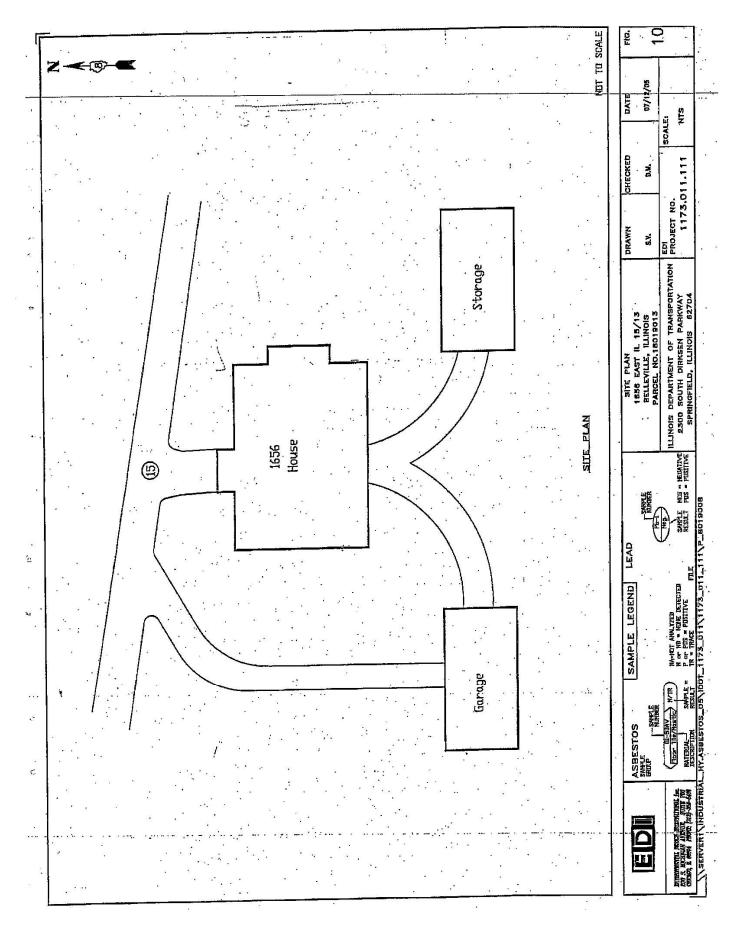
ND = None Detected ... NA =Not Analyzed

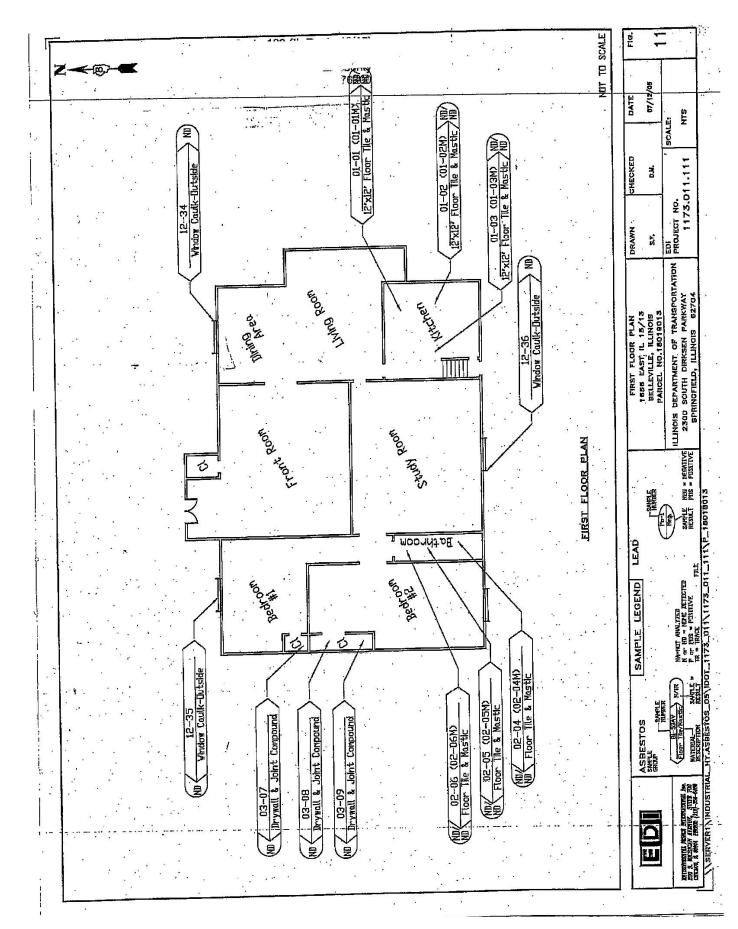
TEM = Electron Microscopy

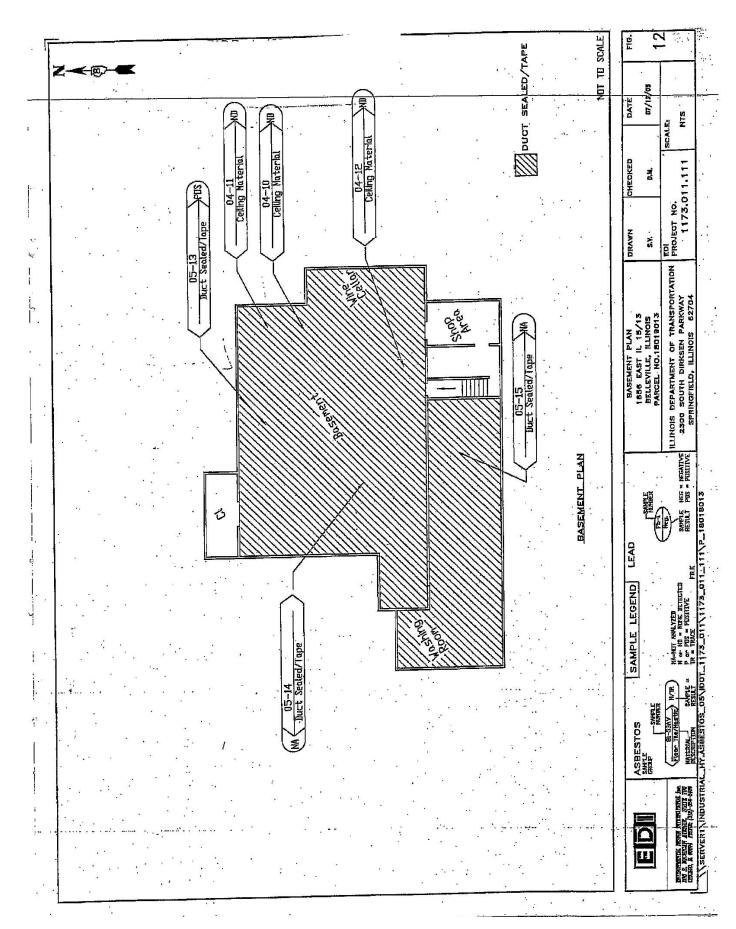
Parcel No. 8019013 1656 East Route 15 Belleville, Illinois

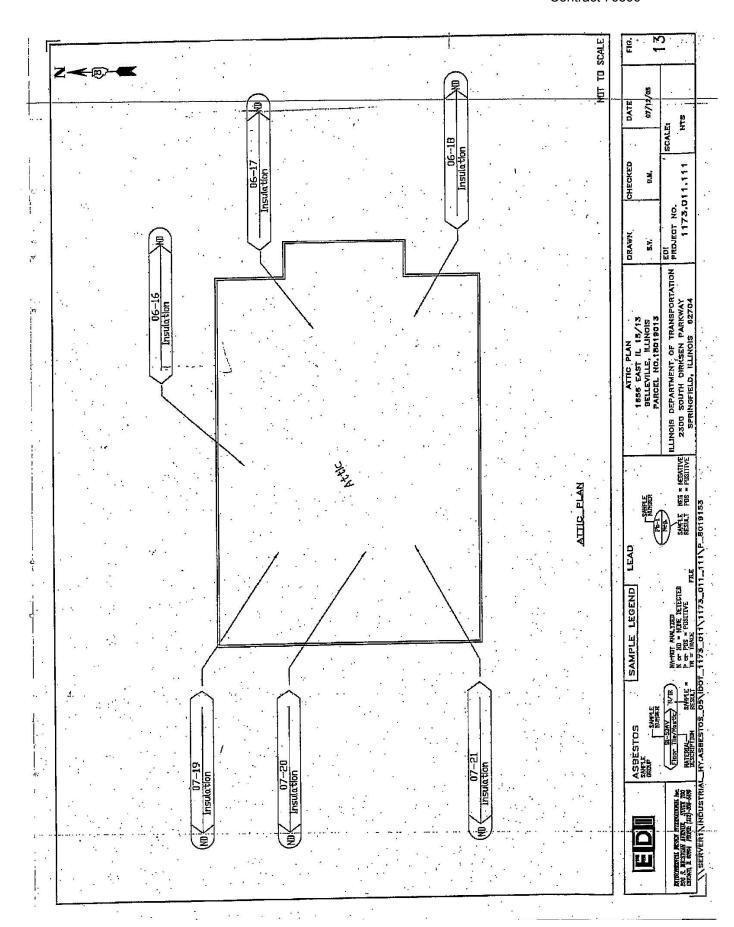
The following costs are an estimate only for the removal of asbestos-containing materials. Please refer to Removal Budget Estimate Methodology for clarification.

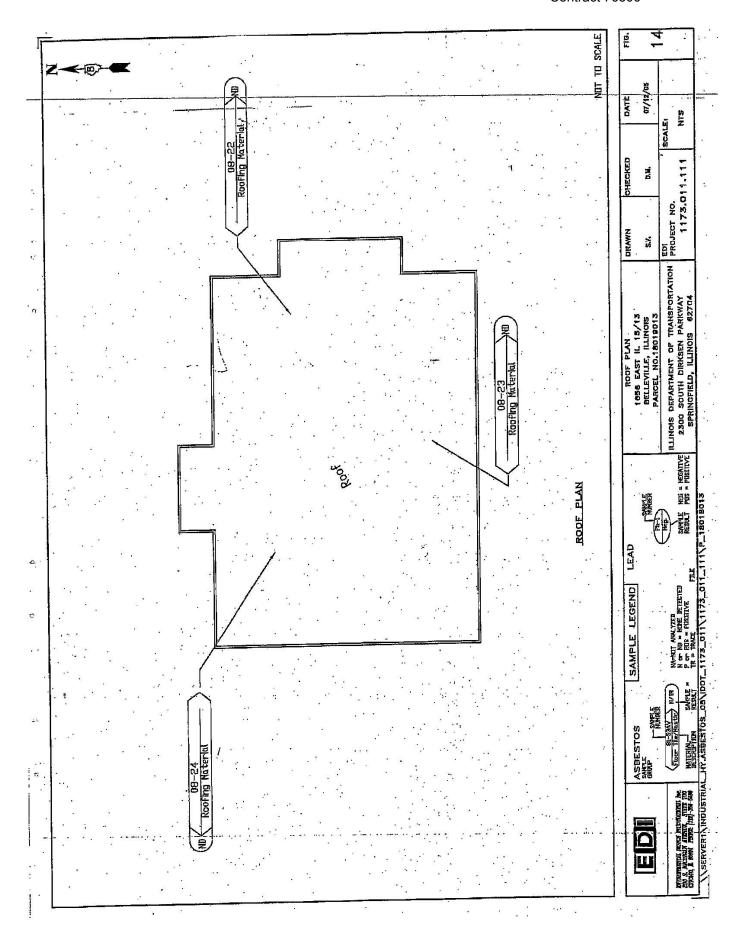
Asbestos-Containing	Quantity		Removal Cost
Duct Tape/Wrap	70 LF	15.00 LF	1,050.00
Contractor's mobilization			\$1,000.00
Subtotal Consultant Fee			\$2,050.00 \$1,000.00
Total:			\$3,050.00

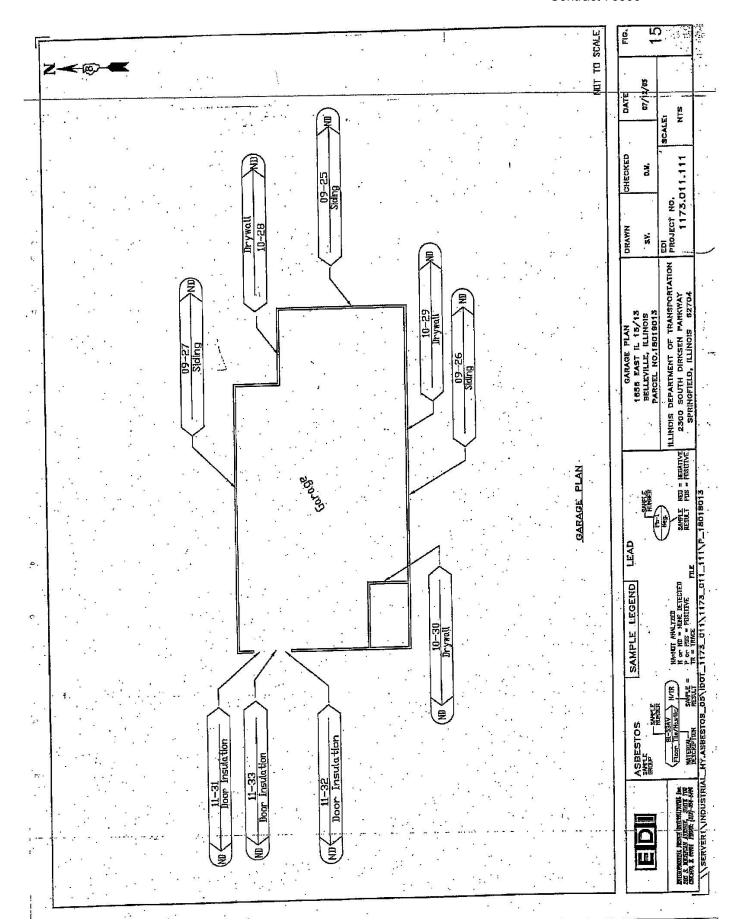












## **BUTT JOINTS (BDE)**

Effective: April 1, 2004 Revised: April 1, 2005

Revise Article 406.18 of the Standard Specifications to read:

"406.18 Butt Joints. Butt joints shall be constructed according to the details shown on the plans. The surface removal shall be performed according to Section 440. Construction of butt joints shall not begin prior to beginning general operations on the project.

When butt joints are to be constructed under traffic, temporary ramps shall be constructed and maintained at both the upstream and downstream ends of the surface removal areas immediately upon completion of the surface removal operation. The temporary ramps shall be constructed by the following methods.

- (a) Temporary Bituminous Ramps. Temporary bituminous ramps shall have a minimum taper rate of 1:40 (V:H). The bituminous material used shall meet the approval of the Engineer. Cold-milled bituminous tailings will not be acceptable.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 55 mph or less. The ramps shall have a minimum taper rate of 1:30 (V:H). The leading edge of the rubber ramp shall have a maximum thickness of 6 mm (1/4 in.) and the trailing edge shall match the height of the adjacent pavement ± 6 mm (1/4 in.).

The rubber material shall conform to the following.

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	80 ±10
Tensile Strength	ASTM D 412	5500 kPa (800 psi) min.
Elongation, percent	ASTM D 412	100 min.
Specific Gravity	ASTM D 297	1.1-1.3
Brittleness	ASTM D 746	-40 °C (-40 °F)

The rubber ramps shall be installed according to the manufacturer's specifications and fastened with the anchors provided. Rubber ramps that fail to stay in place or create a traffic hazard shall be replaced immediately with temporary bituminous ramps at the Contractor's expense.

The temporary ramps shall be removed just prior to placing the proposed surface course. If work is suspended for the winter season prior to completion of surface course construction, precut but joints shall be filled to the elevation of the existing pavement surface with compacted bituminous concrete surface course or binder course."

COARSE AGGREGATE FOR TRENCH BACKFILL, BACKFILL AND BEDDING (BDE)

Effective: April 1, 2001 Revised: November 1, 2003

Revise Article 208.02 of the Standard Specifications to read:

**"208.02 Materials.** Materials shall be according to the following Articles of Section 1000 – Materials:

- - Note 1. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 2. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first sentence of the second paragraph of subparagraph (b) in Article 208.03 of the Standard Specifications to read:

"Any material meeting the requirements of Articles 1003.04 or 1004.06 which has been excavated from the trenches shall be used for backfilling the trenches."

Add the following to the end of Article 542.02 of the Standard Specifications:

- - Note 1. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 2. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first and second sentences of the second paragraph of subparagraph (a) of Article 542.04 of the Standard Specifications to read:

"The unstable and unsuitable material shall be removed to a depth determined by the Engineer and for a width of one diameter (or equivalent diameter) of the pipe on each side of the pipe culvert, and replaced with aggregate. Rock shall be removed to an elevation 300 mm (1 ft) lower than the bottom of the pipe or to a depth equal to 40 mm/m (1/2 in./ft) of ultimate fill height over the top of the pipe culvert, whichever is the greater depth, and for a width as specified in (b) below, and replaced with aggregate."

Revise the second paragraph of subparagraph (c) of Article 542.04 of the Standard Specifications to read:

"Well compacted aggregate, at least 100 mm (4 in.) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except well compacted impervious material shall be used for the outer 1 m (3 ft) at each end of the pipe. When the trench has been widened by the removal and replacement of unstable or unsuitable material, the foundation material shall be placed for a width not less than the above specified widths on each side of the pipe. The aggregate and impervious material shall be approved by the Engineer and shall be compacted to the Engineer's satisfaction by mechanical means."

Revise subparagraph (e) of Article 542.04 of the Standard Specifications to read:

"(e) Backfilling. As soon as the condition of the pipe culvert will permit, the entire width of the trench shall be backfilled with aggregate to a height of at least the elevation of the center of the pipe. The aggregate shall be placed longitudinally along the pipe culvert, except at the outer 1 m (3 ft) at each end of the culvert which shall be backfilled with impervious material. The elevation of the backfill material on each side of the pipe shall be the same. The space under the pipe shall be completely filled. The aggregate and impervious material shall be placed in 200 mm (8 in.) layers, loose measurement. When using PVC, PE, or corrugated metal pipe, the aggregate shall be continued to a height of at least 300 mm (1 ft) above the top of the pipe and compacted to a minimum of 85 percent of standard lab density by mechanical means. When reinforced concrete pipes are used and the trench is within 600 mm (2 ft) of the pavement structure, the backfill shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

When using PVC, PE, or corrugated metal pipe a minimum of 300 mm (1 ft) of cover from the top of the pipe to the top of the subgrade will be required.

The installed pipe and its embedment shall not be disturbed when using movable trench boxes and shields, sheet pile, or other trench protection.

The remainder of the trench shall be backfilled with select material, from excavation or borrow, free from large or frozen lumps, clods or rock, meeting the approval of the Engineer. The material shall be placed in layers not exceeding 200 mm (8 in.) in depth, loose measurement and compacted to 95 percent of the standard laboratory density. Compaction shall be obtained by use of mechanical tampers or with approved vibratory compactors. Before compacting, each layer shall be wetted or dried to bring the moisture content within the limits of 80 to 110 percent of optimum moisture content determined according to AASHTO T 99 (Method C). All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the culvert. The filling of the trench shall be carried on simultaneously on both sides of the pipe. The Contractor may, at his/her expense, backfill the entire trench with aggregate in lieu of select material. The aggregate shall be compacted to the satisfaction of the Engineer by mechanical means.

The backfill material for all trenches and excavations made in the subgrade of the proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder, or sidewalk shall be according to Section 208. The trench backfill material shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

The Contractor may, at his/her expense, backfill the entire trench with controlled low strength material meeting the approval of the Engineer.

When the trench has been widened for the removal and replacement of unstable or unsuitable material, the backfilling with aggregate and impervious material, will be required for a width of at least the specified widths on each side of the pipe. The remaining width of each layer may be backfilled with select material. Each 200 mm (8 in.) layer for the entire trench width shall be completed before beginning the placement of the next layer."

Revise subparagraph (b) of Article 542.05 of the Standard Specifications to read:

"(b) Embankment. Embankment extending to an elevation of 300 mm (1 ft) over the top of the pipe shall be constructed according to Article 542.04(f), except the material up to the elevation of the center of the pipe and extending to a width of at least 450 mm (18 in.) on each side of the pipe, exclusive of the outer 1 m (3 ft) at each end of the pipe, shall consist of aggregate. At the outer 1 m (3 ft) at each end of the culvert, impervious material shall be used."

Add the following paragraph after the first paragraph of Article 542.10 of the Standard Specifications:

"Trench backfill will be measured for payment according to Article 208.03."

Add the following paragraph after the third paragraph of Article 542.11 of the Standard Specifications:

"Trench backfill will be paid for according to Article 208.04."

Add the following to of Article 550.02 of the Standard Specifications:

- - Note 2. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 3. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first two sentences of the third paragraph of Article 550.04 of the Standard Specifications to read:

"Well compacted, aggregate bedding material at least 100 mm (4 in.) in depth below the pipe, shall be placed for the entire width of the trench and length of the pipe. The aggregate shall be compacted to the satisfaction of the Engineer by mechanical means."

Revise Article 550.07 of the Standard Specifications to read:

"550.07 Backfilling. As soon as the condition of the pipe will permit, the entire width of the trench shall be backfilled with aggregate to a height of at least the elevation of the center of the pipe. The aggregate shall be placed longitudinally along the pipe. The elevation of the backfill

material on each side of the pipe shall be the same. The space under the pipe shall be completely filled. The aggregate backfill material shall be placed in 200 mm (8 in.) layers, loose measurement and compacted to the satisfaction of the Engineer by mechanical means. When using PVC pipe, the aggregate shall be continued to a height of at least 300 mm (12 in.) above the top of the pipe.

The installed pipe and its embedment shall not be disturbed when using movable trench boxes and shields, sheet pile, or other trench protection.

The remainder of the trench and excavation shall be backfilled to the natural line or finished surface as rapidly as the condition of the sewer will permit. The backfill material shall consist of suitable excavated material from the trench or of trench backfill as herein specified. All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the sewer and shall be compacted to the satisfaction of the Engineer by mechanical means. The filling of the trench shall be carried on simultaneously on both sides of the pipe.

The backfill material for trenches and excavation made in the subgrade of the proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk shall be according to Section 208. The backfill material shall be compacted to 85 percent of standard lab density by mechanical means.

All backfill material up to a height of 300 mm (1 ft) above the pipe shall be deposited in uniform layers not exceeding 200 mm (8 in.) thick, loose measurement. The material in each layer shall be compacted to the satisfaction of the Engineer by mechanical means. The backfilling above this height shall be done according to Method 1, 2 or 3 as described below, with the following exceptions.

When trench backfill or excavated material meeting the requirements of Section 208 is required above the first 300 mm (1 ft) of the pipe, the layers shall not exceed 200 mm (8 in.). Gradations CA6 or CA10 shall not be used with Method 2 or Method 3.

- Method 1. The material shall be deposited in uniform layers not exceeding 300 mm (1 ft) thick, loose measurement, and each layer shall be compacted to the satisfaction of the Engineer by mechanical means.
- Method 2. The material shall be deposited in uniform layers not exceeding 300 mm (1 ft) thick, loose measurement, and each layer shall be either inundated or deposited in water.
- Method 3. The trench shall be backfilled with loose material, and settlement secured by introducing water through holes jetted into the backfill to a point approximately 600 mm (2 ft) above the top of the pipe. The holes shall be spaced as directed by the Engineer but shall be no farther than 2 m (6 ft) apart.

The water shall be injected at a pressure just sufficient to sink the holes at a moderate rate of speed. The pressure shall be such that the water will not cut cavities in the backfill material nor overflow the surface. If water does overflow the surface, it shall be drained into the jetted holes by means of shallow trenches.

Water shall be injected as long as it will be absorbed by the backfill material and until samples taken from test holes in the trench show a satisfactory moisture content. The Contractor shall bore the test holes not more than 15 m (50 ft) apart and at such other locations in the trench designated by the Engineer. As soon as the watersoaking has been completed, all holes shall be filled with soil and compacted by ramming with a tool approved by the Engineer.

Backfill material which has been watersoaked shall be allowed to settle and dry for at least 10 days before any surface course or pavement is constructed on it. The length of time may be altered, if deemed desirable, by the Engineer. Where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk, the provisions of this paragraph shall also apply.

At the end of the settling and drying period, the crusted top of the backfill material shall be scarified and, if necessary, sufficient backfill material added, as specified in Method 1, to complete the backfilling operations.

The method used for backfilling and compacting the backfill material shall be the choice of the Contractor. If the method used does not produce results satisfactory to the Engineer, the Contractor will be required to alter or change the method being used so the resultant backfill will be satisfactory to the Engineer. Should the Contractor be required to alter or change the method being used, no additional compensation will be allowed for altering or changing the method.

The Contractor may, at his/her expense, backfill the entire trench with controlled low strength material meeting the approval of the Engineer.

When sheeting and bracing have been used, sufficient bracing shall be left across the trench as the backfilling progresses to hold the sides firmly in place without caving or settlement. This bracing shall be removed as soon as practicable. Any depressions which may develop within the area involved in the construction operation due to settlement of the backfilling material shall be filled in a manner approved by the Engineer.

When the Contractor constructs the trench with sloped or benched sides according to Article 550.04, backfilling for the full width of the excavation shall be as specified, except no additional compensation will be allowed for trench backfill material required outside the vertical limits of the specified trench width.

Whenever excavation is made for installing sewer pipe across earth shoulders or private property, the topsoil disturbed by excavation operations shall be replaced as nearly as possible in its original position, and the whole area involved in the construction operations shall be left in a neat and presentable condition.

When using any PVC pipe, the pipe shall be backfilled with aggregate to 300 mm (1 ft) over the top of the pipe and compacted to a minimum of 85 percent of standard lab density by mechanical means.

When reinforced concrete pipes are used and the trench is within 600 mm (2 ft) of the pavement structure, the backfill shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

Deflection Testing for Storm Sewers. All PVC storm sewers will be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted.

For PVC storm sewers with diameters 600 mm (24 in.) or smaller, a mandrel drag shall be used for deflection testing. For PVC storm sewers with diameters over 600 mm (24 in.), deflection measurements other than by a mandrel drag shall be used.

Where the mandrel is used, the mandrel shall be furnished by the Contractor and pulled by hand through the pipeline with a suitable rope or cable connected to each end. Winching or other means of forcing the deflection gauge through the pipeline will not be allowed.

The mandrel shall be of a shape similar to that of a true circle enabling the gauge to pass through a satisfactory pipeline with little or no resistance. The mandrel shall be of a design to prevent it from tipping from side to side and to prevent debris build-up from occurring between the channels of the adjacent fins or legs during operation. Each end of the core of the mandrel shall have fasteners to which the pulling cables can be attached. The mandrel shall have 9, various sized fins or legs of appropriate dimension for various diameter pipes. Each fin or leg shall have a permanent marking that states its designated pipe size and percent of deflection allowable.

The outside diameter of the mandrel shall be 95 percent of the base inside diameter, where the base inside diameter is:

For all PVC pipe (as defined using ASTM D 3034 methodology):

If the pipe is found to have a deflection greater than specified, that pipe section shall be removed, replaced, and retested."

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

"(c) Gradation. The fine aggregate gradation shall be as follows:

Backfill, bedding and trench backfill for pipe culverts and storm sewers FA 1, FA 2, FA 6, or FA 21 Porous granular embankment and backfill, french drains, and sand backfill for underdrains FA 1, FA 2, or FA20 (Note 1)

Note 1: For FA 1, FA 2, and FA 20 the percent passing the 75  $\,$  m (No. 200) sieve shall be 2  $\pm$  2."

Revise the title of Article 1004.06 of the Standard Specifications to read:

"Coarse Aggregate for Blotter, Embankment, Backfill, Trench Backfill, French Drains, and Bedding."

Add the following to the end of subparagraph (c) of Article 1004.06 of the Standard Specifications:

"Backfill, bedding, and trench backfill for pipe culverts and storm sewers CA 6, CA 10, and CA 18"

### **CONCRETE ADMIXTURES (BDE)**

Effective: January 1, 2003 Revised: July 1, 2004

Revise Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. Except as specified, the use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted only when approved in writing by the Engineer. The Department will maintain an Approved List of Concrete Admixtures. When the Department permits the use of a calcium chloride accelerator, it shall be according to Article 442.02, Note 5.

When the atmosphere or concrete temperature is 18 °C (65 °F) or higher, a retarding admixture meeting the requirements of Article 1021.03 shall be used in the Class BD Concrete and portland cement concrete bridge deck overlays. The amount of retarding admixture to be used will be determined by the Engineer. The proportions of the ingredients of the concrete shall be the same as without the retarding admixture except that the amount of mixing water shall be reduced, as may be necessary, in order to maintain the consistency of the concrete as required. In addition, a high range water-reducing admixture shall be used in Class BD Concrete. The amount of high range water-reducing admixture will be determined by the Engineer. At the option of the Contractor, a water-reducing admixture may be used. Type I cement shall be used.

For Class PC and PS Concrete, a retarding admixture may be added to the concrete mixture when the concrete temperature is 18 °C (65 °F) or higher. Other admixtures may be used when approved by the Engineer, or if specified by the contract. If an accelerating admixture is permitted by the Engineer, it shall be the non-chloride type.

At the Contractor's option, admixtures in addition to an air-entraining admixture may be used for Class PP-1 concrete. The accelerator shall be the non-chloride type. If a water-reducing or retarding admixture is used, the cement factor may be reduced a maximum 18 kg/cu m (0.30 hundredweight/cu yd). If a high range water-reducing admixture is used, the cement factor may be reduced a maximum 36 kg/cu m (0.60 hundredweight/cu yd). Cement factor reductions shall not be cumulative when using multiple admixtures. An accelerator shall always be added prior to a high range water-reducing admixture, if both are used.

If Class C fly ash or ground granulated blast-furnace slag is used in Class PP-1 concrete, a water-reducing or high range water-reducing admixture shall be used. However, the cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used. In addition, an accelerator shall not be used.

For Class PP-2 or PP-3 concrete, a non-chloride accelerator followed by a high range water-reducing admixture shall be used, in addition to the air-entraining admixture. For Class PP-3 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-2 or PP-3 concrete, the Contractor has the option to use a water-reducing admixture. A retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

When the air temperature is less than 13 °C (55 °F) for Class PP-1 or PP-2 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture. An accelerator shall not be used. For stationary or truck mixed concrete, a retarding admixture shall be used to allow for haul time. The Contractor has the option to use a mobile portland cement concrete plant according to Article 1103.04, but a retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

If the Department specifies a calcium chloride accelerator for Class PP-1 concrete, the maximum chloride dosage shall be 1.0 L (1.0 quart) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.0 L (2.0 quarts) per 45 kg (100 lb) of cement if approved by the Engineer. If the Department specifies a calcium chloride accelerator for Class PP-2 concrete, the maximum chloride dosage shall be 1.3 L (1.3 quarts) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.6 L (2.6 quarts) per 45 kg (100 lb) of cement if approved by the Engineer.

For Class PV, MS, SI, RR, SC and SH concrete, at the option of the Contractor, or when specified by the Engineer, a water-reducing admixture or a retarding admixture may be used. The amount of water-reducing admixture or retarding admixture permitted will be determined by the Engineer. The air-entraining admixture and other admixtures shall be added to the concrete separately, and shall be permitted to intermingle only after they have separately entered the concrete batch. The sequence, method and equipment for adding the admixtures shall be approved by the Engineer. The water-reducing admixture shall not delay the initial set of the concrete by more than one hour. Type I cement shall be used.

When a water-reducing admixture is added, a cement factor reduction of up to 18 kg/cu m (0.30 hundredweight/cu yd), from the concrete designed for a specific slump without the admixture, will be permitted for Class PV, MS, SI, RR, SC and SH concrete. When an approved high range water-reducing admixture is used, a cement factor reduction of up to 36 kg/cu m (0.60 hundredweight/cu yd), from a specific water cement/ratio without the admixture, will be permitted based on a 14 percent minimum water reduction. This is applicable to Class PV, MS, SI, RR, SC and SH concrete. A

cement factor below 320 kg/cu m (5.35 hundredweight/cu yd) will not be permitted for Class PV, MS, SI, RR, SC and SH concrete. A cement factor reduction will not be allowed for concrete placed underwater. Cement factor reductions shall not be cumulative when using multiple admixtures.

For use of admixtures to control concrete temperature, refer to Articles 1020.14(a) and 1020.14(b).

The maximum slumps given in Table 1 may be increased to 175 mm (7 in.) when a high range water-reducing admixture is used for all classes of concrete except Class PV and PP."

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 may 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 to the satisfaction of the Engineer as to manufacturer and trade name of the material they contain.

Prior to inclusion of a product on the Department's Approved List of Concrete Admixtures, the manufacturer shall submit a report prepared by an independent laboratory accredited by the AASHTO Accreditation Program. 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.

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 335 kg/cu m (5.65 cwt/cu yd). Compressive strength test results for six months and one year will not be required.

In addition to the report, 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 335 kg/cu m (5.65 cwt/cu yd). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by the AASHTO Accreditation Program.

Prior to the approval of an admixture, the Engineer may conduct all or part of the applicable tests on a sample that is representative of the material to be furnished. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161, Procedure B.

The manufacturer shall include in the submittal the following information according to ASTM C 494; the average and manufacturing range of specific gravity, the average and manufacturing range of solids in the solution, and the average and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

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 the AASHTO Accreditation Program.

All admixtures, except chloride-based accelerators, shall contain no more than 0.3 percent chloride by mass (weight).

**1021.02 Air-Entraining Admixtures.** Air-entraining admixtures shall conform to the requirements of AASHTO M 154.

If the manufacturer certifies that the air-entraining admixture is an aqueous solution of Vinsol resin that has been neutralized with sodium hydroxide (caustic soda), testing for compliance with the requirements may be waived by the Engineer. In the certification, the manufacturer shall show complete information with respect to the formulation of the solution, including the number of parts of Vinsol resin to each part of sodium hydroxide. Before the approval of its use is granted, the Engineer will test the solution for its air-entraining quality in comparison with a solution prepared and kept for that purpose.

**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall comply with the following requirements:

- (a) The retarding admixture shall comply with the requirements of AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall comply with the requirements of AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

When a Type F or Type G high range water-reducing admixture is used, water-cement ratios shall be a minimum of 0.32.

Type F or Type G admixtures may be used, subject to the following restrictions:

For Class MS, SI, RR, SC and SH concrete, the water-cement ratio shall be a maximum of 0.44.

The Type F or Type G admixture shall be added at the jobsite unless otherwise directed by the Engineer. The initial slump shall be a minimum of 40 mm (1 1/2 in.) prior to addition of the Type F or Type G admixture, except as approved by the Engineer.

When a Type F or Type G admixture is used, retempering with water or with a Type G admixture will not be allowed. An additional dosage of a Type F admixture, not to exceed 40 percent of the original dosage, may be used to retemper concrete once, provided set time is not unduly affected. A second retempering with a Type F admixture may be used for all classes of concrete except Class PP and SC, provided that the dosage does not exceed the dosage used for the first retempering, and provided that the set time is not unduly affected. No further retempering will be allowed.

Air tests shall be performed after the addition of the Type F or Type G admixture.

**1021.04 Set Accelerating Admixtures.** The admixture shall comply with the requirements of AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating)"

### CORRUGATED METAL PIPE CULVERTS (BDE)

Effective: August 1, 2003 Revised: July 1, 2004

Revise the fourth paragraph of Article 542.04(d) of the Standard Specifications to read:

"When corrugated steel or aluminum alloy culvert pipe (including bituminous coated steel or aluminum and pre-coated steel) is used, the pipe shall be placed such that the longitudinal lap is placed at the sides and separate sections of pipe shall be joined with a hugger-type band. When the pipes are fabricated with a smooth sleeve-type coupler, the gasket shall meet the requirements of Article 1006.01."

Add the following paragraph after the first paragraph of Article 1006.01 of the Standard Specifications:

"Round pipes 1200 mm (48 in.) in diameter and smaller may be fabricated with a smooth sleeve-type coupler. Gasket material on the smooth sleeve-type coupler shall be polyisoprene or equal with a durometer hardness of 45±5 (ASTM D 2240, Shore A). Pipe used with smooth sleeve-type couplers shall contain a homing mark that indicates when the joint is tight. The homing mark shall consist of a painted stripe around the circumference of the male end of the pipe."

Delete the last sentence of the first paragraph of Article 1006.01(a) of the Standard Specifications.

Add the following paragraph after the first paragraph of Article 1006.03 of the Standard Specifications:

"Round pipes 1200 mm (48 in.) in diameter and smaller may be fabricated with a smooth sleeve-type coupler. Gasket material on the smooth sleeve-type coupler shall be polyisoprene or equal with a durometer hardness of 45±5 (ASTM D 2240, Shore A). Pipe used with smooth sleeve-type couplers shall contain a homing mark that indicates when the joint is tight. The homing mark shall consist of a painted stripe around the circumference of the male end of the pipe."

# **CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)**

Effective: January 1, 2004 Revised: November 1, 2005

Revise the second and third sentences of the eleventh paragraph of Article 503.06 of the Standard Specifications to read:

"Forms on substructure units shall remain in place at least 24 hours. The method of form removal shall not result in damage to the concrete."

Delete the twentieth paragraph of Article 503.22 of the Standard Specifications.

Revise the "Unit Price Adjustments" table of Article 503.22 of the Standard Specifications to read:

"UNIT PRICE ADJUSTMENTS	
	Percent
Type of Construction	Adjustment
	in Unit Price
For concrete in substructures, culverts (having a waterway	
opening of more than 1 sq m (10 sq ft)), pump houses, and	
retaining walls (except concrete pilings, footings and	
foundation seals):	
When protected by:	
Protection Method II	115%
Protection Method I	110%
For concrete in superstructures:	
When protected by:	
Protection Method II	123%
Protection Method I	115%
For concrete in footings:	
When protected by:	
Protection Method I, II or III	107%
For concrete in slope walls:	
When protected by:	
Protection Method I	107%"

Delete the fourth paragraph of Article 504.05(a) of the Standard Specifications.

Revise the second and third sentences of the fifth paragraph of Article 504.05(a) of the Standard Specifications to read:

"All test specimens shall be cured with the units according to Article 1020.13."

Revise the first paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"Curing and Low Air Temperature Protection. The curing and protection for precast, prestressed concrete members shall be according to Article 1020.13 and this Article."

Revise the first sentence of the second paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"For curing, air vents shall be in place and shall be so arranged that no water can enter the void tubes during the curing of the members."

Revise the first sentence of the third paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"As soon as each member is finished, the concrete shall be covered with curing material according to Article 1020.13."

Revise the eighth paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"The prestressing force shall not be transferred to any member before the concrete has attained the compressive strength of 28,000 kPa (4000 psi) or other higher compressive release strength specified on the plans, as determined from tests of 150 mm (6 in.) by 300 mm (12 in.) cylinders cured with the member according to Article 1020.13. Members shall not be shipped until 28-day strengths have been attained and members have a yard age of at least 4 days."

Delete the third paragraph of Article 512.03(a) of the Standard Specifications.

Delete the last sentence of the second paragraph of Article 512.04(d) of the Standard Specifications.

Revise the "Index Table of Curing and Protection of Concrete Construction" table of Article 1020.13 of the Standard Specifications to read:

"INDEX TABLE OF C	CURING AND PROTECTION O	F CONCRETE C	CONSTRUCTION
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Cast-in-Place Concrete: 11/			
Pavement Shoulder	1020.13(a)(1)(2)(3)(4)(5) 3/5/	3	1020.13(c)
Base Course Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) 1/2/	3	1020.13(c)
Driveway Median Curb Gutter Curb and Gutter Sidewalk Slope Wall	1020.13(a)(1)(2)(3)(4)(5) 4/5/	3	1020.13(c) <sup>16/</sup>
Paved Ditch Catch Basin Manhole Inlet Valve Vault	1020.13(a)(1)(2)(3)(4)(5) 4/	3	1020.13(c)
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) 2/	3 <sup>12/</sup>	1020.13(c)
Pavement Replacement	1020.13(a)(1)(2)(3)(4)(5) 1/2/	3	442.06(h) and 1020.13(c)
Railroad Crossing	1020.13(a)(3)(5)	1	1020.13(c)
Piles	1020.13(a)(3)(5)	7	1020.13(e)(1)(2)(3)
Footings Foundation Seals Substructure	1020.13(a)(1)(2)(3)(4)(5) 4/6/ 1020.13(a)(1)(2)(3)(4)(5) 1/7/	7 7	1020.13(e)(1)(2)(3) 1020.13(e)(1)(2)(3)
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) <sup>8/</sup>	7	1020.13(e)(1)(2)
Deck	1020.13(a)(5)	7	1020.13(e)(1)(2) <sup>17/</sup>
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) 1/7/	7	1020.13(e)(1)(2)
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) 1/	7	1020.13(e)(1)(2)
Culverts	1020.13(a)(1)(2)(3)(4)(5) 4/6/	7	1020.13(e)(1)(2) <sup>18/</sup>
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)
Precast Concrete: 11/	1 // // // // //		` '
Bridge Beams Piles Bridge Slabs Nelson Type Structural Member	1020.13(a)(3)(5) 9/ 10/	As required. <sup>13/</sup>	504.06(c)(6), 1020.13(e)(2) <sup>19/</sup>
All Other Precast Items	1020.13(a)(3)(4)(5) 2/ 9/ 10/	As required. 14/	504.06(c)(6), 1020.13(e)(2) 19/
Precast, Prestressed Concrete: 11/	· · · · · · · · · · · · · · · · · · ·		
All Items	1020.13(a)(3)(5) 9/ 10/	Until strand tensioning is released. 15/	d504.06(c)(6), 1020.13(e)(2) <sup>19/</sup> s

#### Notes-General:

- 1/ Type I, membrane curing only
- 2/ Type II, membrane curing only
- 3/ Type III, membrane curing only
- 4/ Type I, II and III membrane curing
- 5/ Membrane curing will not be permitted between November 1 and April 15.
- 6/ The use of water to inundate footings, foundation seals or the bottom slab of culverts is permissible when approved by the Engineer, provided the water temperature can be maintained at 7 °C (45 °F) or higher.
- 7/ Asphalt Emulsion for Waterproofing may be used in lieu of other curing methods when specified and permitted according to Article 503.18.
- 8/ On non-traffic surfaces which receive protective coat according to Article 503.19, a linseed oil emulsion curing compound may be used as a substitute for protective coat and other curing methods. The linseed emulsion curing compound will be permitted between April 16 and October 31 of the same year, provided it is applied with a mechanical sprayer according to Article 1101.09 (b), and meets the material requirements of Article 1022.07.
- 9/ Steam curing (heat and moisture) is acceptable and shall be accomplished by the method specified in Article 504.06(c)(6).
- 10/ A moist room according to AASHTO M 201 is acceptable for curing.
- 11/ If curing is required and interrupted because of form removal for cast-in-place concrete items, precast concrete products, or precast prestressed concrete products, the curing shall be resumed within two hours from the start of the form removal.
- 12/ Curing maintained only until opening strength is attained, with a maximum curing period of three days.
- 13/ The curing period shall end when the concrete has attained the mix design strength. The producer has the option to discontinue curing when the concrete has attained 80 percent of the mix design strength or after seven days. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 14/ The producer shall determine the curing period or may elect to not cure the product. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 15/ The producer has the option to continue curing after strand release.
- 16/ When structural steel or structural concrete is in place above slope wall, Article 1020.13(c) shall not apply. The protection method shall be according to Article 1020.13(e)(1).
- 17/ When Article 1020.13(e)(2) is used to protect the deck, the housing may enclose only the bottom and sides. The top surface shall be protected according to Article 1020.13(e)(1).
- 18/ For culverts having a waterway opening of 1 sq m (10 sq ft) or less, the culverts may be protected according to Article 1020.13(e)(3).
- 19/ The seven day protection period in the first paragraph of Article 1020.13(e)(2) shall not apply. The protection period shall end when curing is finished. For the third paragraph of Article 1020.13(e)(2), the decrease in temperature shall be according to Article 504.06(c)(6)."

Add the following to Article 1020.13(a) of the Standard Specifications:

"(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry cotton mats. The cotton mats shall be placed in a manner which will not mar the concrete surface. A texture resulting from the cotton mat material is acceptable. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. For bridge decks, a foot bridge shall be used to place and wet the cotton mats.

The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without marring the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 1.2 m (4 ft) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

After placement of the soaker hoses, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets.

For construction items other than bridge decks, soaker hoses or a continuous wetting system will not be required if the alternative method keeps the cotton mats wet. Periodic wetting of the cotton mats is acceptable.

For areas inaccessible to the cotton mats on bridge decks, curing shall be according to Article 1020.13(a)(3)."

Revise the first paragraph of Article 1020.13(c) of the Standard Specifications to read:

"Protection of Portland Cement Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 0 °C (32 °F), or lower, or if the actual temperature drops to 0 °C (32 °F), or lower, concrete less than 72 hours old shall be provided at least the following protection:"

Delete Article 1020.13(d) and Articles 1020.13(d)(1),(2),(3),(4) of the Standard Specifications.

Revise the first five paragraphs of Article 1020.13(e) of the Standard Specifications to read:

"Protection of Portland Cement Concrete Structures From Low Air Temperatures. When the official National Weather Service Forecast for the construction area predicts a low below 7 °C (45 °F), or if the actual temperature drops below 7 °C (45 °F), concrete less than 72 hours old shall be provided protection. Concrete shall also be provided protection when placed during the winter period of December 1 through March 15. Concrete shall not be placed until the materials, facilities, and equipment for protection are approved by the Engineer.

When directed by the Engineer, the Contractor may be required to place concrete during the winter period. If winter construction is specified, the Contractor shall proceed with the construction, including concrete, excavation, pile driving, steel erection, and all appurtenant work required for the complete construction of the item, except at times when weather conditions make such operations impracticable.

Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced at no additional cost to the Department."

Add the following at the end of the third paragraph of Article 1020.13(e)(1) of the Standard Specifications:

"The Contractor shall provide means for checking the temperature of the surface of the concrete during the protection period."

Revise the second sentence of the first paragraph of Article 1020.13(e)(2) of the Standard Specifications to read:

"The Contractor shall provide means for checking the temperature of the surface of the concrete or air temperature within the housing during the protection period."

Delete the last sentence of the first paragraph of Article 1020.13(e)(3) of the Standard Specifications.

Add the following Article to Section 1022 of the Standard Specifications:

"1022.06 Cotton Mats. Cotton mats shall consist of a cotton fill material, minimum 400 g/sq m (11.8 oz/sq yd), covered with unsized cloth or burlap, minimum 200 g/sq m (5.9 oz/sq yd), and be tufted or stitched to maintain stability.

Cotton mats shall be in a condition satisfactory to the Engineer. Any tears or holes in the mats shall be repaired."

Add the following Article to Section 1022 of the Standard Specifications:

"1022.07 Linseed Oil Emulsion Curing Compound. Linseed oil emulsion curing compound shall be composed of a blend of boiled linseed oil and high viscosity, heavy bodied linseed oil emulsified in a water solution. The curing compound shall meet the requirements of a Type I according to Article 1022.01, except the drying time requirement will be waived. The oil phase shall be  $50 \pm 4$  percent by volume. The oil phase shall consist of 80 percent by mass (weight) boiled linseed oil and 20 percent by mass (weight) Z-8 viscosity linseed oil. The water phase shall be  $50 \pm 4$  percent by volume."

Revise Article 1020.14 of the Standard Specifications to read:

"1020.14 Temperature Control for Placement. Temperature control for concrete placement shall be according to the following.

(a) Temperature Control other than Structures. The temperature of the concrete immediately before placement shall be a minimum of 10 °C (50 °F) and a maximum of 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

Plastic concrete temperatures up to 35 °C (96 °F), as placed, may be permitted provided job site conditions permit placement and finishing without excessive use of water on and/or overworking of the surface. The occurrence within 24 hours of unusual surface distress shall be cause to revert to a maximum 32 °C (90 °F) plastic concrete temperature.

Concrete shall not be placed when the air temperature is below 5 °C (40 °F) and falling or below 2 °C (35 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to between 20 °C (70 °F) and 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

For pavement patching, refer to Article 442.06(e) for additional information on temperature control for placement.

(b) Temperature Control for Structures. The temperature of the concrete, as placed in the forms, shall be a minimum of 10 °C (50 °F) and a maximum of 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits. When insulated forms are used, the temperature of the concrete mixture shall not exceed 25 °C (80 °F). If the Engineer determines that heat of hydration might cause excessive temperatures in the concrete, the concrete shall be placed at a temperature between 10 °C (50 °F) and 15 °C (60 °F). When concrete is placed in contact with previously placed concrete, the temperature of the concrete may be increased as required to offset anticipated heat loss.

Concrete shall not be placed when the air temperature is below 7  $^{\circ}$ C (45  $^{\circ}$ F) and falling or below 4  $^{\circ}$ C (40  $^{\circ}$ F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the

aggregates to be heated to between 20 °C (70 °F) and 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

(c) Temperature. The concrete temperature shall be determined according to ASTM C 1064."

## **DETECTABLE WARNINGS (BDE)**

Effective: August 1, 2005

Replace Articles 424.08 – 424.12 of the Standard Specifications with the following:

"424.08 Curb Ramps. Curb ramps shall be constructed according to the Americans with Disabilities Act Accessibility Guidelines (ADAAG), the Illinois Accessibility Code, and as shown on the plans.

Curb ramps shall be constructed to the same thickness as the adjacent sidewalk with a minimum thickness of 100 mm (4 in.).

**424.09 Detectable Warnings.** Detectable warnings shall consist of a surface of truncated domes meeting the requirements of the ADAAG and the details shown on the plans.

Detectable warnings shall be installed at curb ramps, medians and pedestrian refuge islands, at-grade railroad crossings, transit platform edges, and other locations where pedestrians are required to cross a hazardous vehicular way. Detectable warnings shall also be installed at alleys and commercial entrances when permanent traffic control devices are present. The installation shall be an integral part of the walking surface and only the actual domes shall project above the walking surface.

The product or method used for installing detectable warnings shall come with the following documents which shall be given to the Engineer prior to use.

- (a) Manufacturer's certification stating the product is fully compliant with the ADAAG.
- (b) Manufacturer's five year warranty.

(c) Manufacturer's specifications stating the required materials, equipment, and installation procedures.

Products that are colored shall be colored their entire thickness.

The materials, equipment, and installation procedures used shall be according to the manufacturer's specifications.

- **424.10 Backfill.** After the concrete has been cured, the spaces along the edges of the sidewalk and ramps shall be backfilled with approved material. The material shall be compacted until firm and the surface neatly graded.
- **424.11 Disposal of Surplus Material.** Surplus or waste material shall be disposed of according to Article 202.03.
- **424.12 Method of Measurement.** This work will be measured for payment in place and the area computed in square meters (square feet). Curb ramps will be measured for payment as sidewalk. No deduction will be made for detectable warnings located within the ramp.

Detectable warnings will be measured for payment in place and the area computed in square meters (square feet).

Earth excavation will be measured for payment according to Article 202.07.

**424.13 Basis of Payment.** This work will be paid for at the contract unit price per square meter (square foot) for PORTLAND CEMENT CONCRETE SIDEWALK, of the thickness specified.

Detectable warnings will be paid for at the contract unit price per square meter (square foot) for DETECTABLE WARNINGS.

Earth excavation will be paid for according to Article 202.08."

#### DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

Effective: September 1, 2000 Revised: June 22, 2005

<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 DBE Directory or most recent addendum.

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% 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% 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 firms performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 18.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

<u>DBE LOCATOR REFERENCES</u>. Bidders may consult the DBE Directory as a reference source for DBE companies certified by the Department. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning

DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's web site at www.dot.state.il.us.

<u>BIDDING PROCEDURES</u>. Compliance with the bidding procedures of this Special Provision is required prior to the award of the contract and the failure of the as-read low bidder to comply will render the bid not responsive.

- (a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven (7) working days after the date of letting. To meet the seven (7) day requirement, the bidder may send the Plan by certified mail or delivery service within the seven (7) working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven (7) working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted 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). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven (7) day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of 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. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
  - (1) The name and address of each DBE to be used;
  - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;

- (3) The price to be paid to each DBE for the identified work specifically stating 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) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
- (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five (5) working day period in order to cure the deficiency.

<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% 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 firm does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100% 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% 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 firm does not count toward the DBE goal.

- (d) DBE as a trucker: 100% goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contact. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.
- (e) DBE as a material supplier:
  - (1) 60% goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100% goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
  - (3) 100% credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt 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 could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those 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 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 a good faith effort has not been made, the Department will notify the

bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will designate a five (5) working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.

(c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five (5) working days after 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 pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. 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 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 (10) working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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 Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (c) 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 therefor to the DBE by the Contractor, but not later than thirty (30) 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 Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) 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.

(e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

### **EPOXY COATING ON REINFORCEMENT (BDE)**

Effective: April 1, 1997 Revised: January 1, 2003

For work outside the limits of bridge approach pavement, all references to epoxy coating in the Highway Standards and Standard Specifications for reinforcement, tie bars and chair supports will not apply for pavement, shoulders, curb, gutter, combination curb and gutter and median.

### **EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)**

Effective: August 1, 2001 Revised: November 1, 2001

When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, he/she will direct the Contractor in writing to correct the deficiency. The Contractor shall then correct the deficiency within 24 hours. The 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 National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for Construction Site Activities.

If the Contractor fails to correct the deficiency(s) within 24 hours, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The time period will begin with the initial written notification to the Contractor and end with the Engineer's acceptance of the corrected work. The per calendar day deduction will be either \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater.

If the Contractor fails to respond, the Engineer may correct the deficiencies and deduct the cost from monies due or which may become due the Contractor. This corrective action shall in no way relieve the Contractor of his/her contractual requirements or responsibilities.

### **EXPANSION JOINTS (BDE)**

Effective: August 1, 2003

Add the following paragraph after the second paragraph of Article 420.10(e) of the Standard Specifications:

"After the dowel bars are oiled, plastic expansion caps shall be secured to the bars maintaining a minimum expansion gap of 50 mm (2 in.) between the end of the bar and the end of the cap. The caps shall fit snuggly on the bar and the closed end shall be watertight. For expansion joints formed using dowel bar basket assemblies, the caps shall be installed on the alternating free ends of the bars. For expansion joints formed using a construction header, the caps shall be installed on the exposed end of each bar once the header has been removed and the joint filler material has been installed."

## FLAGGER VESTS (BDE)

Effective: April 1, 2003 Revised: January 1, 2006

Revise the first sentence of Article 701.04(c)(1) of the Standard Specifications to read:

"The flagger shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-2004 for Conspicuity Class 2 garments and approved flagger traffic control signs conforming to Standard 702001 and Article 702.05(e)."

Revise Article 701.04(c)(6) of the Standard Specifications to read:

"(6) Nighttime Flagging. Flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 108 lux (10 fc) measured 300 mm (1 ft) out from the flagger's chest. The bottom of any luminaire shall be a minimum of 3 m (10 ft) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties.

The flagger vest shall be a fluorescent orange or fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 3 garments."

### FREEZE-THAW RATING (BDE)

Effective: November 1, 2002

Revise the first sentence of Article 1004.02(f) of the Standard Specifications to read:

"When coarse aggregate is used to produce portland cement concrete for base course, base course widening, pavement, driveway pavement, sidewalk, shoulders, curb, gutter, combination curb and gutter, median, paved ditch or their repair using concrete, the gradation permitted will be determined from the results of the Department's Freeze-Thaw Test."

## IMPACT ATTENUATORS, TEMPORARY (BDE)

Effective: November 1, 2003 Revised: April 1, 2004

<u>Description</u>. This work shall consist of furnishing, installing, maintaining, and removing temporary impact attenuators of the category and test level specified.

<u>Materials</u>. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

Item	Article/Section
(a) Fine Aggregate (Note 1)	1003.01
(b) Steel Posts, Structural Shapes, and Plates	
(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) Rapid Set Mortar (Note 2)	

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.

Note 2. Rapid set mortar shall be obtained from the Department's approved list of Packaged, Dry, Rapid Hardening Cementitous Materials for Concrete Repairs. For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume or a packaged rapid set mortar shall be used. Mixing of the rapid set mortar shall be according to the manufacturer's instructions.

#### CONSTRUCTION REQUIREMENTS

<u>General</u>. Impact Attenuators shall meet the testing criteria contained in National Cooperative Highway Research Program (NCHRP) Report 350 for the test level specified and shall be on the Department's approved list.

<u>Installation</u>. Regrading of slopes or approaches for the installation shall be as shown on the plans.

Attenuator bases, when required by the manufacturer, shall be constructed on a prepared subgrade according to the manufacturer's specifications. The surface of the base shall be slightly sloped or crowned to facilitate drainage.

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

When water filled attenuators are used between November 1 and April 15, they shall contain anti-freeze according to the manufacturer's recommendations.

<u>Markings</u>. Sand module impact attenuators shall be striped with alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes. There shall be at least two of each stripe on each module.

Other types of impact attenuators shall have a terminal marker applied to their nose and reflectors along their sides.

<u>Maintenance</u>. All maintenance of the impact attenuators shall be the responsibility of the Contractor until removal is directed by the Engineer.

<u>Relocate</u>. When relocation of temporary impact attenuators is specified, they shall be removed, relocated and reinstalled at the new location. The reinstallation requirements shall be the same as those for a new installation.

<u>Removal</u>. When the Engineer determines the temporary impact attenuators are no longer required, the installation shall be dismantled with all hardware becoming the property of the Contractor.

Surplus material shall be disposed of according to Article 202.03. Anti-freeze, when present, shall be disposed of/recycled according to local ordinances.

When impact attenuators have been anchored to the pavement, the anchor holes shall be repaired with rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

<u>Method of Measurement</u>. This work will be measured for payment as each, where each is defined as one complete installation.

Basis of Payment. This work will be paid for at the contract unit price per each for IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS, TEMPORARY (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.

### LIME GRADATION REQUIREMENTS (BDE)

Effective: November 1, 2002

Revise Articles 1012.03(e) and 1012.04(e) of the Standard Specifications to modify the maximum percent retained on the 150 µm (No. 100) sieve from "25" to "30".

## LIME STABILIZED SOIL MIXTURE (BDE)

Effective: November 1, 2004 Revised: April 1, 2006

Revise Section 310 of the Standard Specifications to read:

### "SECTION 310. LIME STABILIZED SOIL MIXTURE

**310.01 Description.** This work shall consist of the construction of a lime stabilized soil mixture, composed of soil, lime, and water which shall be considered as subbase.

**310.02 Materials.** Materials shall meet the requirements of the following Articles of Section 1000 - Materials:

Item	Article/Section
(a) Water	1002
(b) Hydrated Lime	1012.01
(c) By-Product, Non-Hydrated Lime (Note 1)	
(d) Lime Slurry (Note 2)	
(e) Soil (Note 3)	
(f) Bituminous Materials (Note 4)	1009.07, 1009.08, 1009.09

Note 1. By-product, non-hydrated lime (lime kiln dust) shall conform to the following requirements:

Parameter	Value
Total calcium and magnesium oxides (nonvolatile basis)	60 % minimum
Available calcium hydroxide (rapid sugar test, ASTM C 25) plus total MgO content calculated to be equivalent Ca(OH) <sub>2</sub>	30 % minimum
As received loss on ignition (carbon dioxide plus moisture, combined and free)	40 % maximum
Free water (as received basis)	4 % maximum
SO <sub>3</sub>	10 % maximum

The sieve analysis of the lime residue shall be as follows:

Sieve	Maximum Percent Retained
4.75 mm (No. 4)	5
600 μm (No. 30)	10
150 µm (No. 100)	30

Note 2. The lime used in the slurry shall be either hydrated lime conforming to the requirements of ASTM C 207, Type N, or quicklime conforming to the requirements for calcium lime as stated in ASTM C 5. The quantity of lime (hydrated lime or quicklime) in the slurry shall be a minimum of 35 percent and a maximum of 45 percent by total mass (weight) of slurry.

Note 3. The soil shall have a minimum clay content of 15 percent, determined according to AASHTO T 88; and shall have a maximum organic matter content of ten percent, determined according to AASHTO T 194. It shall also be a reactive soil. A reactive soil is defined as a soil which when mixed thoroughly with at least three percent lime and then compacted and cured for 48 hours at 49 °C (120 °F), will exhibit a compressive strength gain of at least 345 kPa (50 psi) greater than that obtained from similarly prepared untreated control specimens. The compressive strength will be determined according to AASHTO T 208.

Note 4. The bituminous materials used for curing shall be emulsified asphalt RS-1, RS-2, CRS-1, CRS-2, HFE 60, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70 or RC-250; or medium curing liquid asphalt MC-70 or MC-250.

**310.03 Equipment.** Equipment shall meet the requirements of the following Articles of Section 1100 - Equipment:

Item	Article/Section
(a) Rotary Speed Mixer	1101.06
(b) Disk Harrow (Note 1)	1101.02
(c) Distributor (Note 2)	
(d) Lime Slurry Equipment (Note 3)	

- Note 1. A disk harrow may be used when permitted by the Engineer.
- Note 2. The distributor shall be of a mechanical type and shall be approved by the Engineer.
- Note 3. The equipment used for mixing, transporting, slaking, and placing lime slurry shall be approved by the Engineer.

### **310.04 Proportioning.** Proportioning shall be as follows.

- (a) Samples. Samples of the lime and the project soil(s) shall be obtained and submitted to the Engineer at least 45 days prior to the construction of the lime stabilized soil mixture. Sample sizes shall be a minimum of 12 kg (25 lb) for the lime and 90 kg (200 lb) for the project soil(s).
- (b) Mix Design. The actual proportions of lime, soil, and water will be determined by the Engineer prior to construction using the submitted samples. The Engineer reserves the right to make such adjustments in proportions as are considered necessary during the progress of the work.

In no case shall proportions or type of lime be changed during the progress of the work without permission by the Engineer.

#### **CONSTRUCTION REQUIREMENTS**

**310.05 General.** The lime stabilized soil mixture shall be constructed when the temperature of the soil measured 150 mm (6 in.) below the surface, is above 10  $^{\circ}$ C (50  $^{\circ}$ F), and the ambient air temperature in the shade is above 7  $^{\circ}$ C (45  $^{\circ}$ F).

The quantity of lime stabilized soil mixture constructed shall be limited to that which can be covered by the succeeding pavement layer during the same construction season.

**310.06 Preparation of Subgrade.** The area to be processed shall be shaped to the proper grade and cross section. All vegetation and other objectionable material shall be removed from within the limits of lime treatment. In cut or at grade sections, the subgrade shall be prepared according to Article 301.03; except the minimum immediate bearing value (IBV) of the soil below the soil to be stabilized, shall be 3.0.

**310.07 Application of Lime.** The lime (slurry or dry) shall be applied uniformly on the soil. The application of lime shall be limited to that area where the initial mixing operations can be completed during the same working day.

After application of dry lime, but before the addition of any water, the surface of the subgrade shall be lightly scarified or disked. When lime slurry is used, the surface of the subgrade shall be lightly scarified or disked prior to application of the slurry.

Dry lime shall not be applied when wind conditions are such that blowing lime becomes objectionable to adjacent property owners or creates a hazard to traffic on adjacent highways, as determined by the Engineer.

Lime slurry shall be applied within 30 days of preparing and mixing the slurry, and shall be thoroughly agitated prior to application.

Lime (slurry or dry) that has been exposed to the open air for a period of six hours or more shall be replaced. Lime (slurry or dry) which has been damaged by hydration due to rain prior to or during the mixing operations, or has been displaced by the Contractor's equipment or other traffic after application shall be replaced.

**310.08 Mixing.** Mixing shall be performed in two stages as follows:

(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 50 mm (2 in.). The moisture content of the stabilized soil shall be between optimum and three percent above optimum.

After mixing, the surface shall be sealed with a light rolling. The mixture shall then be left to undergo a conditioning period of at least 48 hours. The mixture shall be maintained in a moist condition throughout the entire conditioning period.

(b) Final Mixing. After the required conditioning period, the mixture shall be uniformly mixed and maintained at approximately optimum moisture content. If the mixture contains clods, they shall be pulverized to meet the following requirements:

Sieve Size	Minimum %
	Passing
25 mm (1 in.)	100 %
4.75 mm (No. 4)	60 %

Mixing may be performed in a single stage when permitted by the Engineer, provided that the final mixing requirements are met.

**310.09 Compaction.** After final mixing, compaction shall be completed within the same working day.

The compacted, lime stabilized soil mixture shall have a minimum dry density of 95 percent of the laboratory standard dry density. The in-place dry density will be determined according to AASHTO T 191, or Illinois Modified AASHTO T 310 (Direct Transmission Density/Backscatter Moisture). The laboratory standard dry density will be determined according to AASHTO T 99.

**310.10 Finishing and Curing.** When compaction of the lime stabilized soil mixture is nearing completion, the surface shall be shaped to the required lines, grades, and cross section shown on the plans. For bituminous concrete base course and pavement (full-depth) and portland cement concrete base course and pavement, the surface of the lime stabilized soil mixture shall be brought to true shape and correct elevation according to Article 301.06, except that well compacted earth shall not be used to fill low areas. The surface shall be maintained in a moist condition by means of a fine spray during all finishing operations.

The lime stabilized soil mixture shall be cured for a period of seven days and maintained at optimum moisture content by sprinkling with water or applying bituminous materials according to Article 312.19. During this period, no equipment or traffic will be permitted on the completed work beyond that required for maintenance of curing.

**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.

No equipment or traffic shall be on the lime stabilized soil mixture after compaction until the required IBV is attained.

**310.12 Construction Joints.** Construction joints will not be required between each day's work unless there is a time lapse of seven days or more between the processing of adjacent sections. When construction joints are required, they shall be formed by cutting back 1 m (3 ft) into the completed work to form a vertical face. Otherwise, damage to completed work shall be avoided.

- **310.13 Maintenance.** The lime stabilized soil mixture shall be maintained in a manner satisfactory to the Engineer. Maintenance shall include immediate repairs of any defective or damaged portions.
  - **310.14 Method of Measurement.** This work will be measured for payment as follows.
  - (a) Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a).
  - (b) Measured Quantities. Processing lime stabilized soil mixture will be measured for payment in place and the area computed in square meters (square yards). The width of measurement will be as shown on the plans.

Lime will be measured for payment in metric tons (tons). The lime will be measured in trucks or freight cars. The Contractor shall furnish or arrange for use of scales of a type approved by the Engineer. When the lime is shipped in trucks, it will be measured at the place of loading, at the place of unloading, or at such other place as the Engineer may designate. The Engineer may accept original signed freight bills in lieu of determining the mass (weight).

Should the Contractor's method of construction require additional earth excavation or embankment due to requiring more than one lift to construct the lime stabilized soil mixture as shown on the plans, this extra earth excavation and embankment will not be measured for payment.

**310.15** Basis of Payment. This work will be paid for at the contract unit price per square meter (square yard) for PROCESSING LIME STABILIZED SOIL MIXTURE, of the thickness specified; and per metric ton (ton) for LIME."

#### MATERIAL TRANSFER DEVICE (BDE)

Effective Date: June 15, 1999 Revised Date: March 1, 2001

<u>Description.</u> This work shall consist of placing BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N90, except that these materials shall be placed using a material transfer device.

<u>Materials and Equipment.</u> The Material Transfer Device shall have a minimum surge capacity of 13.5 metric tons (15 tons), shall be self-propelled and capable of moving independent of the paver, and shall be equipped with the following:

- (a) Front-Dump Hopper and Conveyor. The conveyor shall provide a positive restraint along the sides of the conveyor to prevent material spillage.
- (b) Paver Hopper Insert. The paver hopper insert shall have a minimum capacity of 12.7 metric tons (14 tons).

(c) Mixer/Agitator Mechanism. This re-mixing mechanism shall consist of a segmented, antisegregation, re-mixing auger or two full-length longitudinal paddle mixers designed for the purpose of re-mixing the bituminous material. The longitudinal paddle mixers shall be located in the paver hopper insert.

<u>Construction Requirements.</u> The material transfer device shall be used for the placement of all mainline bituminous concrete surface course mixtures. The material transfer device speed shall be adjusted to the speed of the paver to maintain a continuous, non-stop paving operation.

The material transfer device will be permitted on partially completed segments of full-depth bituminous concrete pavement if the thickness of binder in place is 250 mm (10 in.) or greater.

<u>Structures.</u> The Material Transfer Device may be allowed to travel over structures under the following conditions:

- (a) Approval will be given by the Engineer.
- (b) The vehicle shall be emptied of bituminous material prior to crossing the structure and shall travel at crawl speed across the structure.
- (c) The tires of the vehicle shall travel on or in close proximity and parallel to the beam and/or girder lines of the structure.

<u>Method of Measurement.</u> This work will be measured for payment in metric tons (tons) for BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "D", N90 materials placed with a material transfer device.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per metric ton (ton) for MATERIAL TRANSFER DEVICE.

The various bituminous mixtures placed with the material transfer device will be paid for as specified in their respective specifications. The Contractor may choose to use the material transfer device for other applications on this project; however, no additional compensation will be allowed.

### MINIMUM LANE WIDTH WITH LANE CLOSURE (BDE)

Effective: January 1, 2005

Add the following paragraph after the eighth paragraph of Article 701.04(a) of the Standard Specifications.

"The minimum lane width adjacent to a closed lane during paving, patching, and other moving operations on freeways and expressways shall be a minimum of 3 m (10 ft). The 3 m (10 ft) shall be clear, unobstructed, and free of channelizing devices or other obstacles."

### **MULCHING SEEDED AREAS (BDE)**

Effective: January 1, 2005

Delete Article 251.02(a) of the Standard Specifications.

Add the following to Article 251.02 of the Standard Specifications:

Delete Article 251.03(b)(1) of the Standard Specifications.

Add the following to Article 251.03 of the Standard Specifications:

"(d) 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 50 mm (2 in.)."

Revise the first sentence of the first paragraph of Article 251.06(b) of the Standard Specifications to read:

"Mulch Methods 1, 2, 3, and 4 will be measured for payment in hectares (acres) of surface area mulched."

Revise Article 251.07 of the Standard Specifications to read:

"251.07 Basis of Payment. This work will be paid for at the contract unit price per hectare (acre) for MULCH, METHOD 1; MULCH, METHOD 2; MULCH, METHOD 3; or MULCH, METHOD 4; and at the contract unit price per square meter (square yard) for EROSION CONTROL BLANKET or HEAVY DUTY EROSION CONTROL BLANKET."

Add the following after the second paragraph of Article 1081.05(b) of the Standard Specifications:

"Chemical Compost Binder. Chemical compost binder shall be a commercially available product specifically recommended by the manufacturer for use as a compost stabilizer.

The compost binder shall be nonstaining and nontoxic to vegetation and the environment. It shall disperse evenly and rapidly and remain in suspension when agitated in water.

Prior to use of the compost binder, the Contractor shall submit a notarized certification by the manufacturer stating that it meets these requirements. Chemical compost binder shall be packaged, stored, and shipped according to the manufacturer's recommendations with the net quantity plainly shown on each package or container."

### **MULTILANE PAVEMENT PATCHING (BDE)**

Effective: November 1, 2002

Pavement broken and holes opened for patching shall be completed prior to weekend or holiday periods. Should delays of any type or for any reason prevent the completion of the work, temporary patches shall be constructed. Material able to support the average daily traffic and meeting the approval of the Engineer shall be used for the temporary patches. The cost of furnishing, placing, maintaining, removing and disposing of the temporary work, including traffic control, shall be the responsibility of the Contractor.

### **NOTCHED WEDGE LONGITUDINAL JOINT (BDE)**

Effective: July 1, 2004

<u>Description</u>. This work shall consist of constructing a notched wedge longitudinal joint between successive passes of bituminous concrete binder course that is placed in 57 mm (2 1/4 in.) or greater lifts on pavement that is open to traffic.

The notched wedge longitudinal joint shall consist of a 25 to 38 mm (1 to 1 1/2 in.) vertical notch at the centerline or lane line, a 230 to 300 mm (9 to 12 in.) uniform taper extending into the open lane, and a second 25 to 38 mm (1 to 1 1/2 in.) vertical notch (see Figure 1).

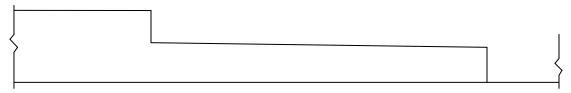


Figure 1

Equipment. Equipment shall meet the following requirements:

- a) Strike Off Device. The strike off device shall produce the notches and wedge of the joint and shall be adjustable. The device shall be attached to the paver and shall not restrict operation of the main screed.
- b) Wedge Roller. The wedge roller shall have a minimum diameter of 300 mm (12 in.), a minimum weight of 9 N/mm (50 lb/in.) of width, and a width equal to the wedge. The roller shall be attached to the paver.

### CONSTRUCTION REQUIREMENTS

<u>Joint Construction</u>. The notched wedge longitudinal joint shall be formed by the strike off device on the paver. The wedge shall then be compacted by the joint roller.

<u>Compaction</u>. Initial compaction of the wedge shall be as close to final density as possible. Final density requirements of the entire binder mat, including the wedge, shall remain unchanged.

<u>Prime Coat</u>. Immediately prior to placing the adjacent lift of binder, the bituminous material specified for the mainline prime coat shall be applied to the entire face of the notched wedge longitudinal joint. The material shall be uniformly applied at a rate of 0.2 to 0.5 L/sq m (0.05 to 0.1 gal/sq yd).

<u>Method of Measurement</u>. The notched wedge longitudinal joint will not be measured for payment.

The prime coat will be measured for payment according to Article 406.23 of the Standard Specifications.

<u>Basis of Payment</u>. The work of constructing the notched wedge longitudinal joint will not be paid for separately but shall be considered as included in the cost of the bituminous concrete binder course being constructed.

The prime coat will be paid for according to Article 406.24 of the Standard Specifications.

## **PARTIAL PAYMENTS (BDE)**

Effective: September 1, 2003

Revise Article 109.07 of the Standard Specifications to read:

"109.07 Partial Payments. Partial payments will be made as follows:

(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the amount of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved. Furthermore, progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

(b) Material Allowances. At the discretion of the Department, payment may be made for materials, prior to their use in the work, when satisfactory evidence is presented by the Contractor. Satisfactory evidence includes justification for the allowance (to expedite the work, meet project schedules, regional or national material shortages, etc.), documentation of material and transportation costs, and evidence that such material is properly stored on the project or at a secure location acceptable and accessible to the Department.

Material allowances will be considered only for nonperishable materials when the cost, including transportation, exceeds \$10,000 and such materials are not expected to be utilized within 60 days of the request for the allowance. For contracts valued under \$500,000, the minimum \$10,000 requirement may be met by combining the principal (material) product of no more than two contract items. An exception to this two item limitation may be considered for any contract regardless of value for items in which material (products) are similar except for type and/or size.

Material allowances shall not exceed the value of the contract items in which used and shall not include the cost of installation or related markups. Amounts paid by the Department for material allowances will be deducted from estimates due the Contractor as the material is used. Two-sided copies of the Contractor's cancelled checks for materials and transportation must be furnished to the Department within 60 days of payment of the allowances or the amounts will be reclaimed by the Department."

# PAVEMENT AND SHOULDER RESURFACING (BDE)

Effective: February 1, 2000 Revised: July 1, 2004

Revise Article 406.20 of the Standard Specifications to read:

**"406.20 Resurfacing Sequence.** The resurfacing operations shall satisfy the following requirements:

- (a) Before paving in a lane, the adjacent lane and its shoulder must be at the same elevation.
- (b) Each lift of resurfacing shall be completed, including shoulders, before the next lift is begun.
- (c) Elevation differences between lanes shall be eliminated within twelve calendar days.

Revise the first paragraph of Article 406.23 of the Standard Specifications to read:

"406.23 Method of Measurement. This work will be measured for payment according to the following:"

Revise the first sentence of the ninth paragraph of Article 406.23 of the Standard Specifications to read:

"When a Superpave Binder and Surface Course mixture is used on shoulders and is placed simultaneously with the traffic lane as specified in Section 482, the quantity of bituminous mixture placed on the traffic lane that will paid for will be limited to a calculated tonnage based upon actual mat width and length, plan thickness or a revised thickness authorized by the Engineer, and design mix weight per millimeter (inch) of thickness."

Delete the tenth paragraph of Article 406.23 of the Standard Specifications.

Revise the second paragraph of Article 482.06 of the Standard Specifications to read:

"On pavement and shoulder resurfacing projects, the resurfacing sequence shall be according to Article 406.20. When the Superpave mixture option is used, the shoulders may be placed, at the Contractor's option, simultaneously with the adjacent traffic lane for both the binder and surface courses, provided the specified density, thickness and cross slope of both the pavement and shoulder can be satisfactorily obtained."

## PAVEMENT THICKNESS DETERMINATION FOR PAYMENT (BDE)

Effective: April 1, 1999 Revised: January 1, 2004

<u>Description</u>. This work shall consist of determining pavement thickness for payment for full depth bituminous concrete and all pcc pavements. Pavement pay items that individually contain at least 840 sq m (1000 sq yd) of contiguous pavement will be subject to this Special Provision with the following exclusions: temporary pavements; variable width pavement; radius returns and side streets less than 125 m (400 ft) in length; and turn lanes of constant width less than 125 m (400 ft) in length. The areas of pavement excluded from the pay adjustment as described in this Special Provision will be cored according to Article 407.10 of the Standard Specifications. Temporary pavements are defined as pavements constructed and removed under this contract.

<u>Materials</u>. Rapid set materials shall be obtained from the Department's approved list of Packaged, Dry, Rapid Hardening Cementitous Materials For Concrete Repairs. Coarse aggregate may be added to the mortar if allowed by the manufacturer's instructions on the package. Mixing shall be according to the manufacture's recommendations.

<u>Equipment</u>. Cores shall be taken utilizing an approved coring machine. The cores shall have a diameter of 50 mm (2 in.). The cores shall be measured utilizing an approved measuring device.

#### **CONSTRUCTION REQUIREMENTS**

<u>Tolerance in Thickness</u>. Determination of the pavement thickness shall be performed after the pavement surface tests and all corrective grinding are complete according to Article 407.09 of the Standard Specifications. Adjustments made in the contract unit price for pavement thickness will be in addition to and independent of those made for the Profile Index.

The pavement will be divided into approximately equal lots of not more than 1500 m (5000 ft) in length. When the length of a continuous strip of pavement is less than 1500 m (5000 ft), these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement shall be grouped together to form lots of approximately 1500 m (5000 ft) 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.

Fifty millimeter (Two inch) cores shall be taken from the pavement by the Contractor at random locations selected by the Engineer. When computing the thickness of a lot, one core will be taken per sublot. Core locations will be specified by the Engineer prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, the measurement, 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 discarded.

<u>Patching Holes</u>. Upon completion of coring, all core holes shall be filled with a rapid set mortar or concrete. Only enough water to permit placement and consolidation by rodding shall be used, and the material shall be struck-off flush with the adjacent pavement.

For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume; or a packaged rapid set mortar shall be used. For a rapid set concrete mixture, a packaged rapid set mortar shall be combined with coarse aggregate according to the manufacturer's instructions or a packaged rapid set concrete shall be used. Mixing of a rapid set mortar or concrete shall be according to the manufacturer's instructions.

Deficient Sublot. When the thickness of the core in a sublot is deficient by more than ten percent of plan thickness, the Contractor will have the option of taking three additional cores selected at random by the Engineer within the same sublot at the Contractor's expense. The thickness of the additional three cores will be averaged with the original core thickness. When the average thickness shows the sublot to be deficient by ten percent or less, no additional action is necessary. If the Contractor chooses not to take additional cores, the pavement in the sublot shall be removed and replaced at the Contractor's expense. When additional cores are taken and the average thickness of the additional cores show the sublot to be deficient by more than ten percent, the pavement in that sublot shall be removed and replaced at the Contractor's expense. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing such thin pavement to remain in place. For Bituminous Concrete Pavement (Full Depth) allowed to remain in place, additional lift(s) may be placed, at the Contractor's expense, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The material thickness(es), areas to be overlaid, and method of placement used for additional lift(s) will be approved by the Engineer. When the thin pavement is removed and replaced or additional lifts are placed, the replacement pavement will be retested for thickness at the Contractor's expense. When the thin pavement is left in place and no additional lift(s) are placed, no payment will be made for the deficient pavement sublot. The thickness of the original core taken in the sublot will be used in determining the payment for the entire lot and no adjustment to the pay factor will be made for any corrective action taken.

<u>Deficient Lot</u>. After analyzing the cores, the Percent Within Limits will be calculated. A lot of pavement represented by the Percent Within Limits (PWL) of 60 percent or less, shall be removed and replaced at the Contractor's expense. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing such pavement to remain in place. For Bituminous Concrete Pavement (Full Depth), allowed to remain in place, additional lift(s) may be placed, at the Contractor's expense, to bring the deficient pavement to plan

thickness when the Engineer determines grade control conditions will permit such lift(s). The material, thickness(es), areas to be overlaid and method of placement used for the additional lift(s) will be approved by the Engineer. After either corrective action, the Contractor shall core the lot according to the "Coring Procedures" at no additional cost to the Department. The PWL will then be recalculated for the lot, however, the pay factor for the lot will be a maximum of 100 percent. When requested in writing by the Contractor, the Engineer, at his/her option, may permit in writing, the lot to remain in place. When the lot is left in place and no additional lifts are placed the pay factor for the lot will be based on the calculated PWL.

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 cores in addition to those specified. 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. These additional cores and locations will be determined prior to commencement of coring operations. When the additional cores show the pavement to be deficient by more than ten percent, additional cores shall be taken at locations determined by the Engineer to determine the limits of the deficient pavement area. The deficient pavement area will be defined as the area between two acceptable cores. An acceptable core is a core with a thickness of 90 percent or more of plan thickness. The defined pavement area shall be removed and replaced at the Contractor's expense. When requested by the Contractor, the Engineer, at his/her option, may permit in writing such thin pavement to remain in place. On Bituminous Concrete Pavement (Full Depth) allowed to remain in place, additional lift(s) may be placed to bring the deficient pavement to plan thickness when the Engineer determines that grade control conditions will permit such lift(s). The material, thickness(es), areas to be overlaid and method of placement for the additional lift(s) will be approved by the Engineer. When the thin pavement is removed and replaced or additional lifts are placed, the replacement pavement will be retested for thickness at the Contractor's expense. When the thin pavement is left in place and no additional lift(s) are placed, no payment will be made for the deficient payement. When the additional cores show the pavement to be deficient by ten percent or less the additional cores will be paid for according to Article 109.04. When the additional cores show the pavement to be deficient by more than ten percent the additional cores taken in the deficient area shall be at the Contractor's expense.

<u>Profile Index Adjustment</u>. After any section of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be tested for pavement smoothness and any necessary Profile Index adjustments and/or corrections will be made based on these final profile readings. Such surface testing shall be performed at the Contractor's expense.

<u>Core Analysis</u>. Cores will be analyzed according to the following:

#### (a) Definition:

x<sub>i</sub> = Individual values (core lengths) under consideration

n = Number of individual values under consideration (10 per lot)

x = Average of the values under consideration

LSL = Lower Specification Limit (LSL = 0.98 plan thickness for pavement)

 $Q_L$  = Lower Quality Index

S = Sample Standard Deviation

PWL = Percent Within Limits

Determine  $\bar{x}$  for the lot to the nearest two decimal places.

Compute the sample standard deviation to the nearest three decimal places using:

$$S = \sqrt{\frac{\sum (x_i - \overline{x})^2}{n - 1}} \quad \text{where} \quad \Sigma (x_i - \overline{x})^2 = (x_1 - \overline{x})^2 + (x_2 - \overline{x})^2 + \dots + (x_{10} - \overline{x})^2$$

Determine the Lower Quality Index to the nearest two decimal places using:

$$Q_{L} = \frac{\left(\bar{x} - LSL\right)}{S}$$

Determine the percentage that will fall above the Lower Specification Limit (LSL) by going to the attached Table and utilizing calculated  $Q_L$ . Read the appropriate PWL value from the Table. For  $Q_L$  values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.

<u>Pay Adjustment</u>. The following pay adjustment equation will be used to determine (to the nearest two decimal places) the pay factor for each lot.

Pay Factor (PF) in percent = 55 + 0.5 (PWL)

If  $\bar{x}$  for a lot is less than the plan thickness, the maximum pay factor for that lot will be 100 percent.

<u>Total Payment</u>. The payment will be based on the appropriate pay items in Sections 407, 420, and 421. The final payment will be adjusted according to the following equation:

Total Payment = TPF[CUP (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 entire pavement will be the average of the PF for all the lots, however, not more than 102 percent of plan quantity will be paid.

Deficient pavement is defined as an area of pavement represented by a sublot deficient by more than 10 percent which is left in place with no additional thickness added.

All work involved in determining the total payment will be included in the contract unit prices of the pay items involved.

	Percent Within Limits						
Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)						
0.00	50.00	0.40	65.07	0.80	78.43	1.20	88.76
0.01	50.38	0.41	65.43	0.81	78.72	1.21	88.97
0.02	50.77	0.42	65.79	0.82	79.02	1.22	89.17
0.03	51.15	0.43	66.15	0.83	79.31	1.23	89.38
0.04	51.54	0.44	66.51	0.84	79.61	1.24	89.58
0.05	51.92	0.45	66.87	0.85	79.90	1.25	89.79
0.06	52.30	0.46	67.22	0.86	80.19	1.26	89.99
0.07	52.69	0.47	67.57	0.87	80.47	1.27	90.19
0.08	53.07	0.48	67.93	0.88	80.76	1.28	90.38
0.09	53.46	0.49	68.28	0.89	81.04	1.29	90.58
0.10	53.84	0.50	68.63	0.90	81.33	1.30	90.78
0.11	54.22	0.51	68.98	0.91	81.61	1.31	90.96
0.12	54.60	0.52	69.32	0.92	81.88	1.32	91.15
0.13	54.99	0.53	69.67	0.93	82.16	1.33	91.33
0.14	55.37	0.54	70.01	0.94	82.43	1.34	91.52
0.15	55.75	0.55	70.36	0.95	82.71	1.35	91.70
0.16	56.13	0.56	70.70	0.96	82.97	1.36	91.87
0.17	56.51	0.57	71.04	0.97	83.24	1.37	92.04
0.18	56.89	0.58	71.38	0.98	83.50	1.38	92.22
0.19	57.27	0.59	71.72	0.99	83.77	1.39	92.39
0.20	57.65	0.60	72.06	1.00	84.03	1.40	92.56
0.21	58.03	0.61	72.39	1.01	84.28	1.41	92.72
0.22	58.40	0.62	72.72	1.02	84.53	1.42	92.88
0.23	58.78	0.63	73.06	1.03	84.79	1.43	93.05
0.24	59.15	0.64	73.39	1.04	85.04	1.44	93.21
0.25	59.53	0.65	73.72	1.05	85.29	1.45	93.37
0.26	59.90	0.66	74.04	1.06	85.53	1.46	93.52
0.27	60.28	0.67	74.36	1.07	85.77	1.47	93.67
0.28	60.65	0.68	74.69	1.08	86.02	1.48	93.83
0.29	61.03	0.69	75.01	1.09	86.26	1.49	93.98
0.30	61.40	0.70	75.33	1.10	86.50	1.50	94.13
0.31	61.77	0.71	75.64	1.11	86.73	1.51	94.27
0.32	62.14	0.72	75.96	1.12	86.96	1.52	94.41
0.33	62.51	0.73	76.27	1.13	87.20	1.53	94.54
0.34	62.88	0.74	76.59	1.14	87.43	1.54	94.68
0.35	63.25	0.75	76.90	1.15	87.66	1.55	94.82
0.36	63.61	0.76	77.21	1.16	87.88	1.56	94.95
0.37	63.98	0.77	77.51	1.17	88.10	1.57	95.08
0.38	64.34	0.78	77.82	1.18	88.32	1.58	95.20
0.39	64.71	0.79	78.12	1.19	88.54	1.59	95.33

<sup>\*</sup>For Q<sub>L</sub> values less than zero, subtract the table value from 100 to obtain PWL

Percent Within Limits (continued)						
Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)	Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)	Quality Index (Q <sub>L</sub> )*	Percent Within Limits (PWL)	
1.60 1.61 1.62 1.63 1.64	95.46 95.58 95.70 95.81 95.93	2.00 2.01 2.02 2.03 2.04	98.83 98.88 98.92 98.97 99.01	2.40 2.41 2.42 2.43 2.44	99.89 99.90 99.91 99.91 99.92	
1.65 1.66 1.67 1.68 1.69	96.05 96.16 96.27 96.37 96.48	2.05 2.06 2.07 2.08 2.09	99.06 99.10 99.14 99.18 99.22	2.45 2.46 2.47 2.48 2.49	99.93 99.94 99.94 99.95 99.95	
1.70 1.71 1.72 1.73 1.74	96.59 96.69 96.78 96.88 96.97	2.10 2.11 2.12 2.13 2.14	99.26 99.29 99.32 99.36 99.39	2.50 2.51 2.52 2.53 2.54	99.96 99.96 99.97 99.97 99.98	
1.75 1.76 1.77 1.78 1.79	97.07 97.16 97.25 97.33 97.42	2.15 2.16 2.17 2.18 2.19	99.42 99.45 99.48 99.50 99.53	2.55 2.56 2.57 2.58 2.59	99.98 99.98 99.98 99.99	
1.80 1.81 1.82 1.83 1.84	97.51 97.59 97.67 97.75 97.83	2.20 2.21 2.22 2.23 2.22	99.56 99.58 99.61 99.63 99.66	2.60 2.61 2.62 2.63 2.64	99.99 99.99 99.99 100.00 100.00	
1.85 1.86 1.87 1.88 1.89	97.91 97.98 98.05 98.11 98.18	2.25 2.26 2.27 2.28 2.29	99.68 99.70 99.72 99.73 99.75	<u>≥</u> 2.65	100.00	
1.90 1.91 1.92 1.93 1.94	98.25 98.31 98.37 98.44 98.50	2.30 2.31 2.32 2.33 2.34	99.77 99.78 99.80 99.81 99.83			
1.95 1.96 1.97 1.98 1.99	98.56 98.61 98.67 98.72 98.78	2.35 2.36 2.37 2.38 2.39	99.84 99.85 99.86 99.87 99.88			

<sup>\*</sup>For Q<sub>L</sub> values less than zero, subtract the table value from 100 to obtain PWL

## PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

## PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: July 1, 2004

All personnel, excluding flaggers, working outside of a vehicle (car or truck) within 7.6 m (25 ft) of pavement open to traffic shall wear a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/.green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments. Other types of garments may be substituted for the vest as long as the garments have manufacturers tags identifying them as meeting the ANSI Class 2 requirement.

### PLASTIC BLOCKOUTS FOR GUARDRAIL (BDE)

Effective: November 1, 2004

Add the following to Article 630.02 of the Standard Specifications:

"(h) Plastic Blockouts (Note 1.)

Note 1. Plastic blockouts, 150 mm (6 in.) deep, may be used in lieu of 150 mm (6 in.) deep wood block-outs for steel plate beam guardrail. The plastic blockouts shall be on the Department's approved list."

### PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)

Effective: November 1, 1993 Revised: April 2, 2004

<u>Description</u>. This work shall consist of furnishing, placing, and maintaining changeable message sign(s) at the locations(s) shown on the plans or as directed by the Engineer.

The sign(s) shall be trailer mounted. The message panel shall be at least 2.1 m (7 ft) above the pavement, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time. Character height shall be 450 mm (18 in.).

The message panel shall be of either a bulb matrix or disc matrix design controlled by an onboard computer capable of storing a minimum of 99 programmed messages for instant recall. The computer shall be capable of being programmed to accept messages created by the operator via an alpha-numeric keyboard and able to flash any six messages in sequence. The message panel shall also be capable of being controlled by a computer from a remote location via a cellular linkage. The Contractor shall supply the modem, the cellular phone, and the necessary software to run the sign from a remote computer at a location designated by the Engineer. The Contractor shall promptly program and/or reprogram the computer to provide the messages as directed by the Engineer.

The message panel shall be visible from 400 m (1/4 mile) under both day and night conditions. The letters shall be legible from 250 m (750 ft).

The sign shall include automatic dimming for nighttime operation and a power supply capable of providing 24 hours of uninterrupted service.

The Contractor shall provide all preventive maintenance efforts s(he) deems necessary to achieve uninterrupted service. If service is interrupted for any cause and not restored within 24 hours, the Engineer will cause such work to be performed as may be necessary to provide this service. The cost of such work shall be borne by the Contractor or deducted from current or future compensation due the Contractor.

When the sign(s) are displaying messages, they shall be considered a traffic control device. At all times when no message is displayed, they shall be considered equipment.

<u>Basis of Payment</u>. When portable changeable message signs are shown on the Standard, this work will not be paid for separately but shall be considered as included in the cost of the Standard.

For all other portable changeable message signs, this work will be paid for at the contract unit price per calendar month for each sign as CHANGEABLE MESSAGE SIGN.

## PORTLAND CEMENT (BDE)

Effective: January 1, 2005 Revised: November 1, 2005

Add the following paragraph after the last paragraph of Article 1001.01 of the Standard Specifications.

"For portland cement according to ASTM C 150, the bill of lading shall state if limestone has been added. The bill of lading shall also state that the limestone addition is not in excess of five percent by mass (weight) of the cement."

#### PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2002

Add the following paragraph after the fourth paragraph of Article 1103.01(b) of the Standard Specifications:

"The truck mixer shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Add the following paragraph after the first paragraph of Article 1103.01(c) of the Standard Specifications:

"The truck agitator shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Add the following paragraph after the first paragraph of Article 1103.01(d) of the Standard Specifications:

"The nonagitator truck shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Revise the first sentence of the first paragraph of Article 1103.02 of the Standard Specifications to read:

"The plant shall be approved before production begins according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

#### PORTLAND CEMENT CONCRETE PATCHING (BDE)

Effective: January 1, 2001 Revised: January 1, 2004

Revise Note 1 of Article 442.02 of the Standard Specifications, to read:

"Note 1. When patching ramp pavements and two lane pavements with two way traffic, Class PP-2, PP-3, or PP-4 concrete shall be used for Class A, Class B and Class C patching. For all other pavements, Class PP-1, PP-2, PP-3, or PP-4 concrete shall be used, at the Contractor's option, for Class A, Class B and Class C patching."

Delete Note 2 of Article 442.02 of the Standard Specifications.

Add the following to Article 442.02 of the Standard Specifications:

Note 5. The calcium chloride accelerator, when permitted by the Department, shall be Type L (Liquid) with a minimum of 32.0 percent by mass (weight) of calcium chloride."

Revise the first paragraph of Article 442.06(e) of the Standard Specifications to read:

"(e) Concrete Placement. For Class A, Class B and Class C Patches, concrete shall be placed according to Article 420.07 and governed by the limitations set forth in Article 1020.14, except that the maximum temperature of the mixed concrete immediately before placing shall be 35 °C (96 °F), the required use of an approved retarding admixture when the plastic concrete reaches 30 °C (85 °F) shall not apply."

Revise the first paragraph of Article 442.06(h) of the Standard Specifications to read:

"(h) Curing and Protection. In addition to Article 1020.13, when the air temperature is less than 13 °C (55 °F), the Contractor shall cover the patch with minimum R12 insulation until opening strength is reached. Insulation is optional when the air temperature is 13 °C - 35 °C (55 °F - 96 °F). Insulation shall not be placed when the air temperature is greater than 35 °C (96 °F)."

Revise the second paragraph of Article 701.05(e)(1)d.1. of the Standard Specifications to read:

"No open holes, broken pavement, or partially filled holes shall remain overnight for bituminous patching or when the Department specifies only Class PP-2, PP-3, or PP-4 concrete be used. The only exception is conditions beyond the control of the Contractor."

Revise Article 701.05(e)(2)b. of the Standard Specifications to read:

"b. Strength Tests. For patches constructed with Class PP-1, PP-2, PP-3, or PP-4 concrete, the pavement may be opened to traffic when test specimens cured with the patches have obtained a minimum flexural strength of 4150 kPa (600 psi) or a minimum compressive strength of 22,100 kPa (3200 psi) according to Article 1020.09.

For patches constructed with Class PP-2, PP-3, or PP-4 concrete which can obtain a minimum flexural strength of 4150 kPa (600 psi) or a minimum of compressive strength of 22,100 kPa (3200 psi) in 16 hours, the pavement may be opened to traffic at a lower opening strength. The specimens cured with the patches shall have obtained a minimum flexural strength of 2050 kPa (300 psi) or a minimum compressive strength of 11,000 kPa (1600 psi) according to Article 1020.09, to permit opening pavement to traffic.

With the approval of the Engineer, concrete strength may be determined according to AASHTO T 276. The strength-maturity relationship shall be developed from concrete which has an air content near the upper specification limit. The strength-maturity relationship shall be re-established if the mix design or materials are changed."

Revise Article 701.05(e)(2)c. of the Standard Specifications to read:

"c. Construction Operations. For Class PP-2, PP-3, or PP-4 concrete used on ramp pavements and two lane pavements with two way traffic, or when the Department specifies only Class PP-2, PP-3, or PP-4 concrete be used for other pavements, Contractor construction operations shall be performed in a manner which allows the patches to be opened the same day and before nightfall. If patches are not opened before nightfall, the additional traffic control shall be at the Contractor's expense. Any time patches cannot be opened before nightfall, the Contractor shall change subsequent construction operations or the mix design. The changes shall be at no additional cost to the Department."

Revise Table 1 of Article 1020.04 of the Standard Specifications by replacing Class PP concrete with the following:

"TABLE	"TABLE 1. CLASSES OF PORTLAND CEMENT CONCRETE AND MIX DESIGN CRITERIA					
Class of Concrete	Use	Specification Section Reference	Cement Factor kg/cu m (cwt/cu yd)	Max. Water/Cement Ratio kg/kg (lb/lb)		
PP-1	PCC Pavement Patching Bridge Deck Patching	442	Type I Cement 385 to 445 (6.50 to 7.50) Type III Cement 365 to 425 (6.20 to 7.20)	0.44		
PP-2	PCC Pavement Patching Bridge Deck Patching	442	Type I Cement 435 (7.35)	0.38		
PP-3	PCC Pavement Patching Bridge Deck Patching	442	Type III Cement 435 (7.35)	0.35		
PP-4	PCC Pavement Patching Bridge Deck Patching	442	Rapid Hardening Cement 355 to 370 (6.00 to 6.25)	0.50		

For PP-1, the Contractor has the option to replace the Type I Cement with Class C fly ash or ground granulated blast-furnace slag. The amount of cement replaced shall not exceed 15 percent by mass (weight), at a minimum replacement ratio of 1.5:1.

For PP-2, the Contractor has the option to replace the Type I cement with ground granulated blast-furnace slag. The amount of cement replaced shall not exceed 30 percent by mass (weight), at a minimum replacement ratio of 1:1.

For PP-3, in addition to the cement, 60 kg/cu m (100 lb/cu yd) of ground granulated blast-furnace slag and 30 kg/cu m (50 lb/cu yd) of microsilica are required. For an air temperature greater than 30  $^{\circ}$ C (85  $^{\circ}$ F), the Contractor has the option to replace the Type III cement with Type I cement.

For PP-4, the cement shall be from the Department's "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs".

TABLE 1.	TABLE 1. (CONT'D) CLASSES OF PORTLAND CEMENT CONCRETE AND MIX DESIGN CRITERIA					
Class of Concrete	Slump, mm (in.)	Mix Design Compressive Strength, kPa (psi) Hours 48	Mix Design Flexural Strength, kPa (psi) Hours 48	Air Content, %	Coarse Aggregate Gradations Permitted	
PP – 1	100 (4) Max	22,100 (3200)	4150 (600)	4.0 – 7.0	CA-7, CA-11, CA-13, CA14, or CA-16	
PP – 2	150 (6) Max	22,100 (3200)	4150 (600)	4.0 - 6.0	CA-7, CA-11, CA-13, CA14, or CA-16	
PP – 3	100 (4) Max	22,100 (3200)	4150 (600)	4.0 – 6.0	CA-7, CA-11, CA-13, CA14, or CA-16	
PP – 4	150 (6) Max	22,100 (3200)	4150 (600)	4.0 – 6.0	CA-7, CA-11, CA-13, CA14, or CA-16	

For PP-1, PP-2, PP-3 or PP-4; only CA-13, CA-14, or CA-16 may be used for bridge deck patching. In addition, the mix design strength at 48 hours shall be increased to 27,500 kPa (4,000 psi) compressive or 4,650 kPa (675 psi) flexural for bridge deck patching.

For PP-1, the slump may be increased to 150 mm (6 in.) Max if a high range water-reducing admixture is used."

Delete Article 1020.05(g) of the Standard Specifications.

#### PRECAST CONCRETE PRODUCTS (BDE)

Effective: July 1, 1999 Revised: November 1, 2004

<u>Product Approval.</u> Precast concrete products shall be produced according to the Department's current Policy Memorandum, "Quality Control/Quality Assurance Program for Precast Concrete Products". The Policy Memorandum applies to precast concrete products listed under the Products Key of the "Approved List of Certified Precast Concrete Producers".

<u>Precast Concrete Box Culverts</u>. Add the following sentence to the end of the fourth paragraph of Article 540.06:

"After installation, the interior and exterior joint gap between precast concrete box culvert sections shall not exceed 38 mm (1 1/2 in.)."

<u>Portland Cement Replacement</u>. For precast concrete products using Class PC concrete or other mixtures, portland cement replacement with fly ash or ground granulated blast-furnace (GGBF) slag shall be governed by the AASHTO or ASTM standard specification referenced in the Standard Specifications.

For all other precast concrete products using Class PC concrete or other mixtures, portland cement replacement with fly ash or GGBF slag shall be approved by the Engineer. Class F fly ash shall not exceed 15 percent by mass (weight) of the total portland cement and Class F fly ash. Class C fly ash shall not exceed 20 percent by mass (weight) of the total portland cement and Class C fly ash. GGBF slag shall not exceed 25 percent by mass (weight) of the total portland cement and GGBF slag.

Concrete mix designs, for precast concrete products, shall not consist of portland cement, fly ash and GGBF slag.

<u>Ready-Mixed Concrete</u>. Delete the last paragraph of Article 1020.11(a) of the Standard Specifications.

<u>Shipping</u>. When a precast concrete product has attained the specified strength, the earliest the product may be loaded, shipped, and used is on the fifth calendar day. The first calendar day shall be the date casting was completed.

<u>Acceptance</u>. Products which have been lot or piece inspected and approved by the Department prior to July 1, 1999, will be accepted for use on this contract.

### PREFORMED RECYCLED RUBBER JOINT FILLER (BDE)

Effective: November 1, 2002

Revise Article 503.02(c) of the Standard Specifications to read:

"(c) Preformed Expansion Joint Filler ......1051"

Revise Article 637.02(d) of the Standard Specifications to read:

"(d) Preformed Expansion Joint Filler ......1051"

Add the following Article to Section 1051 of the Standard Specifications:

"1051.10 Preformed Recycled Rubber Joint Filler. Preformed recycled rubber joint filler shall consist of ground tire rubber, free of steel and fabric, combined with ground scrap or waste polyethylene. It shall not have a strong hydrocarbon or rancid odor and shall meet the physical property requirements of ASTM D 1752. Water absorption by volume shall not exceed 5.0 percent."

#### RAP FOR USE IN BITUMINOUS CONCRETE MIXTURES (BDE)

Effective: January 1, 2000 Revised: April 1, 2002

Revise Article 1004.07 to read:

"1004.07 RAP Materials. RAP is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt pavement. RAP must originate from

routes or airfields under federal, state or local agency jurisdiction. The Contractor shall supply documentation that the RAP meets these requirements.

- (a) Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP will be allowed on top of the pile after the pile has been sealed.
  - (1) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only and represent the same aggregate quality, but shall be at least C quality or better, the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag), similar gradation and similar AC 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. Homogenous stockpiles shall meet the requirements of Article 1004.07(d). Homogeneous RAP stockpiles not meeting these requirements may be processed (crushing and screening) and retested.
  - (2) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only. The coarse aggregate in this RAP shall be crushed aggregate only and may represent more than one aggregate type and/or quality but shall be at least C quality or better. This RAP may have an inconsistent gradation and/or asphalt cement content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 16 mm (5/8 in.) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate RAP stockpiles shall meet the requirements of Article 1004.07(d).
  - (3) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP containing coarse aggregate (crushed or round) that is at least D quality or better. This RAP may have an inconsistent gradation and/or asphalt content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate DQ RAP shall meet the requirements of Article 1004.07(d).
    - Reclaimed Superpave Low ESAL IL-9.5L surface mixtures shall only be placed in conglomerate DQ RAP stockpiles due to the potential for rounded aggregate.
  - (4) Other. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Other". "Other" RAP stockpiles shall not be used in any of the Department's bituminous mixtures.
- (b) Use. The allowable use of a RAP stockpile shall be set by the lowest quality of coarse aggregate in the RAP stockpile. Class I/Superpave surface mixtures are designated as containing Class B quality coarse aggregate only. Superpave Low ESAL IL-19.0L binder and IL-9.5L surface mixtures are designated as Class C quality coarse aggregate only. Class I/Superpave binder mixtures, bituminous base course mixtures, and bituminous

base course widening mixtures are designated as containing Class C quality coarse aggregate only. Bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate only. Any mixture not listed above shall have the designated quality determined by the Department.

RAP containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in Class I/Superpave (including Low ESAL) surface mixtures only. RAP stockpiles for use in Class I/Superpave mixtures (including Low ESAL), base course, base course widening and Class B mixtures shall be either homogeneous or conglomerate RAP stockpiles except conglomerate RAP stockpiles shall not be used in Superpave surface mixture Ndesign 50 or greater. RAP for use in bituminous aggregate mixtures (BAM) shoulders and BAM stabilized subbase shall be from homogeneous, conglomerate, or conglomerate DQ stockpiles.

Additionally, RAP used in Class I/Superpave surface mixtures shall originate from milled or crushed mixtures only, in which the coarse aggregate is of Class B quality or better. RAP stockpiles for use in Class I/Superpave (including Low ESAL) binder mixes as well as base course, base course widening and Class B mixtures shall originate from milled or processed surface mixture, binder mixture, or a combination of both mixtures uniformly blended to the satisfaction of the Engineer, in which the coarse aggregate is of Class C quality or better.

- (c) Contaminants. RAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.
- (d) Testing. All RAP 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 450 metric tons (500 tons) for the first 1800 metric tons (2,000 tons) and one sample per 1800 metric tons (2,000 tons) thereafter. A minimum of five tests shall be required for stockpiles less than 3600 metric tons (4,000 tons).

For testing existing stockpiles, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP pile either insitu or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to extract representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to 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.

All of the extraction results shall be compiled and averaged for asphalt content and gradation. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	Homogeneous / Conglomerate	Conglomerate "D" Quality
25 mm (1 in.)		± 5%
12.5 mm (1/2 in.)	± 8%	± 15%
4.75 mm (No. 4)	± 6%	± 13%
2.36 mm (No. 8)	± 5%	
1.18 mm (No. 16)		± 15%
600 μm (No. 30)	± 5%	
75 μm (No. 200)	± 2.0%	± 4.0%
AC	± 0.4%	± 0.5%

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt content test results fall outside the appropriate tolerances, the RAP will not be allowed to be used in the Department's bituminous concrete mixtures unless the RAP representing the failing tests is removed from the stockpile to the satisfaction of the Engineer. 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)".

(e) Designs. At the Contractor's option, bituminous concrete mixtures may be constructed utilizing RAP material meeting the above detailed requirements. The amount of RAP included in the mixture shall not exceed the percentages specified in the plans.

RAP designs shall be submitted for volumetric verification. If additional RAP 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 stockpile and design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

(f) Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the bituminous mixture being produced.

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

## **SEEDING AND SODDING (BDE)**

Effective: July 1, 2004 Revised: August 1, 2005

Revise Class 1A and 2A seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

	"Table 1 - SEEDING MIXTURES					
Class – Type Seeds kg/hectare (lb/acre)						
1A	Salt Tolerant	Bluegrass	70 (60)			
	Lawn Mixture 7/	Perennial Ryegrass	20 (20)			
		Audubon Red Fescue	20 (20)			
		Rescue 911 Hard Fescue	20 (20)			
		Fults Salt Grass*	70 (60)			
2A	Salt Tolerant	Alta Fescue or Ky 31	70 (60)			
	Roadside Mixture 7/	Perennial Ryegrass	20 (20)			
		Audubon Red Fescue	20 (30)			
		Rescue 911 Hard Fescue	20 (30)			
		Fults Salt Grass 1/	70 (60)"			

Revise Note 7 of Article 250.07 of the Standard Specifications to read:

"Note 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 one growing season. The guarantee shall be submitted to the Engineer in writing prior to performing the work. After one growing season, areas not sustaining 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at the Contractor's expense."

Add the following sentence to Article 252.04 of the Standard Specifications:

"Sod shall not be placed during the months of July and August."

Revise the first paragraph of Article 252.08 of the Standard Specifications to read:

"252.08 Sod Watering. Within two hours after the sod has been placed, water shall be applied at a rate of 25 L/sq m (5 gal/sq yd). Additional water shall be applied every other day at a rate of 15 L/sq m (3 gal/sq yd) for a total of 15 additional waterings. During periods exceeding 26 °C (80 °F) or subnormal rainfall, the schedule of additional waterings may be altered with the approval of the Engineer."

Revise Article 252.09 of the Standard Specifications to read:

"252.09 Supplemental Watering. During periods exceeding 26 °C (80 °F) or subnormal rainfall, supplemental watering may be required after the initial and additional waterings. Supplemental watering shall be performed when directed by the Engineer. Water shall be applied at the rate specified by the Engineer within 24 hours of notice."

Revise the first and third paragraphs of Article 252.12 of the Standard Specifications to read:

"252.12 Method of Measurement. Sodding will be measured for payment in place and the area computed in square meters (square yards). To be acceptable for final payment, the sod shall be growing in place for a minimum of 30 days in a live, healthy condition. When directed by the Engineer, any defective or unacceptable sod shall be removed, replaced and watered by the Contractor at his/her own expense."

"Supplemental watering will be measured for payment in units of 1000 L (1000 gal) of water applied on the sodded areas. Waterings performed in addition to those required by Article 252.08 or after the 30 day establishment period will be considered as supplemental watering."

Replace the first paragraph of Article 252.13 of the Standard Specifications with the following:

- "252.13 Basis of Payment. Sodding will be paid for at the contract unit price per square meter (square yard) for SODDING or SODDING, SALT TOLERANT according to the following schedule.
  - (a) Initial Payment. Upon placement of sod, 25 percent of the pay item will be paid.
  - (b) Final Payment. Upon acceptance of sod, the remaining 75 percent of the pay item will be paid."

Revise Article 1081.03(b) of the Standard Specifications to read:

"(b) Salt Tolerant Sod.

Variety	Percent by Weight
Buffalo Grass	30%
Buchloe Dactyloides	
Amigo Fineleaf Tall Fescue	20%
Audubon Red Fescue	15%
Rescue 911 Hard Fescue	15%
Rugby Kentucky Bluegrass	5%
Fults Pucinnellia Distans	15%"

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

		TA	BLE II			
					Secondary	
	Hard Seed	Purity	Pure, Live	Weed	Noxious Weeds	
	Percent	Percent	Seed Percent	Percent	No. per kg (oz)	
Variety of Seeds	Maximum	Minimum	Minimum	Maximum	Max. Permitted*	Remarks
Alfalfa	20	92	89	0.50	211 (6)	1/
Brome Grass	-	90	75	0.50	175 (5)	-
Clover, Alsike	15	92	87	0.30	211 (6)	2/
Clover, Crimson	15	92	83	0.50	211 (6)	-
Clover, Ladino	15	92	87	0.30	211 (6)	-
Clover, Red	20	92	87	0.30	211 (6)	-
Clover, White Dutch	30	92	87	0.30	211 (6)	3/
Audubon Red Fescue	0	97	82	0.10	105 (3)	-
Fescue, Alta or Ky. 31	-	97	82	1.00	105 (3)	-
Fescue, Creeping Red	-	97	82	1.00	105 (3)	-
Fults Salt Grass	0	98	85	0.10	70 (2)	-
Kentucky Bluegrass	-	97	80	0.30	247 (7)	5/
Lespedeza, Korean	20	92	84	0.50	211 (6)	3/
Oats	-	92	88	0.50	70 (2)	4/
Orchard Grass	-	90	78	1.50	175 (5)	4/
Redtop	-	90	78	1.80	175 (S)	4/
Ryegrass, Perennial, Annual	-	97	85	0.30	175 (S)	4/
Rye, Grain, Winter	-	92	83	0.50	70 (2)	4/
Rescue 911 Hard Fescue	0	97	82	0.10	105 (3)	-
Timothy	-	92	84	0.50	175 (5)	4/
Vetch, Crown	30	92	67	1.00	211 (6)	3/ & 6/
Vetch, Spring	30	92	88	1.00	70 (2)	4/
Vetch, Winter	15	92	83	1.00	105 (3)	4/
Wheat, hard Red Winter	-	92	89	0.50	70 (2)	4/

#### SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004 Revised: November 1, 2005

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

Usage. Self-consolidating concrete may be used for precast concrete products.

Materials. Materials shall be according to the following.

(a) <u>Self-Consolidating Admixtures</u>. 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 that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F.

The viscosity modifying admixture will be evaluated according to the test methods and mix design proportions referenced in AASHTO M 194, except the following physical requirements shall be met:

- (1) For initial and final set times, the allowable deviation of the test concrete from the reference concrete shall not be more than 1.0 hour earlier or 1.5 hours later.
- (2) For compressive and flexural strengths, the test concrete shall be a minimum of 90 percent of the reference concrete at 3, 7 and 28 days.
- (3) The length change of the test concrete shall be a maximum 135 percent of the reference concrete. However, if the length change of the reference concrete is less than 0.030 percent, the length change of the test concrete shall be a maximum 0.010 percentage units greater than the reference concrete.
- (4) The relative durability factor of the test concrete shall be a minimum 80 percent.
- (b) <u>Fine Aggregate</u>. A fine aggregate used alone in the mix design shall not have an expansion greater than 0.30 percent per ASTM C 1260. For a blend of two or more fine aggregates, the resulting blend shall not have an expansion greater than 0.30 percent.

The aggregate blend expansion will be calculated as follows:

Aggregate Blend Expansion =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$ etc.

Where: a, b, c, ... = percent of aggregate blend A, B, C, ... = aggregate expansion according to ASTM C 1260

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 or as specified. The maximum cement factor shall be 418 kg/cu m (7.05 cwt/cu yd).
- (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 11, CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 shall not be used when the Engineer approves a horizontal flow distance greater than 9 m (30 ft). The fine aggregate proportion shall be a maximum 50 percent by mass (weight) of the total aggregate used.
- (e) The slump flow range shall be ± 50 mm (± 2 in.) of the Contractor target value, and within the overall Department range of 510 mm (20 in.) minimum to 710 mm (28 in.) maximum.

- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 100 mm (4 in.). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>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".

## SHOULDER RUMBLE STRIPS (BDE)

Effective: January 1, 2003

Delete the third paragraph of Article 482.06 of the Standard Specifications.

Delete the last two sentences of the fourth paragraph of Article 483.06 of the Standard Specifications.

Add the following to the Standard Specifications:

#### "SECTION 642. SHOULDER RUMBLE STRIPS

- **642.01 Description.** This work shall consist of constructing rumble strips in shoulders.
- **642.02** Equipment. The equipment shall be a self-propelled milling machine with a rotary-type cutting head(s). The cutting head(s) shall be suspended from the machine such that it can align itself with the slope of the shoulder and any irregularities in the shoulder surface. The teeth of the cutting head(s) shall be arranged to provide a smooth cut, with no more than a 3 mm (1/8 in.) difference between peaks and valleys.

Prior to commencement of the work, the Contractor shall demonstrate, to the satisfaction of the Engineer, the ability of the equipment to achieve the desired results without damaging the shoulder.

## **CONSTRUCTION REQUIREMENTS**

**642.03 General.** The rumble strips shall be cut to the dimensions shown on the plans. Guides shall be used to ensure consistent alignment, spacing and depth. In portland cement concrete shoulders, rumble strips may be formed according to the details shown on the plans immediately after the application of the final finish.

Rumble strips shall be omitted within the limits of structures, entrances, side roads, entrance ramps and exit ramps. In portland cement concrete shoulders, rumble strips shall not be placed within 150 mm (6 in.) of transverse joints.

Cuttings resulting from this operation shall be disposed of according to Article 202.03 of the Standard Specifications and the shoulders shall be swept clean.

- **642.04 Method of Measurement.** This work will be measured for payment in meters (feet) along the edge of pavement. Measurement will include both the cut and uncut (formed and unformed) sections of the shoulder rumble strips with exceptions for bridge decks, approach pavements, turn lanes, entrances and other sections where shoulder rumble strips have been omitted.
- **642.05** Basis of Payment. This work will be paid for at the contract unit price per meter (foot) for SHOULDER RUMBLE STRIPS."

## **SOIL MODIFICATION (BDE)**

Effective: November 1, 2004 Revised: April 1, 2006

Revise Section 302 of the Standard Specifications to read:

#### "SECTION 302. SOIL MODIFICATION

- **302.01 Description.** This work shall consist of constructing a modified soil layer composed of soil, water, and a modifier.
- **302.02 Materials.** Materials shall meet the requirements of the following Articles of Section 1000 Materials:

Item	Article/Section
(a) Type I Portland Cement	1001
(b) Type I (SM) Slag-Modified Portland Cement	1001
(c) Water	1002
(d) Hydrated Lime	1012.01
(e) By-Product, Hydrated Lime (Note 1)	
(f) By-Product, Non-Hydrated Lime (Note 2)	
(g) Lime Slurry (Note 3)	
(h) Class C Fly Ash (Note 4)	
(i) Soil (Note 5)	
(j) Bituminous Materials (Note 6)	1009.07, 1009.08, 1009.09

Note 1. By-product, hydrated lime (hydrator tailings) shall conform to the following requirements:

Parameter	Value
Total calcium and magnesium oxides (nonvolatile basis)	90 % minimum
Available calcium hydroxide (rapid sugar test, ASTM C 25) plus total MgO content calculated to be equivalent Ca(OH) <sub>2</sub>	70 % minimum
As received loss on ignition (carbon dioxide plus moisture, combined and free)	5 % maximum
Free water (as-received basis)	4 % maximum
SO <sub>3</sub>	10 % maximum

The sieve analysis of the lime residue shall be as follows:

Sieve	Maximum Percent Retained
4.75 mm (No. 4)	0
600 μm (No. 30)	10
150 µm (No. 100)	60

Note 2. By-product, non-hydrated lime (lime kiln dust) shall conform to the following requirements:

Parameter	Value
Total calcium and magnesium oxides (nonvolatile basis)	60 % minimum
Available calcium hydroxide (rapid sugar test, ASTM C 25) plus total MgO content calculated to be equivalent Ca(OH) <sub>2</sub>	30 % minimum
As received loss on ignition (carbon dioxide plus moisture, combined and free)	40 % maximum
Free water (as received basis)	4 % maximum
SO <sub>3</sub>	10 % maximum

The sieve analysis of the lime residue shall be as follows:

Sieve	Maximum Percent Retained
4.75 mm (No. 4)	5
600 µm (No. 30)	10
150 µm (No. 100)	30

Note 3. The lime used in the slurry shall be either hydrated lime conforming to the requirements of ASTM C 207, Type N, or quicklime conforming to the requirements for calcium lime as stated in ASTM C 5. The quantity of lime (hydrated lime or quicklime) in the slurry shall be a minimum of 35 percent and a maximum of 45 percent by total mass (weight) of slurry.

Note 4. The fly ash shall meet the physical and chemical requirements of AASHTO M 295, Class C.

Note 5. When lime (slurry or dry) is used as the modifier, the soil shall have a minimum clay content of 15 percent, determined according to AASHTO T 88; and shall have a maximum organic matter content of ten percent, determined according to AASHTO T 194.

Note 6. The bituminous materials used for curing shall be emulsified asphalt RS-1, RS-2, CRS-1, CRS-2, HFE 60, HFE 90, or HFE 150; rapid curing liquid asphalt RC-70 or RC-250; or medium curing liquid asphalt MC-70 or MC-250.

**302.03 Equipment.** Equipment shall meet the requirements of the following Articles of Section 1100 - Equipment:

Item	Article/Section
(a) Rotary Speed Mixer	1101.06
(b) Disk Harrow (Note 1)	1101.02
(c) Distributor (Note 2)	
(d) Lima Churry Equipment (Note 2)	

- (d) Lime Slurry Equipment (Note 3)
  - Note 1. A disk harrow may be used for soil modification with portland cement, slag-modified portland cement, or lime (slurry or dry) when permitted by the Engineer.
  - Note 2. The distributor shall be of a mechanical type and shall be approved by the Engineer.
  - Note 3. The equipment used for mixing, transporting, slaking, and placing lime slurry shall be approved by the Engineer.

#### **302.04 Proportioning.** Proportioning shall be as follows.

- (a) Samples. Samples of the soil modifier(s) and the project soil(s) shall be obtained and submitted to the Engineer at least 45 days prior to the construction of the modified soil. Sample sizes shall be a minimum of 12 kg (25 lb) for the modifier(s) and 90 kg (200 lb) for the project soil(s).
- (b) Mix Design. The actual proportions of modifier, soil, and water will be determined by the Engineer prior to construction using the submitted samples. The Engineer reserves the right to make such adjustments in proportions as are considered necessary during the progress of the work.

In no case shall proportions or type of modifier be changed during the progress of the work without permission by the Engineer.

#### **CONSTRUCTION REQUIREMENTS**

**302.05 General.** The modified soil shall be constructed when the temperature of the soil, measured 150 mm (6 in.) below the surface, is above 10  $^{\circ}$ C (50  $^{\circ}$ F); and the ambient air temperature in the shade is above 7  $^{\circ}$ C (45  $^{\circ}$ F).

The quantity of modified soil constructed shall be limited to that which can be covered by the succeeding pavement layer during the same construction season.

- **302.06 Preparation of Subgrade.** The area to be processed shall be shaped to the proper grade and cross section. All vegetation and other objectionable material shall be removed from within the limits of modification. In cut or at grade sections, the subgrade shall be prepared according to Article 301.03; except the minimum immediate bearing value (IBV) of the soil below the soil to be modified, shall be according to the Department's "Subgrade Stability Manual".
- **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 incorporated into the soil within the same working day.

After application of dry modifiers, but before the addition of any water, the surface of the subgrade shall be lightly scarified or disked. When lime slurry is used, the surface of the subgrade shall be lightly scarified or disked prior to application of the slurry.

Dry modifiers shall not be applied when wind conditions are such that blowing modifier becomes objectionable to adjacent property owners or creates a hazard to traffic on adjacent highways, as determined by the Engineer.

Lime slurry shall be applied within 30 days of preparing and mixing the slurry, and shall be thoroughly agitated prior to application.

Modifier which has been damaged by hydration due to rain prior to or during the mixing operations, or has been displaced by the Contractor's equipment or other traffic after application shall be replaced.

**302.08 Mixing.** The modifier, soil, and water shall be thoroughly mixed. Mixing shall continue until a homogeneous layer of the required thickness has been obtained and a minimum of 75 percent of the mixture is smaller than 25 mm (1 in.). The moisture content of the modified soil shall be between optimum and three percent above optimum.

For soil modification with fly ash, more than one pass of the rotary speed mixer may be necessary to obtain a homogenous mixture. If more than one pass of the rotary speed mixer is required, the application of the fly ash shall be modified such that 25 percent of the specified fly ash quantity is applied and mixed with a down-cut motion as a preparation for the final pass of the rotary speed mixer. The remaining specified quantity of fly ash shall be applied prior to the final pass of the rotary speed mixer. Mixing shall continue until a minimum 75 percent of the mixture is smaller than 25 mm (1 in.).

**302.09 Compaction.** Compaction of soil modified with portland cement, slag-modified portland cement, or fly ash shall be completed no later than one hour after mixing begins.

Compaction of soil modified with hydrated lime or by-product non-hydrated lime shall be completed within the same working day.

Compaction of soil modified with lime slurry shall begin within 24 hours.

Compaction of soil modified with by-product hydrated lime shall be delayed a minimum of 24 hours. The Engineer may require additional water or further mixing prior to the final compaction of soil modified with by-product hydrated lime. In no case shall compaction be started later than three days after mixing unless approved by the Engineer. If compaction is to be delayed, the surface of the soil shall be crown-graded and sealed from moisture loss by either blade dragging or light rolling immediately after mixing.

The compacted, modified soil shall have a minimum dry density of 95 percent of the laboratory standard dry density. The in place dry density will be determined according to AASHTO T 191, or Illinois Modified AASHTO T 310 (Direct Transmission Density/Backscatter Moisture). The laboratory standard dry density will be determined according to AASHTO T 99.

**302.10 Finishing and Curing.** When multiple lifts are used to construct the modified soil layer, the top lift shall be a minimum of 150 mm (6 in.) thick when compacted.

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 bituminous concrete 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 301.06, except that 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 7 °C (45 °F) during curing.

Soils modified with lime (slurry or dry) generally will not require curing unless the minimum stability requirements in Article 302.11 cannot be met. If it has been determined by the Engineer that curing is necessary, the curing requirements stated above shall apply.

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 312.19. 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 12 mm (0.5 in.) or more in the finished modified soil, shall be removed, or the rutting otherwise prevented, as directed by the Engineer.

**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.

No equipment or traffic shall be on the modified soil after compaction until the required IBV is attained.

- **302.12 Method of Measurement.** This work will be measured for payment as follows.
- (a) Contract Quantities. The requirements for the use of contract quantities shall conform to Article 202.07(a).
- (b) Measured Quantities. Processing modified soils will be measured for payment in place and the area computed in square meters (square yards). The width for measurement will be as shown on the plans.

Modifier will be measured for payment in metric tons (tons). The modifier will be measured in trucks or freight cars. The Contractor shall furnish or arrange for use of scales of a type approved by the Engineer. When the modifier is shipped in trucks, it shall be measured at the place of loading, at the place of unloading, or at such other place as the Engineer may designate. The Engineer may accept original signed freight bills in lieu of determining the mass (weight).

Should the Contractor's method of construction require additional earth excavation or embankment due to requiring more than one lift to construct the modified soil layer as shown on the plans, this extra earth excavation and embankment will not be measured for payment.

**302.13** Basis of Payment. This work will be paid for at the contract unit price per square meter (square yard) for PROCESSING MODIFIED SOIL, of the thickness specified; and per metric ton (ton) for LIME, FLY ASH, PORTLAND CEMENT, or SLAG-MODIFIED PORTLAND CEMENT."

#### STABILIZED SUBBASE AND BITUMINOUS SHOULDERS SUPERPAVE (BDE)

Effective: April 1, 2002 Revised: August 1, 2005

<u>Description</u>. This work shall consist of constructing stabilized subbase and bituminous shoulders Superpave according to Sections 312 and 482 respectively, of the Standard Specifications and the special provision, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures" except as modified herein.

Revise Article 312.03(b) of the Standard Specifications to read:

"(b) RAP Material (Note 3)"

Revise Note 2 of Article 312.03 of the Standard Specifications to read:

"Note 2. Gradation CA 6, CA 10, or CA 12 shall be used."

Revise Note 3 of Article 312.03 of the Standard Specifications to read:

"Note 3. RAP shall meet the requirements of the special provision "RAP for Use in Bituminous Concrete Mixtures". RAP containing steel slag shall be permitted for use in top-lift surface mixtures only."

Revise Note 4 of Article 312.03 of the Standard Specifications to read:

"Note 4. Unless otherwise specified on the plans, the bituminous material shall be performance graded asphalt cement, PG58-22. When more than 15 percent RAP is used, a softer PG binder may be required as determined by the Engineer."

Revise Article 312.06 of the Standard Specifications to read:

"312.06 Mixture Design. The Contractor shall submit mix designs for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have completed the course, "Superpave Mix Design Upgrade". The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below:

AASHTO MP 2	Standard Specification for Superpave Volumetric Mix Design
AASHTO R 30	Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)
AASHTO PP 28	Standard Practice for Designing Superpave HMA
AASHTO T 209	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
AASHTO T 312	Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO T 308	Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method

(a) Job Mix Formula (JMF). The JMF shall be according to the following limits:

<u>ingredient</u>	Percent by Dry Weight
Aggregate	94.0 to 96.0
Asphalt Cement	
Dust/AC Ratio	

<sup>\*</sup>Upper limit may be raised for the lower or top lifts if the Contractor elects to use a highly absorptive coarse and/or fine aggregate requiring more than six percent asphalt. The additional asphalt shall be furnished at no cost to the Department.

When RAP material is being used, the JMF shall be according to the following limits:

<u>Ingredient</u>	Percent by Dry Weight
Virgin Aggregate(s)	
RAP Material(s) (Note 1)	
Mineral Filler (if required)	0 to 5.0
Asphalt Cement	4.0 to 7.0
Dust/AC Ratio	

Note 1. If specified on the plans, the maximum percentage of RAP shall be as specified therein.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.

(b) Volumetric Requirements.

Design Compactive	Design Air Voids
Effort	Target (%)
N <sub>DES</sub> = 30	2.0

(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 using 4 in. Marshall bricks. To be considered acceptable by the Engineer as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSR) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSR values less than 0.75 will be considered unacceptable.

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. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.

Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Engineer. The method of application shall be according to Article 406.12 of the Standard Specifications."

Revise Article 312.08 of the Standard Specifications to read:

"312.08 Mixture Production. When a hot-mix plant conforming to Article 1102.01 is used, the aggregate shall be dried and heated in the revolving dryer to a temperature of 120  $^{\circ}$ C (250  $^{\circ}$ F) to 175  $^{\circ}$ C (350  $^{\circ}$ F).

The aggregate and bituminous material used in the bituminous aggregate mixture shall be measured separately and accurately by weight or by volume. When the aggregate is in the mixer, the bituminous material shall be added and mixing continued for a minimum of 35 seconds and until a homogeneous mixture is produced in which all particles of the aggregate are coated. The mixing period, size of the batch and the production rate shall be approved by the Engineer.

The ingredients shall be heated and combined in such a manner as to produce a mixture which, when discharged from the mixer, shall be workable and vary not more 10 °C (20 °F) from the temperature set by the Engineer.

When RAP material(s) is used in the bituminous aggregate mixture, the virgin aggregate(s) shall be dried and heated in the dryer to a temperature that will produce the specified resultant mix temperature when combined with the RAP material.

The heated virgin aggregates and mineral filler shall be combined with RAP material in such a manner as to produce a bituminous mixture which when discharged from the mixer shall not vary more than 15  $^{\circ}$ C (30  $^{\circ}$ F) from the temperature set by the Engineer. The combined ingredients shall be mixed for a minimum of 35 seconds and until a homogeneous mixture as to composition and temperature is obtained. The total mixing time shall be a minimum of 45 seconds consisting of dry and wet mixing. Variation in wet and dry mixing times may be permitted, depending on the moisture content and amount of salvaged material used. The mix temperature shall not exceed 175  $^{\circ}$ C (350  $^{\circ}$ F). Wide variations in the mixture temperature will be cause for rejection of the mix.

- (a) Personnel. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".
- (b) Required Tests. Testing for stabilized subbase and bituminous shoulders shall be conducted to control the production of the bituminous mixture using the test methods identified and performed at a frequency not less than indicated in the following table.

Parameter	Frequency of Tests Non-Class I Mixtures	Test Method
Aggregate Gradation  Hot bins for batch and continuous plants.  Individual cold-feeds or combined belt-feed for drier-drum plants.  (% passing seives: 12.5 mm (1/2 ln.), 4.75 mm (No. 4), 75 µm (No. 200))	1 gradation per day of production.  The first day of production shall be washed ignition oven test on the mix. Thereafter, the testing shall alternate between dry gradation and washed ignition oven test on the mix.  The dry gradation and the washed ignition oven test results shall be plotted on the same control chart.	Illinois Procedure (See Manual of Test Procedures for Materials).
Asphalt Content by ignition oven (Note 1.)	1 per day	Illinois-Modified AASHTO T 308

Air Voids		
Bulk Specific Gravity of Gyratory Sample	1 per day	Illinois-Modified AASHTO T 312
Maximum Specific Gravity of Mixture	1 per day	Illinois-Modified AASHTO T 209

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the AC content.

During production, the ratio of minus 75  $\mu$ m (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.6, and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75  $\mu$ m (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resumption of production.

During production, mixture containing an anti-stripping additive will be tested by the Engineer for stripping according to Illinois Modified AASHTO T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

(c) Control Charts/Limits. Control charts/limits shall be according to QC/QA requirements for Non-Class I Mixtures except air voids and density shall be plotted on the control charts within the following control limits:

Individual Test Control Limits	
Voids	±1.2%
Density <sup>1/</sup>	93.0 – 97.4% of G <sub>mm</sub>

1/ Except when placed as first lift over unimproved subgrade. When the exception applies, the first lift over unimproved subgrade shall be compacted to an average density of not less than 95 percent nor greater than 102 percent of the target density obtained on the growth curve.

Replace Article 312.10 of the Standard Specifications with the following:

"312.10 Placing. After the subgrade has been compacted and is acceptable to the Engineer, the bituminous aggregate mixture shall be spread upon it with a mechanical spreader. The maximum compacted thickness of each lift shall be 150 mm (6 in.) provided the required density is obtained. The minimum compacted thickness of each lift shall be according to the following table:

Nominal Maximum	Minimum Compacted
Aggregate Size of Mixture	Lift Thickness
CA 12 – 12.5 mm (1/2 in.)	38 mm (1 1/2 in.)
CA 10 - 19 mm (3/4 in.)	57 mm (2 1/4 in.)
CA 6 – 25 mm (1 in.)	76 mm (3 in.)

The surface of each lift shall be clean and dry before succeeding lifts are placed."

Revise Article 482.02 of the Standard Specifications to read:

"482.02 Materials. Materials shall meet the requirements of Article 312.03. For the top lift, the aggregate used shall meet the gradation requirements for a CA 10 or CA 12. Blending of aggregates to meet these gradation requirements will be permitted."

Revise the first paragraph of Article 482.04 of the Standard Specifications to read:

"482.04 General. For pavement and shoulder resurfacing projects, Superpave binder and surface course mixtures may be used in lieu of bituminous aggregate mixture for the resurfacing of shoulders, at the option of the Contractor, or shall be used when specified on the plans."

Revise Article 482.04(c) of the Standard Specifications to read:

"(c) Mixture Production .......312.08"

Revise Article 482.05 of the Standard Specifications to read:

"482.05 Composition of Bituminous Aggregate Mixture. The composition of the mixture shall be according to Article 312.06, except that the amount of asphalt cement used in the top lift shall be increased up to 0.5 percent more than that required in the lower lifts. For resurfacing projects when the Superpave binder and surface course mixtures option is used, the asphalt cement used in the top lift shall not be increased. Superpave mixtures used on the top lift of such shoulders shall meet the gradation requirements of the special provision "Superpave Bituminous Concrete Mixtures".

For shoulder and strip construction, the composition of the Superpave binder and surface course shall be the same as that specified for the mainline pavement."

In the following locations of Section 482 of the Standard Specifications, change "Class I" to "Superpave":

the second paragraph of Article 482.04 the first sentence of the second paragraph of Article 482.06 the first sentence of the fourth paragraph of Article 482.06 the second sentence of the fourth paragraph of Article 482.06 the first sentence of the third paragraph of Article 482.08(b)

Revise the first paragraph of Article 482.06 of the Standard Specifications to read:

"482.06 Placing. This work shall be according to Article 312.10 as modified herein. The mechanical spreader for the top lift of shoulders shall meet the requirements of Article 1102.03 when the shoulder width is 3 m (10 ft) or greater."

Revise Article 482.09 of the Standard Specifications to read:

"482.09 Basis of Payment. When bituminous shoulders are constructed along the edges of the completed pavement structure, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS SHOULDERS SUPERPAVE of the thickness specified. The specified thickness shall be the thickness shown on the plans at the edge of the pavement.

On pavement and shoulder resurfacing projects, the shoulder resurfacing will be paid for at the contract unit price per metric ton (ton) for BITUMINOUS SHOULDERS SUPERPAVE.

The construction of shoulder strips for resurfacing pavements will be paid according to the special provision, "Superpave Bituminous Concrete Mixtures"."

#### SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

#### SUBGRADE PREPARATION (BDE)

Effective: November 1, 2002

Revise the tenth paragraph of Article 301.03 of the Standard Specifications to read:

"Equipment of such weight, or used in such a way as to cause a rut in the finished subgrade of 13 mm (1/2 in.) or more in depth, shall be removed from the work or the rutting otherwise prevented."

#### SUPERPAVE BITUMINOUS CONCRETE MIXTURES (BDE)

Effective: January 1, 2000 Revised: April 1, 2004

<u>Description</u>. This work shall consist of designing, producing and constructing Superpave bituminous concrete mixtures using Illinois Modified Strategic Highway Research Program (SHRP) Superpave criteria. This work shall be according to Sections 406 and 407 of the Standard Specifications and the special provision, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures", except as follows.

#### Materials.

- (a) Fine Aggregate Blend Requirement. The Contractor may be required to provide FA 20 manufactured sand to meet the design requirements. For mixtures with Ndesign ≥ 90, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation.
- (b) Reclaimed Asphalt Pavement (RAP). If the Contractor is allowed to use more than 15 percent RAP, as specified in the plans, a softer performance-graded binder may be required as determined by the Engineer.

RAP shall meet the requirements of the special provision, "RAP for Use in Bituminous Concrete Mixtures".

RAP will not be permitted in mixtures containing polymer modifiers.

RAP containing steel slag will be permitted for use in top-lift surface mixtures only.

(c) Bituminous Material. The asphalt cement (AC) shall be performance-graded (PG) or polymer modified performance-graded (SBS-PG or SBR-PG) meeting the requirements of Article 1009.05 of the Standard Specifications for the grade specified on the plans.

The following additional guidelines shall be used if a polymer modified asphalt is specified:

- (1) The polymer modified asphalt cement shall be shipped, maintained, and stored at the mix plant according to the manufacturer's requirements. Polymer modified asphalt cement shall be placed in an empty tank and shall not be blended with other asphalt cements.
- (2) The mixture shall be designed using a mixing temperature of  $163 \pm 3$  °C ( $325 \pm 5$  °F) and a gyratory compaction temperature of  $152 \pm 3$  °C ( $305 \pm 5$  °F).
- (3) Pneumatic-tired rollers will not be allowed unless otherwise specified by the Engineer. A vibratory roller meeting the requirements of Article 406.16 of the Standard Specifications shall be required in the absence of the pneumatic-tired roller.

#### **Laboratory Equipment**.

- (a) Superpave Gyratory Compactor. The superpave gyratory compactor (SGC) shall be used for all QC/QA testing.
- (b) Ignition Oven. The ignition oven shall be used to determine the AC content. The ignition oven shall also be used to recover aggregates for all required washed gradations.

The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the AC content.

<u>Mixture Design</u>. The Contractor shall submit mix designs, for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have successfully completed the course, "Superpave Mix Design Upgrade". Articles 406.10 and 406.13 of the Standard Specifications shall not apply. The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below.

AASHTO MP 2	Standard Specification for Superpave Volumetric Mix Design
AASHTO R 30	Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)
AASHTO PP 28	Standard Practice for Designing Superpave HMA
AASHTO T 209	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
AASHTO T 312	Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO T 308	Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method

(a) Mixture Composition. The ingredients of the bituminous mixture shall be combined in such proportions as to produce a mixture conforming to the composition limits by weight. The gradation mixture specified on the plans shall produce a mixture falling within the limits specified in Table 1.

TABLE 1. MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>								
Sieve	IL-25.	0 mm	IL-19.	0 mm	IL-12.	mm⁴′	IL-9.5	mm <sup>4/</sup>
Size	min	max	min	max	Min	max	min	max
37.5 mm (1 1/2 in.)		100						
25 mm (1 in.)	90	100		100				
19 mm (3/4 in.)		90	82	100		100		
12.5 mm (1/2 in.)	45	75	50	85	90	100		100
9.5 mm (3/8 in.)						89	90	100
4.75 mm (#4)	24	42 <sup>2/</sup>	24	50 <sup>2/</sup>	28	65	28	65
2.36 mm (#8)	16	31	20	36	28	48 <sup>3/</sup>	28	48 <sup>3/</sup>
1.18 mm (#16)	10	22	10	25	10	32	10	32
600 μm (#30)								
300 μm (#50)	4	12	4	12	4	15	4	15
150 μm (#100)	3	9	3	9	3	10	3	10
75 μm (#200)	3	6	3	6	4	6	4	6

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 40 percent passing the 4.75 mm (#4) sieve for binder courses with Ndesign ≥ 90.
- 3/ The mixture composition shall not exceed 40 percent passing the 2.36 mm (#8) sieve for surface courses with Ndesign  $\geq$  90.
- 4/ The mixture composition for surface courses shall be according to IL-12.5 mm or IL-9.5 mm, unless otherwise specified by the Engineer.

One of the above gradations shall be used for leveling binder as specified in the plans and according to Article 406.04 of the Standard Specifications.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.

- (b) Dust/AC Ratio for Superpave. The ratio of material passing the 75  $\mu$ m (#200) sieve to total asphalt cement shall not exceed 1.0 for mixture design (based on total weight of mixture).
- (c) Volumetric Requirements. The target value for the air voids of the hot mix asphalt (HMA) shall be 4.0 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix and shall conform to the requirements listed in Table 2.

	TABLE 2. VOLUMETRIC REQUIREMENTS						
	Voids in the Mineral Aggregate (VMA), % minimum				Voids Filled with Asphalt (VFA),		
Ndesign	IL-25.0	IL-19.0	%				
50					65 - 78		
70	12.0	13.0	14.0	15			
90	12.0	13.0	65 - 75				
105							

(d) 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 T 283 using 4 in. Marshall bricks. To be considered acceptable by the Department as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSRs) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSRs less than 0.75 will be considered unacceptable.

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. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.

Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Department. The method of application shall be according to Article 406.12 of the Standard Specifications.

<u>Personnel</u>. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".

Required Plant Tests. Testing shall be conducted to control the production of the bituminous mixture. The Contractor shall use the test methods identified to perform the following mixture tests at a frequency not less than that indicated in Table 3.

	TABLE 3. REQUIRED PLANT TESTS for SUPERPAVE				
Pa	arameter	Frequency of Tests	Test Method		
Aggregate Gradation  Hot bins for batch and continuous plants  Individual cold-feeds or		1 dry gradation per day of production (either morning or afternoon sample).  And	Illinois Procedure (See Manual of Test Procedures for Materials).		
com	bined belt-feed for r drum plants.	1 washed ignition oven test on the mix per day of production (conduct in afternoon if dry gradation is conducted in the morning or vice versa).			
12.5 mn 4.75 mn 2.36 mn 600 µm	ing sieves: n (1/2 in.), n (No. 4), n (No. 8), (No. 30), No. 200))	NOTE. The order in which the above tests are conducted shall alternate from the previous production day (example: a dry gradation conducted in the morning will be conducted in the afternoon on the next production day and so forth).			
		The dry gradation and washed ignition oven test results shall be plotted on the same control chart.			
Asphalt Oven (I	Content by Ignition Note 1.)	1 per half day of production	Illinois Modified AASHTO T 308		
Air Voids	Bulk Specific Gravity of Gyratory Sample	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	Illinois Modified AASHTO T 312		
	Maximum Specific Gravity of Mixture	, , , , , , , , , , , , , , , , , , ,	Illinois Modified AASHTO T 209		

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the AC content.

During production, the ratio of minus 75  $\mu$ m (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.2 and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75  $\mu$ m (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resuming production.

During production, mixtures containing an anti-stripping additive will be tested by the Department for stripping according to Illinois Modified T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

#### Construction Requirements

#### Lift Thickness.

(a) Binder and Surface Courses. The minimum compacted lift thickness for constructing bituminous concrete binder and surface courses shall be according to Table 4:

TABLE 4 – MINIMUM COMPACTED LIFT THICKNESS		
Mixture	Thickness, mm (in.)	
IL-9.5	32 (1 1/4)	
IL-12.5	38 (1 1/2)	
IL-19.0	57 (2 1/4)	
IL-25.0	76 (3)	

(b) Leveling Binder. Mixtures used for leveling binder shall be as follows:

TABLE 5 – LEVELING BI	NDER
Nominal, Compacted, Leveling	Mixture
Binder Thickness, mm (in.)	
≤ 32 (1 1/4)	IL-9.5
32 (1 1/4) to 50 (2)	IL 9.5 or IL-12.5

Density requirements shall apply for leveling binder when the nominal, compacted thickness is 32 mm (1 1/4 in.) or greater for IL-9.5 mixtures and 38 mm (1 1/2 in.) or greater for IL-12.5 mixtures.

(c) Full-Depth Pavement. The compacted thickness of the initial lift of binder course shall be 100 mm (4 in.). The compacted thickness of succeeding lifts shall meet the minimums specified in Table 4 but not exceed 100 mm (4 in.).

If a vibratory roller is used for breakdown, the compacted thickness of the binder lifts, excluding the top lift, may be increased to 150 mm (6 in.) provided the required density is obtained.

(d) Bituminous Patching. The minimum compacted lift thickness for constructing bituminous patches shall be according to Table 4.

<u>Control Charts/Limits</u>. Control charts/limits shall be according to QC/QA Class I requirements, except density shall be plotted on the control charts within the following control limits:

TABLE 6. DENSITY CONTROL LIMITS			
Mixture	Parameter	Individual Test	
12.5 mm / 9.5 mm	Ndesign ≥ 90	92.0 – 96.0%	
12.5 mm / 9.5 mm	Ndesign < 90	92.5 – 97.4%	
19.0 mm / 25.0 mm	Ndesign ≥ 90	93.0 – 96.0%	
19.0 mm / 25.0 mm	Ndesign < 90	93.0 – 97.4%	

<u>Basis of Payment</u>. On resurfacing projects, this work will be paid for at the contract unit price per metric ton (ton) for BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, of the friction aggregate mixture and Ndesign specified, LEVELING BINDER (HAND METHOD), SUPERPAVE, of the Ndesign specified, LEVELING BINDER (MACHINE METHOD), SUPERPAVE, of the Ndesign specified, and BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition and Ndesign specified.

On resurfacing projects in which polymer modifiers are required, this work will be paid for at the contract unit price per metric ton (ton) for POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, of the friction aggregate mixture and Ndesign specified, POLYMERIZED LEVELING BINDER (HAND METHOD), SUPERPAVE, of the Ndesign specified, POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, of the Ndesign specified, and POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition and Ndesign specified.

On full-depth pavement projects, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE PAVEMENT, (FULL-DEPTH), SUPERPAVE, of the thickness specified.

On projects where widening is constructed and the entire pavement is then resurfaced, the binder for the widening will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition, Ndesign, and thickness specified. The surface and binder used to resurface the entire pavement will be paid for according to the paragraphs above for resurfacing projects.

#### TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 1992 Revised: January 1, 2005

To ensure a prompt response to incidents involving the integrity of work zone traffic control, the Contractor shall provide a telephone number where a responsible individual can be contacted 24 hours-a-day.

When the Engineer is notified, or determines a traffic control deficiency exists, he/she 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 12 hours based upon the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge.

A deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A deficiency may also be applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's

acceptance of the correction. The daily monetary deduction will be either \$1,000 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option this monetary deduction will be immediate.

In addition, if the Contractor fails to respond, the Engineer may correct the deficiency and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

#### TRUCK BED RELEASE AGENT (BDE)

Effective: April 1, 2004

Add the following sentence after the third sentence of the first paragraph of Article 406.14 of the Standard Specifications.

"In addition to the release agent, the Contractor may use a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle."

#### WEIGHT CONTROL DEFICIENCY DEDUCTION

Effective: April 1, 2001 Revised: August 1, 2002

The Contractor shall provide accurate weights of materials delivered to the contract for incorporation into the work (whether temporary or permanent) and for which the basis of payment is by weight. These weights shall be documented on delivery tickets which shall identify the source of the material, type of material, the date and time the material was loaded, the contract number, the net weight, the tare weight when applicable and the identification of the transporting vehicle. For aggregates, the Contractor shall have the driver of the vehicle furnish or establish an acceptable alternative to provide the contract number and a copy of the material order to the source for each load. The source is defined as that facility that produces the final material product that is to be incorporated into the contract pay items.

The Department will conduct random, independent vehicle weight checks for material sources according to the procedures outlined in the Documentation Section Policy Statement of the Department's Construction Manual and hereby incorporated by reference. The results of the independent weight checks shall be applicable to all contracts containing this Special Provision. Should the vehicle weight check for a source result in the net weight of material on the vehicle exceeding the net weight of material shown on the delivery ticket by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. No adjustment in pay quantity will be made. Should the vehicle weight check for a source result in the net weight of material shown on the delivery ticket exceeding the net weight of material on the vehicle by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. The Engineer will adjust the net weight shown on the delivery ticket to the checked delivered net weight as determined by the independent vehicle weight check.

The Engineer will also adjust the method of measurement for all contracts for subsequent deliveries of all materials from the source based on the independent weight check. The net weight of all materials delivered to all contracts containing this Special Provision from this source, for which the basis of payment is by weight, will be adjusted by applying a correction factor "A" as determined by the following formula:

$$A=1.0-\left(\frac{B-C}{B}\right); \mbox{ Where } \ A\leq 1.0 \ ; \ \left(\frac{B-C}{C}\right)>0.50\% \ \ (0.70\% \ for \ aggregates)$$

Where A = Adjustment factor

B = Net weight shown on delivery ticket

C = Net weight determined from independent weight check

The adjustment factor will be applied as follows:

Adjusted Net Weight = A x Delivery Ticket Net Weight

The adjustment factor will be imposed until the cause of the deficient weight is identified and corrected by the Contractor to the satisfaction of the Engineer. If the cause of the deficient weight is not identified and corrected within seven (7) calendar days, the source shall cease delivery of all materials to all contracts containing this Special Provision for which the basis of payment is by weight.

Should the Contractor elect to challenge the results of the independent weight check, the Engineer will continue to document the weight of material for which the adjustment factor would be applied. However, provided the Contractor furnishes the Engineer with written documentation that the source scale has been calibrated within seven (7) calendar days after the date of the independent weight check, adjustments in the weight of material paid for will not be applied unless the scale calibration demonstrates that the source scale was not within the specified Department of Agriculture tolerance.

At the Contractor's option, the vehicle may be weighed on a second independent Department of Agriculture certified scale to verify the accuracy of the scale used for the independent weight check.

#### **WORK ZONE PUBLIC INFORMATION SIGNS (BDE)**

Effective: September 1, 2002 Revised: January 1, 2005

<u>Description</u>. This work shall consist of furnishing, erecting, maintaining, and removing work zone public information signs.

Camera-ready artwork for the signs will be provided to sign manufacturing companies upon request by contacting the Central Bureau of Operations at 217-782-2076. The sign number is W21-I116-6048.

<u>Freeways/Expressways</u>. These signs are required on freeways and expressways. The signs shall be erected as shown on Highway Standard 701400 and according to Article 702.05(a) of the Standard Specifications.

<u>All Other Routes</u>. These signs shall be used on other routes when specified on the plans. They shall be erected in pairs midway between the first and second warning signs.

<u>Basis of Payment</u>. This work will not be paid for separately but shall be considered as included in the cost of the Standard.

#### WORK ZONE SPEED LIMIT SIGNS (BDE)

Effective: April 2, 2004 Revised: January 1, 2006

Delete Article 702.05(c).

Revise Article 702.05(d) to read:

"(d) Work Zone Speed Limit Signs. Work zone speed limit sign assemblies shall be provided and located as shown on the plans. Two additional assemblies shall be placed 150 m (500 ft) beyond the last entrance ramp for each interchange or sideroad. The individual signs that make up an assembly may be combined on a single panel. The sheeting for the signs shall be reflective and conform to the requirements of Article 1084.02.

All permanent "SPEED LIMIT" signs located within the work zone shall be removed or covered. This work shall be coordinated with the lane closure(s) by promptly establishing a reduced posted speed zone when the lane closure(s) are put into effect and promptly reinstating the posted speed zone when the lane closure(s) are removed.

The work zone speed limit signs and end work zone speed limit signs shown in advance of and at the end of the lane closure(s) shall be used for the entire duration of the closure(s).

The work zone speed limit signs shown within the lane closure(s) shall only be used when workers are present in the closed lane adjacent to traffic; at all other times, the signs shall be promptly removed or covered. The sign assemblies shown within the lane closure(s) will not be required when the worker(s) are located behind a concrete barrier wall.

#### WORK ZONE TRAFFIC CONTROL (BDE)

Effective: April 2, 2004 Revised: November 1, 2005

Revise Article 701.07(a) to read:

"(a) Not Measured. Traffic control and protection required under Standards 701001, 701006, 701011, 701101, 701106, 701301, 701311, 701400, and 701426 will not be measured for payment."

Revise the first paragraph of Article 701.07(b) to read:

"(b) Standards 701401, 701422, and 701446 will be measured for payment on an each basis only when the traffic control and protection applies to isolated stationary work areas and does not involve or is not a part of other protected areas."

Revise the Article 701.07(c) to read:

"(c) Measured As Lump Sum. Traffic control and protection required under Standards 701201, 701206, 701306, 701326, 701336, 701406, 701421, 701501, 701502, 701601, 701602, 701606, 701701 and 701801 will be measured for payment on a lump sum basis. Traffic control protection required under Standards 701401, 701422, and 701446 will be measured for payment on a lump sum basis, except as specified under Article 701.07(b). Where the Contractor's operations result in daily changing, or two or more work areas each of which requires traffic control according to one of the above Standards, each work area installation will not be paid for separately, but shall be included in the lump sum price for the type of protection furnished."

Revise the first paragraph of Article 701.08(a) to read:

"(a) Traffic control and protection will be paid for at the contract unit price each for TRAFFIC CONTROL AND PROTECTION STANDARD 701316; TRAFFIC CONTROL AND PROTECTION STANDARD 701321; TRAFFIC CONTROL AND PROTECTION STANDARD 701431; TRAFFIC CONTROL AND PROTECTION STANDARD 701401; TRAFFIC CONTROL AND PROTECTION STANDARD 701402; TRAFFIC CONTROL AND PROTECTION STANDARD 701411; TRAFFIC CONTROL AND PROTECTION STANDARD 701422; TRAFFIC CONTROL AND PROTECTION STANDARD 701423; TRAFFIC CONTROL AND PROTECTION STANDARD 701431; or TRAFFIC CONTROL AND PROTECTION STANDARD 701446 at the location specified."

Revise the first paragraph of Article 701.08(b) to read:

"(b) Traffic control and protection indicated in Article 701.07(c) will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION STANDARD 701201; TRAFFIC CONTROL AND PROTECTION STANDARD 701206; TRAFFIC CONTROL AND PROTECTION STANDARD 701326; TRAFFIC CONTROL AND PROTECTION STANDARD 701326; TRAFFIC CONTROL AND PROTECTION STANDARD 701401; TRAFFIC CONTROL AND PROTECTION STANDARD 701406; TRAFFIC CONTROL AND PROTECTION STANDARD 701421; TRAFFIC CONTROL AND PROTECTION STANDARD 701422; TRAFFIC CONTROL AND PROTECTION STANDARD 701446; TRAFFIC CONTROL AND PROTECTION STANDARD 701501; TRAFFIC CONTROL AND PROTECTION STANDARD 701601; Or TRAFFIC CONTROL AND PROTECTION STANDARD 701801."

#### TRAINING SPECIAL PROVISIONS

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 3 Trainees. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of

Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or

trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

BASIS OF PAYMENT This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

#### AGGREGATE SHIPPING TICKETS (BDE)

Effective: January 1, 2006

Add the following to Article 1003.01 of the Standard Specifications:

"(f) Shipping Tickets. Shipping tickets for the material shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Designation of Aggregate Information on Shipping Tickets"."

Add the following to Article 1004.01 of the Standard Specifications:

"(f) Shipping Tickets. Shipping tickets for the material shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Designation of Aggregate Information on Shipping Tickets"."

Add the following to Article 1005.01 of the Supplemental Specifications:

"(d) Shipping Tickets. Shipping tickets for the material shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Designation of Aggregate Information on Shipping Tickets"."

#### PLANTING WOODY PLANTS (BDE)

Effective: January 1, 2006

Revise the first and second paragraphs of Article 253.14 of the Standard Specifications to read:

**"253.14 Period of Establishment.** Prior to being accepted, the plants shall endure a period of establishment. This period shall begin in June and end in September of the same

year. To qualify for inspection, plants shall have been in place, in a live healthy condition, on or before June 1 of the year of inspection. To be acceptable, plants shall be in a live healthy condition, representative of their species, at the time of inspection in the month of September.

When the planting work is performed by a subcontractor, this delay in inspection and acceptance of plants shall not delay acceptance of the entire project and final payment due if the Contractor requires and receives from the subcontractor a third party performance bond naming the Department as obligee in the full amount of the planting quantities listed in the contract, multiplied by their contract unit prices. The bond shall be executed prior to acceptance and final payment of the non-planting items and shall be in full force and effect until final inspection and acceptance of all plants including replacements. Execution of the third party bond shall be the option of the prime Contractor."

Revise Article 253.16 of the Standard Specifications to read:

"253.16 Method of Measurement. This work will be measured for final payment, in place, after the period of establishment. Trees, shrubs, and vines will be measured as each individual plant. Seedlings will be measured in units of 100 plants."

Revise Article 253.17 of the Standard Specifications to read:

- "253.17 Basis of Payment. This work will be paid for at the contract unit price per each for TREES, SHRUBS, and VINES, of the species, root type, and plant size specified; and per unit for SEEDLINGS. Payment will be made according to the following schedule.
  - (a) Initial Payment. Upon planting, 75 percent of the pay item(s) will be paid.
  - (b) Final Payment. Upon inspection and acceptance of the plant material, or upon execution of a third party bond, the remaining 25 percent of the pay item(s) will be paid."

#### REFLECTIVE CRACK CONTROL TREATMENT (BDE)

Effective: April 1, 2006

Revise the third sentence of the first paragraph of Article 443.01 of the Standard Specifications to read:

"Strip reflective crack control treatment shall be either System A, B, C, or D at the option of the Contractor."

Add the following to Article 443.03 of the Standard Specifications:

"(g) Hot-Poured Joint Sealer......1050.02"

Revise Article 443.09 of the Standard Specifications to Article 443.10.

Revise Article 443.10 of the Standard Specifications to Article 443.11.

Add the following Article to the Standard Specifications:

"Article 443.09 Reflective Crack Control System D. The stress relief membrane shall be applied when the surface temperature is a minimum of 10 °C (50 °F) and rising.

- (a) Tack Coat Placement for Membrane. The tack coat shall be applied to the existing surface using one of the following methods.
  - (1) A hand held wand with a nozzle that produces a fan shaped spray to apply the tack coat evenly according to the rate specified by the manufacturer.
  - (2) A hand held wand without a spray nozzle. The tack coat shall be spread with a squeegee according to the rate specified by the manufacturer.
  - (3) A distributor bar attached to a distributor truck, for longitudinal applications only. The distributor bar nozzles shall be set at 20 degrees to the axis of the bar and the tack coat shall be applied according to the rate specified by the manufacturer. Application of the tack coat directly from a distributor bar attached to a distributor truck will not be permitted for transverse applications.

The maximum width of the tack coat application shall be such that the tack coat extends a maximum 40 mm (1 1/2 in.) on both sides of the stress relief membrane strip.

The use of emulsified asphalts and/or cutbacks is prohibited for use as a tack to bond the stress relief membrane to the existing pavement surface.

(b) Stress Relief Membrane Placement. The open grid woven polyester side of the material shall be placed up with the nonwoven side placed into the tack. The stress relief membrane shall be centered over the crack or joint on the existing surface and with a minimum of 150 mm (6 in.) of the membrane extending beyond the edges of the joint.

The material shall be laid smooth with no uplifted edges. The stress relief membrane shall be placed and rolled immediately with a riding static drum roller or a rubber tire roller. A maximum of three minutes shall pass between the first and second rolling efforts.

The stress relief membrane shall be butted where transverse and longitudinal joints meet or where two rolls must be joined. When required, the stress relief membrane shall be cut with a razor knife from the woven polyester side.

The stress relief membrane shall be placed at least two hours in advance of paving operations. If application must immediately precede the paving operation, hot-poured joint sealer may be required as a tack coat to bond the stress relief membrane to the existing surface.

(c) Traffic Exposure. Exposing the membrane to traffic shall be minimized. Small amounts of washed sand may be used to blot excess asphalt cement tack coat when necessary to facilitate movement of traffic or construction equipment over the membrane prior to placement of the overlay. Damaged membranes shall be removed and replaced. (d) Paving Tack Coat/Paving. Paving operations shall only begin when the membrane is thoroughly bonded to the existing surface. The membrane may be exposed to moisture and rain prior to the application of the overlay, however, the stress relief membrane must be dry at the time the overlay is placed.

A slow-set emulsified asphalt paving tack coat (such as SS-1, SS-1h, CSS-1, or CSS-1h) shall be applied prior to paving over the membrane. Cutback asphalts shall not be used. Hot-mix asphalt or dry washed sand may be placed ahead of the paver if the membrane is sticking to the tires of the paving equipment. The minimum asphalt overlay thickness (total) shall be 50 mm (2 in.) compacted.

When using a vibratory roller for compaction, it shall be set to the lowest amplitude and highest frequency settings."

Add the following Article to the Standard Specifications:

"1062.04 Reflective Crack Control System D. The stress relief membrane shall be 900 mm (36 in.) wide and 4 mm (0.15 in.) thick and shall be a system of materials manufactured in a composite three layer fashion with the following properties.

Stress Relief Membrane				
Property	Value	Test Method		
Cold Flex	No cracking or separation	ASTM D 146 (modified)		
	of fabric			
Tensile Strength (Peak)	700 N/mm (4,000 psi) min.	ASTM D 412 (modified)		
Elongation (at Peak Tensile)	10 % min.	ASTM D 412 (modified)		
Weight	3.7 kg/sq m (0.76 lbs/sq ft)			
Density (mastic)	1100 kg/cu m (69 lbs/cu ft)	ASTM D 70		
	min.			
Thickness	4 mm (0.15 in.)	ASTM E 154-93 Subsection		
		10.0 ASTM D 1790		
Absorption (mastic)	1 % max.	ASTM D 517		
Brittleness	Passes	ASTM D 517		
Softening Point (mastic)	104 °C (220 °F)	ASTM D 36		

The bottom layer of the composite shall be a low strength, nonwoven, geotextile and shall be according to AASHTO M 288-92. The bottom geotextile shall be designed to fully bond with the existing pavement with the help of a tack coat. It shall be capable of accommodating sufficiently large stresses at the joint/crack without breaking its bond with the slab. The middle layer of the composite shall be a viscoelastic membrane designed to prevent water entry into the pavement through the cracks and/or joints in the pavement. It also acts as a stress absorbing member interlayer between the overlay and the underlying pavement. The top layer shall be a high strength woven geotextile with a tensile strength of 700 N/mm (4,000 psi) at five percent strain according to ASTM D 4595. The top geotextile shall be designed to fully bond with the overlay and provide high stiffness and reinforcement to the overlay.

The stress relief membrane shall be stored in an inside enclosure with temperatures not exceeding 49 °C (120 °F). Any material that becomes wet prior to installation shall be removed from the jobsite and discarded.

The grade of asphalt binder tack coat shall be PG 64-22, PG 58-28, or PG 52-28 and shall meet the requirements of Article 1009.05.

Emulsified asphalt for tack coat shall be SS-1, SS-1h, CSS-1h, CSS-1h, CSS1hP, or SS-1hP and shall meet the requirements of Article 1009.07.

The manufacturer shall furnish a certification with each shipment of stress relief membrane, stating the amount of product furnished, and that the material complies with these requirements."

#### REINFORCEMENT BARS (BDE)

Effective: November 1, 2005 Revised: November 2, 2005

Revise Article 1006.10(a) of the Supplemental Specifications to read:

- "(a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reinforcement Bar and Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.
  - (1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706M (A 706), Grade 420 (60) for deformed bars and the following.
    - a. Chemical Composition. The chemical composition of the bars shall be according to the following table.

CHEMICAL COMPOSITION			
Element 1/	Heat Analysis (% maximum)	Product Analysis (% maximum)	
Carbon	0.30	0.33	
Manganese	1.50	1.56	
Phosphorus	0.035	0.045	
Sulfur	0.045	0.055	
Silicon	0.50	0.55	
Nickel	2/	2/	
Chromium	2/	2/	
Molybdenum	2/	2/	
Copper	2/	2/	
Titanium	2/	2/	
Vanadium	2/	2/	
Columbium	2/	2/	
Aluminum	2/, 3/	2/, 3/	
Tin <sup>4/</sup>	0.040	0.044	

- Note 1/. The bars shall not contain any traces of radioactive elements.
- Note 2/. There is no composition limit but the element must be reported.
- Note 3/. If aluminum is not an intentional addition to the steel for deoxidation or killing purposes, residual aluminum content need not be reported.
- Note 4/. If producer bar testing indicates an elongation of 15 percent or more and passing of the bend test, the tin composition requirement may be waived.
- b. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
- c. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706M (A 706). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
- d. Spiral Reinforcment. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.
- (2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284M (M 284) and the following.

- a. Certification. The epoxy coating applicator shall be certified under the Concrete Reinforcing Steel Institute's (CRSI) Epoxy Plant Certification Program.
- b. Coating Thickness. The thickness of the epoxy coating shall be 0.18 to 0.30 mm (7 to 12 mils). When spiral reinforcment is coated after fabrication, the thickness of the epoxy coating shall be 0.18 to 0.50 mm (7 to 20 mils).
- c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 13 mm (0.5 in.) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

#### **SEALING ABANDONED WATER WELLS (BDE)**

Effective: November 1, 2002

<u>Description</u>. This work shall consist of sealing abandoned water wells. Work shall be performed according to the "Illinois Water Well Construction Code (77 Illinois Administrative Code 920)".

Work shall be performed by a licensed water well driller. A list of licensed water well drillers is available from the Illinois Department of Public Health offices in Springfield.

Any available information, such as well type, diameter, depth and geologic data will be shown on the plans.

Basis of Payment. This work will be paid for at the contract unit price per each for SEALING ABANDONED WATER WELLS.

#### SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)

Effective: November 1, 2005

<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 and SI concrete. Self-consolidating concrete may also be used for drilled shafts.

Materials. Materials shall be according to the following.

(a) <u>Self-Consolidating Admixtures</u>. 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 that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F.

The viscosity modifying admixture will be evaluated according to the test methods and mix design proportions referenced in AASHTO M 194, except the following physical requirements shall be met:

- (1) For initial and final set times, the allowable deviation of the test concrete from the reference concrete shall not be more than 1.0 hour earlier or 1.5 hours later.
- (2) For compressive and flexural strengths, the test concrete shall be a minimum of 90 percent of the reference concrete at 3, 7, and 28 days.
- (3) The length change of the test concrete shall be a maximum 135 percent of the reference concrete. However, if the length change of the reference concrete is less than 0.030 percent, the length change of the test concrete shall be a maximum 0.010 percentage units greater than the reference concrete.
- (4) The relative durability factor of the test concrete shall be a minimum 80 percent.
- (b) <u>Fine Aggregate</u>. A fine aggregate used alone in the mix design shall not have an expansion greater than 0.30 percent per ASTM C 1260. For a blend of two or more fine aggregates, the resulting blend shall not have an expansion greater than 0.30 percent.

The aggregate blend expansion will be calculated as follows:

Aggregate Blend Expansion =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$ etc.

Where: a, b, c, ... = percent of aggregate blend A, B, C, ... = aggregate expansion according to ASTM C 1260

Mix Design Criteria. Article 1020.04 of the Standard Specifications shall apply except as follows:

- (a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications or as specified. The maximum cement factor shall be 418 kg/cu m (7.05 cwt/cu yd). 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 11, CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 shall not be used for drilled shafts or when the Engineer approves a horizontal flow distance greater than 9 m (30 ft). The fine aggregate proportion shall be a maximum 50 percent by mass (weight) of the total aggregate used.

- (e) The slump flow range shall be ± 50 mm (± 2 in.) of the Contractor target value, and within the overall Department range of 510 mm (20 in.) minimum to 710 mm (28 in.) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 100 mm (4 in.). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>Test Methods</u>. Illinois Test Procedures SCC-1, SCC-2, SCC-3, SCC-4, SCC-5, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

<u>Mix Design Submittal</u>. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

A J-ring value shall be submitted if a lower mix design maximum will apply. An L-box blocking ratio shall be submitted if a higher mix design minimum will apply. The Contractor shall also indicate applicable construction items for the mix design.

Trial mixture information will also be required by the Engineer. A trial mixture is a batch of concrete tested by the Contractor to verify the Contractor's mix design will meet specification requirements. Trial mixture information shall include test results as specified in the "Portland Cement Concrete Level III Technician" course manual. Test results shall also include slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index. For the trial mixture, the slump flow shall be near the midpoint of the proposed slump flow target range.

<u>Trial Batch</u>. A minimum 1.5 cu m (2 cu yd) 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 25 mm (1.0 in.) of the maximum slump flow range specified by the Contractor, and the air content shall be within the top half of the allowable specification range.

The trial batch shall be scheduled a minimum of 21 calendar days prior to anticipated use, and shall be performed in the presence of the Engineer.

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

A new trial batch will be required whenever there is a change in the source of any component material, proportions, 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 design falsework and forms for full hydrostatic head pressure of the concrete. Forms shall be tight to prevent leakage of fluid concrete.

<u>Placing and Consolidating</u>. Concrete placement and consolidations 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 1.5 m (5 ft). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 9 m (30 ft), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted."

Delete the sixth, seventh, eighth and ninth paragraphs of Article 503.07 of the Standard Specifications.

Revise the eleventh paragraph of Article 503.07 of the Standard Specifications to read:

"Concrete shall be placed in continuous layers. When it is necessary by reason of an emergency to place less than a complete horizontal layer in one operation, such layer shall terminate in a vertical bulkhead. In order that the concrete will not be injured and that there shall be no line of separation between the batches, the separate batches shall follow each other closely as recommended by the manufacturer of the self-consolidating concrete admixture(s). In no case shall the interval of time between the placing of successive batches be greater than 20 minutes. Concrete shall be rodded with a piece of lumber or conduit if the material has lost its fluidity prior to placement of additional concrete. Any other method for restoring the fluidity of the concrete shall be approved by the Engineer. If ready-mixed concrete is used, the requirements of Article 1020.11 shall apply. Delivery of mixed concrete shall be regulated so that there will not be an interruption in the placing of concrete in the forms, as recommended by the manufacturer of the self-consolidating concrete admixture(s). In no case shall the interval of time be greater than 20 minutes."

<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 plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and hardened visual stability index test will not be required to be performed at the plant.

<u>Quality Control by Contractor at Jobsite</u>. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract plans.

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 40 cu m (50 cu yd) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite. The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 230 cu m (300 cu yd) 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 plans.

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 plans.

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 25 mm (1 in.) 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 25 mm (1 in.) 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.

#### STEEL PLATE BEAM GUARDRAIL (BDE)

Effective: November 1, 2005

Add the following to the end of the first paragraph of Article 1006.25 of the Standard Specifications:

"The thickness of the galvanized coating for each side of the guardrail shall be at least 610 g/sq m (2.00 oz/sq ft). The thickness of the zinc or zinc alloy will be determined for each side using the average of at least three non-destructive test readings taken on that side of the guardrail."

#### WATER BLASTER WITH VACUUM RECOVERY (BDE)

Effective: April 1, 2006

Add the following to Article 783.02 of the Standard Specifications.

"(c) Water Blaster with Vacuum Recovery ......1101.17"

Add the following to Section 1101 of the Standard Specifications.

"1101.17 Water Blaster with Vacuum Recovery. The water blaster shall remove the stripe from the pavement using a high pressurized water spray with a vacuum recovery system to provide a clean, almost dry surface, without the use of a secondary cleanup process. The removal shall be to the satisfaction of the Engineer. The equipment shall contain a storage system that allows for the storage of the wastewater while retaining the debris. The operator shall be in immediate control of the blast head."

#### **WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within 270 working days.

#### STEEL COST ADJUSTMENT (BDE)

Effective: April 2, 2004 Revised: July 1, 2004

<u>Description</u>. At the bidder's option, a steel cost adjustment will be made to provide additional compensation to the Contractor or a credit to the Department for fluctuations in steel prices. The bidder must indicate on the attached form whether or not steel cost adjustments will be part of this contract. This attached form shall be submitted with the bid. Failure to submit the form shall make this contract exempt of steel cost adjustments.

<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), frames and grates, and other miscellaneous items will be subject to a steel cost adjustment when the pay item 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) Evidence that increased or decreased steel costs have been passed on to the Contractor.
- (b) The dates and quantity of steel, in kg (lb), shipped from the mill to the fabricator.
- (c) The quantity of steel, in kg (lb), 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 kg (lb)

D = price factor, in dollars per kg (lb)

 $D = CBP_M - CBP_L$ 

Where: CBP<sub>M</sub> = The average of the Consumer Buying Price indices for Shredded Auto

Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the American Metal Market (AMM) for the day the steel is shipped from the mill. The indices will be converted from dollars per ton to dollars per kg (lb).

CBP<sub>L</sub> = The average of the Consumer Buying Price indices for Shredded Auto

Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the AMM for the day the contract is let. The indices will be converted from dollars per

ton to dollars per kg (lb).

The unit masses (weights) 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  $CBP_M$  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  $CBP_L$  and  $CBP_M$  in excess of five percent, as calculated by:

Percent Difference =  $\{(CBP_L - CBP_M) \div CBP_L\} \times 100$ 

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the steel items 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.

#### Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 305 mm (12 in.), 3.80 mm (0.179 in.) wall thickness)	34 kg/m (23 lb/ft)
Furnishing Metal Pile Shells 305 mm (12 in.), 6.35 mm (0.250 in.) wall thickness)	48 kg/m (32 lb/ft)
Furnishing Metal Pile Shells 356 mm (14 in.), 6.35 mm (0.250 in.) wall thickness)	55 kg/m (37 lb/ft)
Other piling	See plans
Structural Steel	See plans for weights
Reinforcing Steel	See plans for weights
Dowel Bars and Tie Bars	3 kg (6 lb) each
Mesh Reinforcement	310 kg/sq m (63 lb/100 sq ft)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	30 kg/m (20 lb/ft)
Steel Plate Beam Guardrail, Type B w/steel posts	45 kg/m (30 lb/ft)
Steel Plate Beam Guardrail, Types A and B w/wood posts	12 kg/m (8 lb/ft)
Steel Plate Beam Guardrail, Type 2	140 kg (305 lb) each
Steel Plate Beam Guardrail, Type 6	570 kg (1260 lb) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	330 kg (730 lb) each
Traffic Barrier Terminal, Type 1 Special (Flared)	185 kg (410 lb) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	16 kg/m (11 lb/ft)
Light Pole, Tenon Mount and Twin Mount, 9 m – 12 m (30 - 40 ft)	21 kg/m (14 lb/ft)
Light Pole, Tenon Mount and Twin Mount, 13.5 m – 16.5 m (45 - 55 ft)	31 kg/m (21 lb/ft)
Light Pole w/Mast Arm, 9 m – 15.2 m (30 - 50 ft)	19 kg/m (13 lb/ft)
Light Pole w/Mast Arm, 16.5 m – 18 m (55 - 60 ft)	28 kg/m (19 lb/ft)
Light Tower w/Luminaire Mount, 24 m – 33.5 m (80 - 110 ft)	46 kg/m (31 lb/ft)
Light Tower w/Luminaire Mount, 36.5 m – 42.5 m (120 - 140 ft)	97 kg/m (65 lb/ft)
Light Tower w/Luminaire Mount, 45.5 m – 48.5 m (150 - 160 ft)	119 kg/m (80 lb/ft)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	95 kg/m (64 lb/ft)
Steel Railing, Type S-1	58 kg/m (39 lb/ft)
Steel Railing, Type T-1	79 kg/m (53 lb/ft)
Steel Bridge Rail	77 kg/m (52 lb/ft)
Frames and Grates	
Frame	115 kg (250 lb)
Lids and Grates	70 kg (150 lb)

#### **RETURN WITH BID**

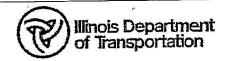
# ILLINOIS DEPARTMENT OF TRANSPORTATION

## OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this form with his/her bid. Failure to submit the form shall make this contract exempt of steel cost adjustments. After award, this form, when submitted shall become part of the contract.

Contract No.:			_		
Company Name:					
Contractor's Option	<u>ı</u> :				
Is your company opti	ing to include th	nis spec	cial provision as p	part of the contract plans?	>
Yes		No			
Signature:				Date:	

#### STORM WATER POLLUTION PREVENTION PLAN



#### Storm Water Pollution Prevention Plan

Route FAP 103		Marked IL Route 13/15
Section 27-1R		Project No. P-98-168-99
County St. Clair		
Environmental Protection Agent I certify under penalty of law t accordance with a system det submitted. Based on my inquir	cy for storm water discharged hat this document and all signed to assure that query of the person or persons formation submitted is to	isions of the NPDES Permit Number ILR10, issued by the Illinoisinges from Construction Site Activities.  Ill attachments were prepared under my direction or supervision in tallified personnel properly gathered and evaluated the information is who manage the system, or those persons directly responsible for the best of my knowledge and belief, true, accurate and complete, ag false information, including the possibility of fine and imprisonment
May Child	, <u>Ku</u>	6-30-0C/
) y Signatu	· .	***
District En		<u>,                                     </u>
Title	1. 10	

#### 1. Site Description

The following is a description of the construction activity which is the subject of this plan (use additional pages, as necessary):

The intent of this project is to upgrade FAP 103 from a 2 lane highway to a four lane divided highway from Green Mount Road to Peabody Road, widen the existing roadway between Peabody Road and Rogers Drive, provide wider shoulders, drainage improvements, and intersection improvements to meet current design policy and improve safety and operations.

Between Green Mount Road and Peabody Road, work consists of widening and resurfacing the existing pavement and constructing a new 24' wide mainline pavement and several access roads generally parallel along either side of the existing pavement. New 10' wide shoulders will be constructed on the outside of both pavements and 6' wide shoulders will be constructed within the median. Between Peabody Road and Rogers Drive, work to be performed includes widening and resurfacing the existing pavement and providing new wider shoulders.

In addition to the pavement construction, the improvements include earth excavation and embankment, provision of a new underdrain system, removal and replacement of pipe culverts, pipe culvert extensions, box culverts, removal of the Sugar Creek structure and replacement with SN 082+2043, construction of median cross-overs, closed drainage system, combination curb and gutter, mountable/barrier medians, landscaping, guardrail, tree removal, and other miscellaneous items pertaining to this work.

BDE 2342

b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading (use additional pages, as necessary):

#### STAGE 1:

- Construct new pavement and shoulders on the right from Green Mount Road to station 223+00.
- Construct new pavement and shoulders on the left from station 223+00 to 265+10.
- Construct new pavement and shoulders on the right from station 266+50 to 290+00.
- Construct Access.Roads RT1, RT2 and RT3 complete.
- Construct Access Road LT1 from station 99+86 to 105+00.
- Construct Access Road LT2 complete.
- Construct Access Road LT3 from station 91+83 to 95+00, and 96+30 to 99+51.
- Construct temporary shoulder on the left from staffon 286+52 to 290+12 and temporary pavement connections on the right from station 223+80 to 225+60 and from station 263+00 to Sta. 266+50.
- Construct pavement widening, shoulders, curb and gutter, and drainage structures on the right from station 290+00 to 338+10.
- Construct temporary ditches from station 183+00 to 185+00 Left, 193+00 to 197+00 Left, 198+50 to 199+00 Left, 211+00 to 221+50 Median, 215+50 to 216+50 Left, 217+50 to 218+00 Left, 221+00 to 224+00 Left, 226+00 to 227+00 Right, 242+50 to 244+00 Median, 264+00 to 266+50 Median, 270+50 to 272+50 Left, 272+00 to 276+00 Median, 277+50 to 289+50 Median.
- Construct proposed ditches from station 199+00 to 206+00 Left, 210+50 to 215+50 Left, and 218+00 to 221+00 Left.

#### STAGE 2:

- Construct pavement widening and shoulders on the left from station 162+00 to 190+50.
- Construct Access Road LT1 from station 105+00 to end.
- Construct new payement and shoulders on the left from station 190+50 to 201+50.
- Construct pavement widening and shoulders on the left from station 201+50 to 218+50.
- Construct new pavement and shoulders on the left from station 218+50 to 223+00.
- Construct new pavement and shoulders on the left from station 265+10 to 271+90;
- Construct pavement widening and shoulders on the left from station 271+90 to 285+25.
- Construct new pavement and shoulders on the left from station 285+25 to 292+57.
- Construct Access Road LT3 from station 95+00 to 96+30.

by reference, or in an attachment to this plan.

- Construct pavement widening, shoulders, curb and gutter, and drainage structures on the left from station 292+57 to 338+10.
- Construct temporary ditch from station 214+00 to 217+50 Median.

#### STAGE 3:

- Construct new pavement and shoulders on the right from station 223+00 to 230+00
- Construct payement widening and shoulders on the right from station 230+00 to 233+60.
- Construct new payement and shoulders on the right from station 233+60 to 239+45.
- Construct new pavement widening and shoulders on the right from station 239+45 to 262+10.
- Construct new pavement and shoulders on the right from station 262+10 to 266+50

This stage consists of surfacing the entire project and removing temporary pavement in the median from station 221+50 to 225+50

	1 6		
c. <sup>.</sup>	The total area of the construction site is estimated to be	101.4	acres.
5	The total area of the site that it is estimated will be disturbed Acres.	by excavation,	grading or other activities is 83.0
d.	The estimated runoff coefficients of the various areas of the contained in the project drainage study, which is hereby i describing the soils at the site is contained either in the Soils		

- e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate stopes anticipated after major grading activities, areas of major soil disturbance; the location of major structural and nonstructural 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 a surface water.
- f. The names of receiving water(s) and area extent of wetland acreage at the site are in the design/project report or plan documents, which are incorporated by reference as a part of this plan.

#### 2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

#### a. Erosion and Sediment Controls

- Stabilization Practices. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(1).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that polition of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occurrious period of 21 or more calendar days.
  - (A) Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

Description of Stabilization Practices (use additional pages, as necessary):

Stabilization practices include temporary seeding, permanent seeding, erosion control blankets, mulching, and permanent riprap and shall be installed on disturbed areas as soon as practicable.

Temporary seeding for erosion control will be placed as soon as possible on disturbed areas until permanent controls can be installed. Class 2 seeding will be required in accordance with Article 250.08(a) of the "Standard Specifications". Seeding mixture will depend on the time of year it is applied.

Permanent seeding will be placed on all areas disturbed by construction immediately following the finished grading:

Erosion control blanket will be installed over fill slopes and in ditches that have been brought to final grade and seeded to protect slopes from erosion and allow seeds to germinate.

Mulch will be applied in relatively flat areas to protect the disturbed areas and prevent further erosion.

Stone riprap with filter fabric will be used at the inlet/outlet end of all culverts to prevent scouring.

Site specific schedules and plans can be found in the plans and special provisions and are incorporated into this plan by reference.

(ii) 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 silt fences, earth dikes, drainage swales, sediment traps, check dams, 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.

Description of Structural Practices (use additional pages, as necessary):

Structural practices include pipe and inlet protection, perimeter erosion barrier, and temporary ditch checks and shall be installed on disturbed areas as soon as practicable.

Pipe and inlet protection will be placed at median inlets and pipe culvert inlets to protect from sedimentation due to grading operations.

Perimeter erosion barrier shall be used at locations where sediment may escape the right of way. Temporary perimeter erosion barrier will be placed adjacent to the areas indicated on the plan to intercept waterborne silt and prevent it from leaving the site.

Temporary ditch checks will be placed in locations indicated on the plans or as directed by the engineer to prevent downstream erosion as the final ditch profiles are established in each area.

Site specific schedules and plans can be found in the plans and special provisions and are incorporated into this plan by reference.

### b. 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: 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 Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois: Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.
- Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintened and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls (use additional pages, as necessary):

Riprap and erosion control blanket will be placed in ditches at the locations shown in the plans to provide channel stability. Riprap will also be placed at culvert inlets and outlets to dissipate velocity and provide channel stability.

#### c. Other Controls

(i) Waste Disposal. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit. (ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

#### d. Approved State or Local Plans

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, 1995. 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 or site permits or 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 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:

None known.

#### 3. Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan (use additional pages, as necessary):

During construction the contractor shall clean up and grade the work area to eliminate concentration of runoff, cover the open ends of pipes in trenches at the close of each working day, maintain or replace stabilization practices and structural practices as directed by the engineer.

#### 4. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution prevention measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.
- A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.

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 or Resident Technician shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency 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 noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit. The report of noncompliance 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

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge, (Use additional pages as necessary to describe non-storm water discharges and applicable pollution control measures).



#### DEPARTMENT OF THE ARMY

ST. LOUIS DISTRICT, CORPS OF ENGINEERS 1222 SPRUCE STREET ST. LOUIS, MISSOURI 63103-2833

November 14, 2003

ATTENTION OF:

Regulatory Branch File Number: 200305530

Ms. Mary C. Lamie
Illinois Department of Transportation
Division of Highways/District 8
1102 Eastport Plaza Drive
Collinsville, Illinois 62234-6198

Dear Ms. Lamie:

We have reviewed your application, concerning improvements along Illinois Route 13/15. Specifically proposed is the widening of the existing roadway from Green Mount Road to Peabody Road, from Peabody Road to Rogers Drive and from Rogers Drive to Washington Street. Additionally four existing box culverts will be replaced with larger structures at four separate locations. Illinois Route 13/15 crosses several unnamed secondary tributaries to the Kaskaskia River. The project is located near Freeburg, St. Clair County, Illinois.

Based upon a review of the U.S. Geological Survey 7.5-minute topographical map, we determined that the unnamed tributaries would possess ordinary high water marks at each location and would be considered jurisdictional waters of the United States. Therefore, the placement of fill material below the ordinary high water elevation requires a permit from this office.

The Corps of Engineers has determined that this activity will have no affect on endangered species, and is authorized under Section 404 of the Clean Water Act by an existing Department of the Army nationwide permit as described in the Uanuary 15, 2002, Federall Register, Pssuance of Nationwide Permits; Notice (67 FR 2080) Appendix A (B) (14). This permit verification is valid for two years from the date of this letter. Enclosed is a copy of the nationwide permit and conditions and management practices with which you must comply.

In accordance with General Condition number 14 of the Nationwide Permit, a compliance certification (Attachment A of this package) must be completed within 30 days of project completion or the permit issuance may be revoked and considered null and void.

The Tilimois Environmental Protection Agency has denied water quality certification for this activity. You must obtain individual water quality certification from the IEPA. You may contact Mr. James Allison, TEPA, at (217) 782-0610 for more information on obtaining water quality certification. If the IEPA fails to act within a reasonable period of time (60 days from the date of this letter), a waiver will be presumed. Upon receipt of water quality certification, the proposed work is authorized. If the water quality certification

. igrafin pine ng ninggow ne ne

2

is conditioned by the state, these conditions will become part of the Corps permit.

This determination is applicable only to the permit program administered by the Corps of Engineers. It does not eliminate the need to obtain other Federal, state or local approvals before beginning work.

You are reminded that the permit is based on submitted plans. Variations from these plans shall constitute a violation of Federal law and may result in the revocation of the permit. If this nationwide permit is modified, reissued, or revoked during this period, the provisions described at 33 CFR 330.6(b) will apply.

The jurisdictional determination for this project is considered a preliminary jurisdictional determination in accordance with final regulations published on March 28, 2000 (65 FR 16485-16503). Enclosed is a Notification of Administrative Appeal Options and Process and Request for Appeal for your consideration and use. This determination cannot be appealed. The jurisdictional determination is valid for a periodiof five years from the date of this letter unless new information warrants revision of this determination before the expiration date.

If you have any questions concerning this matter, do not hesitate to contact me at (314) 331-8185. Please refer to file number 200305530.

Sincerely

Susan L. U. Hornemar Project Manager

Illinois Permits Region

Enclosures:

Copy Furnished: (w/o enclosures)

Mr. Bryan Martindale, Illinois Department of Natural Resources Mr. James Allison, Illinois Environmental Protection Agency

3

# ATTACHMENT A

### COMPLETED WORK CERTIFICATION

Date of Issuance: November 14, 2003

File Number: 200305530

Name of Permittee: Ms. Mary Lamie, IDOT, District 8

River Basin/County/State: Kaskaskia/St. Clair County/IlFinois

Upon completion of this activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers Attn: Regulatory Branch (CO-F) 1222 Spruce Street St. Louis, Missouri 63103-2833

(Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fall to comply with this permit you are subject to permit suspension, modification or revocation.)

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

	T 100		1000
Signature	o£	Permi	.ttee
Ser		4	

·Data



# Nationwide Permit Summary

U.S Army Corps Of Engineers St. Louis District

#### No. 14, LINEAR TRANSPORTATION PROJECTS (NWP Final Notice, 67 FR 2080)

Activities required for the construction, expansion, modification, or improvement of linear transportation crossings (e.g., highways, railways, trails, and airport runways and taxiways) in waters of the United States, including wetlands, provided the activity meets the following criteria:

- a. This NWP is subject to the following acreage and linear limits;
- (1) For public linear transportation projects in non-tidal waters, provided the discharge does not cause the loss of greater than 1/2 agre of waters of the United States, or
- (2) For public linear transportation projects in tidal waters or non-tidal wellands adjacent to fidal waters, provided the discharge does not cause the loss of greater than 1/3 acre of waters of the United States,
- b. The permittee must notify the District Engineer in accordance with General Condition 13 if any of the following criteria are met
- (1) The discharge causes the loss of greater than 1/10 acre of waters of the United States; or
- (2) There is a discharge in a special aquatic site, including
- c. The notification must include a compensatory mitigation proposal to offset permanent losses of waters of the United States to ensure that those losses result only in minimal adverse effects to the aquatic environment and a statement describing how temporary losses of waters of the United States will be minimized to the maximum extent practicable;
- d. For discharges in special aquatic sites, including wetlands, the notification must include a delineation of the affected special aquatic sites;
- s. The width of the fill is limited to the minimum necessary for the
- f. This permit does not authorize stream channelization, and the authorized activities must not cause more than minimal changes to the hydraulic flow characteristics of the stream, increase flooding, or cause more than minimal degradation of water quality of any stream (see General Conditions 9 and 21);
- g. This permit cannot be used to euthorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars; and
- h. The crossing is a single and complete project for crossing a water of the United States. Where a road segment (i.e., the shortest segment of a road with independent utility that is part of a larger project) has multiple crossings of streams (several single and complete projects) the Corps will consider whether it should use its discretionary authority to require an individual permit. (Sections 10 and 404)

Note: Some discharges for the construction of farm roads, forest: roads, or temporary roads for moving mining equipment may be eligible for an exemption from the need for a Section 404 permit (see 33 CFR 323.4).

#### NATIONWIDE PERMIT CONDITIONS

General Conditions: The following general conditions must be followed in order for any authorization by a NWP to be valid:

- Navigation. No activity may cause more than a minimal adverse effect on navigation.
- Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.
- 3. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other title; 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-lice or no-flow.
- 4. Aquatic Life Movements. No activity may substantially disrupt the 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. Culvents placed in streams must be installed to maintain low liow conditions.
- 5. Equipment. Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil.
- 6. Regional and Case-By-Case Conditions: The activity must comply with any regional conditions, which 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 or iribe in its Section 401 Water Quality Certification and Coastal Zone.

  Management Act consistency determination.
- 7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible mixinclusion 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 Spenic River designation, or study status. Information on Wild and Scanic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, US Forest Service, Bureau of Land Management, US Fish and Wildlife Service).

- 8. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 9. Water Quality. (a) in perialn States and tribal lands an individual 401 water quality certification must be obtained or waived (See 33. CFR 330:4(c))."
- (b) For NWPs 12, 14, 17, 18, 32, 39, 40, 42, 43, and 44, where the State or tribat 301 certification (either generically or individually) does not require or approve a water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more then minimal edverse effect on water quality). An important component of a water quality management plan includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality (Refer to General Condition 21 for stormwater management requirements). Another important component of a water quality management plan is the establishment and maintenance of vegetated buffers next to open waters, including streams (Refer to General Condition 19 derivegetated buffer requirements for the NWPs). This condition is only applicable to projects that have the potential to affect water quality. While appropriate measures must be taken, in most cases it is not necessary to conduct detailed studies to identify such measures and require monitoring.
- 10. Coastal Zone Management. In certain states, an individual state coastal zone management consistency concurrence must be obtained orwaiged (see 33 CFR 330.4(d)).
- 1. Endangered Species (a) No activity is authorized under any NWE which is likely to see pardize the continued existence of a threatened or endangeredispacies, or a species proposed for such designation, as identified under the Federal Endangered Species Act or which will destroy or adversely modify the critical habitat of such species. Non-federal parmittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is inthe violaty of the project or is located in the designated critical habitat and shall not begin work on the activity until notified by the District; Engineer that the requirements of the Endangered Species Act have: been satisfied and that the autivity is authorized. For activities that: may affect Federally-listed endangered or threatened species or designated critical natitial, the notification must include the name(s) of the endangered or tweatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the EWS or NMFS, the District Engineer may add: species specific regional endangered species conditions to the NWPs. (b) Authorization of an activity by a nationwide permit does not

authorize the 'take' of a threatened or endangered species as defined under the Federal Endangered Species Act. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with 'incidental take' provisions, etc.) from the US Fish and Wildlife Service or the National Marine Fisheries Service, both lethal and non-lethal 'takes' of protected species are in violation of the Endangered Species Act. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the US Fish and Wildlife Service and National Marine Fisheries Service or their World Wide Web pages at http://www.tws.gov/rgendspp/endspp.html and http://www.nfms.ncaa.gov/prot\_res/overview/es.html, respectively.

12. Historic Properties. No activity, which may affect historic properties, listed, or eligible for listing, in the National Register of Historic Places is authorized, until the DE has complied with the provisions of 33 CFR part 325, Appendix C. The prospective permittee must notify the District Engineer If the authorized activity may affect any historic properties listed, determined to be eligible, or which the prospective permittee has reason to believe may be eligible for listing on the National Register of Historic Places, and shall not begin the activity until notified by the District Engineer that the requirements of the National Historic Preservation Act have been satisfied and that the activity is authorized. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places (see 33 CFR 330.4(g)). For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the notification must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.

13. Notification. (a) Timing: Where required by the terms of the NWP. the prospective permittee must notify the District Engineer with a . preconstruction notification (PCN) as early as possible. The District Engineer must determine if the PCN is complete within 30 days of the date of receipt and can request the additional information necessary to make the IPCN 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:

- (1) Until 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) If notified in writing by the District or Division Engineer that an individual pennit is required; or
- (3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) Contents of Notification: The notification must be in writing and include the following information:
  - (1) Name, address, and telephone numbers of the prospective

permittee;

(2) Location of the proposed project;

(a) Brief 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. Sketches should be provided when necessary to show that the activity compiles with the terms of the NWP (Sketches usually clarify the project and when provided result in a quicker decision); and

(4) For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 40, 41, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see

(5) For NWP 7, Outfall Structures and Maintenance, the PCN must include information regarding the original design capacities and configurations of those areas of the facility where maintenance dredging or excavation is proposed."

(6) For NWP 14, Linear Transportation Projects, the PCN must include a compensatory miligation proposal to offset permanent losses of waters of the US and a statement describing how temporary losses. of waters of the US will be minimized to the maximum extent practicable.

(7) For NWP 21, Surface Coal Mining Activities, the PCN must include an Office of Surface Mining (OSM) or state-approved miligation plan. To be authorized by this NWP, the District Engineer ... must determine that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are minimal both individually and cumulatively and must notify the project sponsor of this determination in writing:

(8) For NWP 27, Stream and Wetland Restoration Activities, the PCN must include documentation of the prior condition of the site that will be reverted by the permittee.

(9) For NWP 29, Single-Family Housing, the PCN must also include;

(i) Any pastuse of this NWP by the individualipermittee and/or the permittee's spouse;

(iii) A statement that the single-family housing activity is for a

personal residence of the permittee;
(iii) A description of the entire parcel, including its size, and a delineation of wellands. For the purpose of this NWP, parcels of land measuring 1/4-acre or tess will not require a formal on site delineation. However, the applicant shall provide an indication of where the wetlands are and the amount of wetlands that exists on the property. For parcels greater than 1/4-acre in size, a formal wetland delineation: must be prepared in accordance with the current method required by the Corps. (See paragraph 15(f));

(iv) A written description of all land (including, if available, legal descriptions) owned by the prospective permittee and/or the prospective permittee's apouse, within a one mile radius of the parcel, in any form of ownership (including any land owned as a partner, corporation, joint tenant, co-tenant, or as a tenant-by-the-entirely) and any land on which a purchase and sale agreement or other contract for sale or purchase has been executed;

(10) For NWP 31; Maintenance of Existing:Flood Control Facilities, the prospective permittee must either notify the District Engineer with a PCN prior to each maintenance activity or submit a live year (or less) maintenance plan. In addition, the PCN must include all of the following:

(i) Sufficient baseline information so as to identify the approved channel depths and configurations and existing facilities. Minor deviations are authorized, provided the approved flood control protection or drainage is not increased;

(ii) A delineation of any affected special aquatic sites, including wetlands; and,

(iii) Location of the dredged material disposal site.

(11) For NWP 33, Temporary Construction, Access, and Dewatering, the PCN must also include a restoration plan of reasonable measures to avoid and minimize adverse effects to aquatic

(12) For NWP's 39, 43, and 44, the PCN must also include a written statement to the District Engineer explaining how avoidance and minimization of losses of waters of the US were achieved on the

(13) For NWP 39 and NWP 42, the PCN must include a compensatory mitigation proposal that offsets unavoidable losses of waters of the US or justification explaining why compensatory miligation should not be required. For discharges that cause the loss of greater than 300 linear feet of an intermittent stream bed; to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determin adverse environmental effects are ininimal both individually and cumulatively, and waive the limitation on stream impacts in writing before the permittee may proceed;

(14) For NWP 40 (Agricultural Activities), the PCN must include a compensatory mitigation proposal to offset losses of waters of the US. This NWP does not authorize the relocation of greater than 300 linear-leet of existing serviceable drainage ditches constructed in nontidal streams unless, for drainage diliches constructed in intermittent non-tidal streams, the District Engineer waives this criterion in writing, and the District Engineer has determined that the project complies with all terms and conditions of this NWP, and that any adverse impacts of the projection the aquatic environment are minimal, both individually

and cumulatively:

(15) For NWP 43 (Stomwater Management Facilities), the PCN must include; for the construction of new stormwater management: lacilities, a maintenance plan (in accordance with state and local requirements, if applicable) and a compensatory miligation proposal to offset losses of waters of the US. Fondischarges that cause the loss of greater than 300 linear feet of an intermittent streambed, to be authorized, the District Engineer must determine that the activity complies with the other terms and conditions of the NWP, determine adverse environmental effects are minimal both individually and cumulatively, and waiva the limitation on stream impacts in writing before the permittee may proceed;

(16) For NWP 44, Mining Activities, the PCN must include a description of all waters of the US adversely affected by the project, a description of measures taken to minimize adverse effects to waters of the US, a description of measures taken to comply with the offenia of the NWP, and a reclamation plan (for aggregate mining activities in isolated waters and non-tidal wellands adjacent to headwaters and any hard rock/mineral mining activities).

(17) For activities that may adversely affect Federally-listed endangered or threatened species; the PCN must include the name(s) of those endangered or inreatened species that may be affected by the proposed work or utilize the designated orlical habitat that may be affected by the proposed work.

(18) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include vicinity map indicating the location of the historic property.

(c) Form of Notification; The standard individual permit application form (Form ENG 4345) may be Used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(19) of General Condition 13. A letter containing the regulate information may also be used.

(d) 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 becontrary to the public interest. The prospective permittee may, optionally, submit a proposed mitigation plan with the FCN to expedite the process and 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. 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, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary. Any compensatory mitigation proposal must be approved by the District Engineer prior to commencing work. If the prospective permittee is required to submit a compensatory mitigation proposal. with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will exceditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and . determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the equatio 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 stating that the project can proceed under the terms and conditions of the nationwide permit. If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then he 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 miligation proposal 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 in order to ensure no more than minimal adverse effects on the aquatic environment, the activity will be authorized within the 45day PCN period, including the necessary conceptual or specific miligation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual miligation is included; or a mitigation plan is required under Item (2) above, no work in waters of the US will occur until the District Engineer has approved

a specific miligation plan.

(e) Agency Coordination: 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 effects on the aquatic environment to a minimal level.

For activities requiring notification to the District Engineer that result in the loss of greater than 1/2 acre of waters of the US, the District Engineer will, upon receipt of a notification, provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner), a copy to the appropriate offices of the Fish and Wildlife Service, State natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the National Marine Fisheries Service. 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 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 notification that the resource agencies' concerns were considered. As required by Section : 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to National Manne Fisheries Service within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.

(f) Wetlands Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps. For NWP 29 see paragraph (b)(9)(ii) for parcels less than 1/4 acre in size. The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

14. Compliance Certification. Every permittee who has received a nationwide permit verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter. The certification will include: (a) A statement that the authorized work was done in accordance with the Corps 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.

15. Use of Multiple Nationwide Parmits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US 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

US for the total project cannot exceed 1/3 acre.

16. Water Supply Intakes. No activity, including structures and work in navigable waters of the US or discharges of dredged or ill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake. structures or adjacent bank stabilization.

17. Shellfish Beds. No activity, including structures and work in navigable waters of the US or discharges of dredged or ill material, may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4.

18. Suitable Material. No activity, including structures and work in navigable waters of the US or discharges of dredged or illi material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material Used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act):

19. Mitigation: The District Engineer will consider the factors discussed below when determining the acceptability of appropriate and practicable mitigation necessary to offset adverse effects on the aquatic environment that are more than minimal.

(a) The project must be designed and constructed to avoid and minimize adverse effects to waters of the US 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

(c) Compensatory miligation at a minimum one-for-one ratio will be required for all wetland impacts requiring a PCN, 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. Consistent with National policy, the District Engineer will establish a preference for restoration of wetlands as compensatory mitigation, with preservation used only in exceptional circumstances.

(d) Compensatory inligitation (i.e., replacement or substitution of aquatic resources for those impacted) will not be used to increase the acreage losses allowed by the acreage limits of some of the NWPs. For example, 11/4 acre of wetlands cannot be created to change a 3/4 acre loss of wetlands to a 1/2 acre loss associated with NWP 39 verification. However, 1/2 acre loss of wetlands can be used to reduce the impacts of a 1/2 acre loss of wetlands to the minimum impact level in order to meet the minimal impact requirement associated with NWPs.

(a) To be practicable, the mitigation must be available and capable of being done considering costs; existing technology, and fogistics in light of the overall project purposes. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project establishing and maintaining wetland of upland vegetated buffers to protect open waters such as streams; and restoring losses of aquatic resource, functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferably in the same watershed.

(f) Compensatory miltigation plans for projects in or near streams of other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., easements, deed restrictions) of yegetated buffers to open waters. In many cases, vegetated buffers will be the only compensatory mitigation required. Vegetated buffers should consist of native-species. The width of the vegetated buffers required will address documented water quality or

aquatic habitat loss concerns. Normally, the vegetated buffer will be 25 to 50 feat wide on each side of the stream, but the District Engineers may require alightly wider vegetated buffers to address documented water quality or habitat loss concerns. Where both wettands and open waters exist on the project site, the Corps will determine the appropriate compensatory miligation (e.g., stream buffers or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where vegetated buffers are determined to be the most appropriate form of compensatory miligation, the District Engineer may waive or reduce the requirement to provide welland compensatory miligation for wetland impacts.

(g) Compensatory miligation proposals submitted with the "notification" may be either conceptual or detailed. If conceptual plans are approved under the verification, then the Corps will condition the verification to require detailed plans be submitted and approved by the Corps prior to construction of the authorized activity in waters of the US.

(h) Permittees may propose the use of mitigation banks, in-lieu tee arrangements or separate activity-specific compensatory mitigation. In all cases that require compensatory mitigation, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

20. Spawning Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material. In spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

21. Management of Water Flows. To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows: In most cases; it will not be a requirement to . conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

22. Adverse Effects From Impoundments. If the activity, including structures and work in navigable waters of the US or discharge of dredged or fill material; creates an impoundment of water, adverse effects on the aquatic system caused by the accelerated passage of water and/or the restriction of its flow shall be minimized to the maximum extent practicable:

23. Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, into breeding areas for migratory waterlow must be avoided

to the maximum extent practicable.

- 24. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.
- 25. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wild and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, 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) Except as noted below, discharges of dredged or fill material into waters of the US are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, and 44 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the US may be authorized by the above NWPs in National Wild and Scenlo Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the US Fish and Wildlife Service or the National Marine Fisheries Service has concurred in a determination of compliance with this condition.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 38, 34, 36, 37, and 38, notification is required in accordance with General Condition 13, 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 he determines that the impacts to the critical resource waters will be no more than minimal.
- 26. Fills Within 100-Year Floodplains. For purposes of this General Condition, 100-year floodplains will be identified through the existing Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps or FEMA-approved local floodplain maps.
- (a) Discharges in Floodplain; Below Headwaters. Discharges of dredged or fill material into waters of the US within the mapped 100-year-floodplain, below headwaters (i.e. five cfs), resulting in permanent above-grade fills, are not authorized by NWPs 39, 40, 42, 43, and 44.
- (b) Discharges in Floodway; Above Headwaters. Discharges of dredged or fill material into waters of the US within the FEMA or locally mapped floodway, resulting in permanent above-grade fills; are not authorized by NWPs 39, 40, 42, and 44.
- (c) The permittee must comply with any applicable FEMA-approved state or local floodplain management requirements.
- 27. Construction Period. For activities the Corps has not verified that and the project were commenced or under contract to commence by the expiration date of the NWP (or modification or revocation date), the work must be completed within 12- months after such date (including any modification that affects the project).

For activities that have been verified and the project was commenced or under contract to commence within the verification period; the work must be completed by the date determined by the Doms.

For projects that have been verified by the Corps, an extension of a Corps approved completion date maybe requested. This request must

be submitted at least one month before the previously approved completion date.

#### D. Further Information

- District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- NWPs do not obviate the need to obtain other Federal, State, or local permits, approvals, or authorizations required by law.
- 3. NWPs do not grant any property rights or exclusive privileges.
- NWPs do not authorize any injury to the property or rights of others;
- NWPs do not authorize interference with any existing or proposed Federal project.

Section 10 Special Condition: The permittee understands and agrees that, if future operations by the US 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 is 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 elter the structure work or obstructions caused thereby, without expense to the US. No claim shall be made against the US on account of any such removal or alteration.

#### DEFINITIONS

Best management practices: Best Management Practices (BMPs) are policies, practices, procedures, or structures implemented to miligate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural, A BMP policy may affect the limits on a development.

Compensatory mitigation: For purposes of Section 10/404, compensatory mitigation is the restoration, creation, enhancement, or in exceptional circumstances, preservation of wetlands and/or other aquatic resources for the purpose of compensating for unavoidable adverse impacts, which remain, after all appropriate and practicable avoidance, and minimization has been achieved.

Creation: The establishment of a wetland or other aquatic resource where one did not formerly exist:

Enhancement: Activities conducted in existing wetlands or other aquatic resources, which increase one or more aquatic functions.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral streambeds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Farm tract: A unit of contiguous land under one ownership which is operated as a farm or part of a farm.

Flood Fringe: That portion of the 100-year floodplain outside of the floodway (often referred to as "floodway fringe:"

Floodway. The area regulated by Federal, state; or local requirements to provide for the discharge of the base flood so the cumulative increase in water surface elevation is no more than a designated amount (not to exceed one foot as set by the National Flood Insurance Program) within the 100-year floodplain.

Independent utility: A test to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases are not built can be considered as separate single and complete projects with independent utility.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the US: Waters of the US that include the filled area and other waters that are permanently adversely affected by flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent above-grade, at-grade, or below-grade fills that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The appeage of loss of waters of the US is the threshold measurement of the impact to existing waters for determining whether e project may qualify for an NWP; It is not a net threshold that is calculated after considering compensatory mitigation that may be used to offsel losses of aquatic functions and values. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the US temporarily filled, illooded, excavated, or drained, but restored to preconstruction contours and elevations after construction; are not included in the measurement of loss of waters of the US. Impacts to ephemeral waters are only not included in the acreage or linear foot measurements of loss of waters of the US or loss of stream bed, for the purpose of determining compliance with the threshold limits of the NWPs.

Non-tidal wetland: A non-tidal wetland is a wetland (i.e., a water of the US) that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands configuous to tidal waters are located landward of the high tide line (i.e., the spring high tide line).

Open water: An area that, during a year with normal patterns of precipitation, has standing or flowing water for sufficient duration to establish an ordinary high water mark. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. The term open water findludes rivers, streams, lakes, and ponds. For the purposes of the NWPs, this term does not include ophemeral waters.

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the streambed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Permanent above-grade fill: A discharge of dredged or fill material into waters of the US, including wetlands, that results in a substantial increase in ground elevation and permanently converts part or all of the waterbody to dry land. Structural fills authorized by NWPs 3, 25, 36, etc. are not included.

Preservation: The protection of ecologically important wetlands or other equatic resources in perpetuity through the implementation of appropriate legal and physical mechanisms. Preservation may include protection of upland areas adjacent to wetlands as necessary to ensure protection and/or enhancement of the overall aquatic ecosystem.

Restoration: Re-establishment of wetland and/or other aquatic resource characteristics and function(s) at a site where they have ceased to exist, or exist in a substantially degraded state

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. Pools are characterized by a slower stream velocity, a streaming flow, a smooth surface, and a liner substrate.

Single and complete project: The term 'single and complete project' is defined at 33 GFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers (see definition of independent utility). For linear projects, the 'single and complete project' (i.e., a single and complete crossing) will apply to each crossing of a separate water of the US-(i.e., a single waterbody) at that location. An exception is for linear projects crossing a single waterbody several times at separate and distant locations each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or take, etc., are not separate waterbodies.

Stormwater management: Stormwater management is the mechanism for controlling stormwater manufror the purposes of reducing downstreamierosion, water quality degradation, and flooding and mitigating the adverse affects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not ilmited to, stormwater retention and detention pends and BMPs, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutents) of stormwater runoff.

Streambed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands configuous to the streambed, but outside of the ordinary high water marks, are not considered part of the streambed.

Stream channelization: The manipulation of a stream channel to increase the rate of water flow through the stream channel. Manipulation may include deepening, widening, straightening, amoing, or other activities that change the stream cross-section or other aspects of stream channel geometry to increase the rate of water flow through the stream channel. A channelized stream remains a water of the US, despite the modifications to increase the rate of water flow.

Tidal wetland: A tidal watland is a wetland (i.e., a water of the US) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 GFR 328.3(b) and 33 GFR 328.3(f), respectively. Tidal waters if se and fell in a predictable and measurable rhythm or cycle tide to the gravitational pulls of the moon and sun. Tidal waters and where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wellands are located channelward of the high tide line (i.e., spring high tide line) and

FAP Route 103 (IL Route 13/15) Section 27-1R St. Clair County Contract 76300

are inundated by Ildal waters two times per tunar month, during spring high tides.

Vegetated buffer: A yegetated upland or welland area next to rivers, streams, lakes, or other open waters, which separates the open water from developed greas, including agricultural land. Vegetated buffers provide a variety of equatic habitat functions and values (e.g., aquatic habitat for fish and other aquatic organisms, moderation of water temperature changes, and detritus for aquatic food webs) and help improve or maintain local water quality. A vegetated buller can be established by maintaining an existing vegetated area or planting native trees, shrubs, and herbaceous plants on land next to open waters. Mowed lawns are not considered vegetated buffers because they provide little or no aquatic habitat functions and values. The establishment and maintenance of vegetated buffers is a method of compensatory mitigation that can be used in conjunction with the restoration, creation, enhancement, or preservation of aquatic habitats to ensure that activities authorized by NWPs result in minimal adverse effects to the aquatic environment. (See General Condition 19.)

Vegetated shallow: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seegrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: A waterbody is any area that in a normal year has water flowing or standing above ground to the extent that evidence of an ordinary high water mark is established. Wetlands contiguous to the waterbody are considered part of the waterbody.



### 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

217/782-3362

ROD R. BLAGOJEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

July 5, 2004

St. Louis District Corps of Engineers 1222 Spruce Street St. Louis, MO 63103

Re: Illinois Department of Transportation, District 8 (St. Clair County)
Improvements to Illinois Route 13/15 – Sugar Creek & tributaries
Log # C-0753-03 [CoE appl. # 200305530]

#### Gentlemen:

This Agency received a request on July 17, 2003 from the Illinois Department of Transportation District 8 requesting necessary comments concerning the improvements to Illinois Route 13/15 which will include the replacement of drainage structures over Sugar Creek and three of its mibutaries. We offer the following comments.

Based on the information included in this submittal, it is our engineering judgment that the proposed project may be completed without causing water pollution as defined in the Illinois Environmental Protection Act, provided the project is carefully planned and supervised.

These comments are directed at the effect on water quality of the construction procedures involved in the above described project and are <u>not</u> an approval of any discharge resulting from the completed facility, nor an approval of the design of the facility. These comments do <u>not</u> supplicant any permit responsibilities of the applicant toward the Agency.

This Agency hereby issues certification finder Section 401 of the Clean Water Act (PL 95-217), subject to the applicant's compliance with the following conditions:

- The applicant shall not cause:
  - violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35,
     Subtitle C: Water Pollution Rules and Regulations;
  - b. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
  - c. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall provide adequate planning and supervision during the project construction period
  for implementing construction methods, processes and pleanup procedures necessary to prevent water
  pollution and control erosion.

ROCKFORD = 4302 North Main Street. Rockford, IL 61103 - 1815) 987-7780 \* Des Plaines = 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000

ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 \* Pronia - 5415 N. University St., Pronia, IL 61614 - (309) 693-5463

ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 \* Pronia - 5415 N. University St., Pronia, IL 61614 - (309) 693-5463

ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 \* Pronia - 5415 N. University St., Pronia, IL 61614 - (309) 693-5463

CHAMPAIGN - 2125 South First Street, Champaign, IL 6180 - (217) 278-5800

Springfield - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892 \* Columbia Columbia

Page No. 2 Log No. C-0753-03

- 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 this Agency. 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 constructed 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 on or after March 10, 2003. 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.
  - 5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
  - Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/streambanks, or 3) placed in waters of the State.
  - 7. 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 downstream:

This certification becomes effective when the Department of the Army, Corps of Engineers, includes the above conditions # 1 through # 7 as conditions of the requested permit issued pursuant to Section 404 of PL 95-217.

This certification does not grant immunity from any enforcement action found necessary by this Agency to meet its responsibilities in prevention abatement, and control of water pollution.

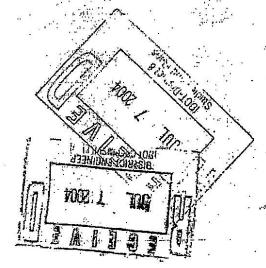
Sincerely,

Manager, Watershed Management Section

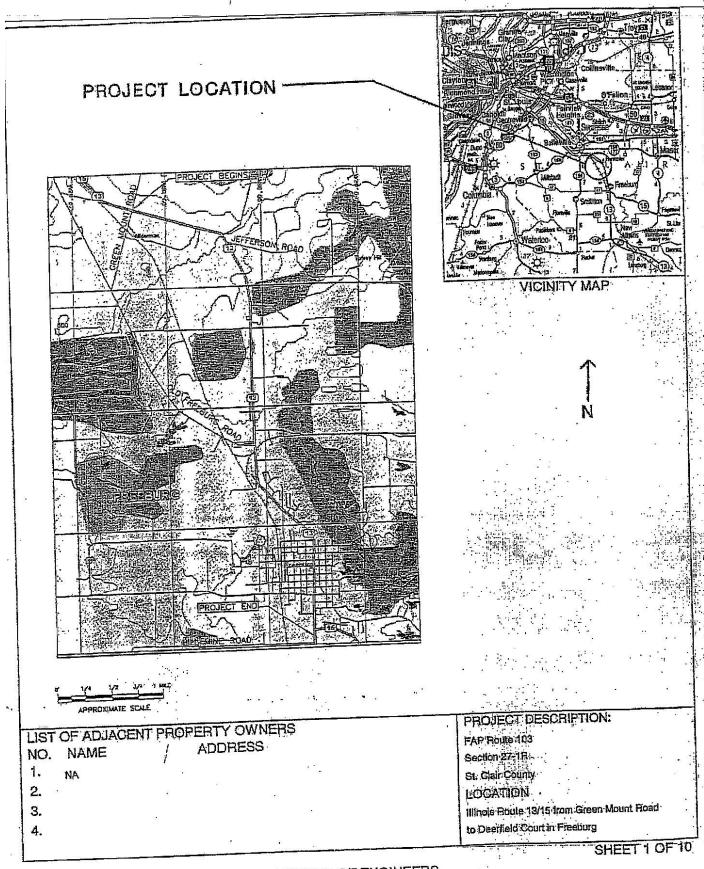
Bureau of Water

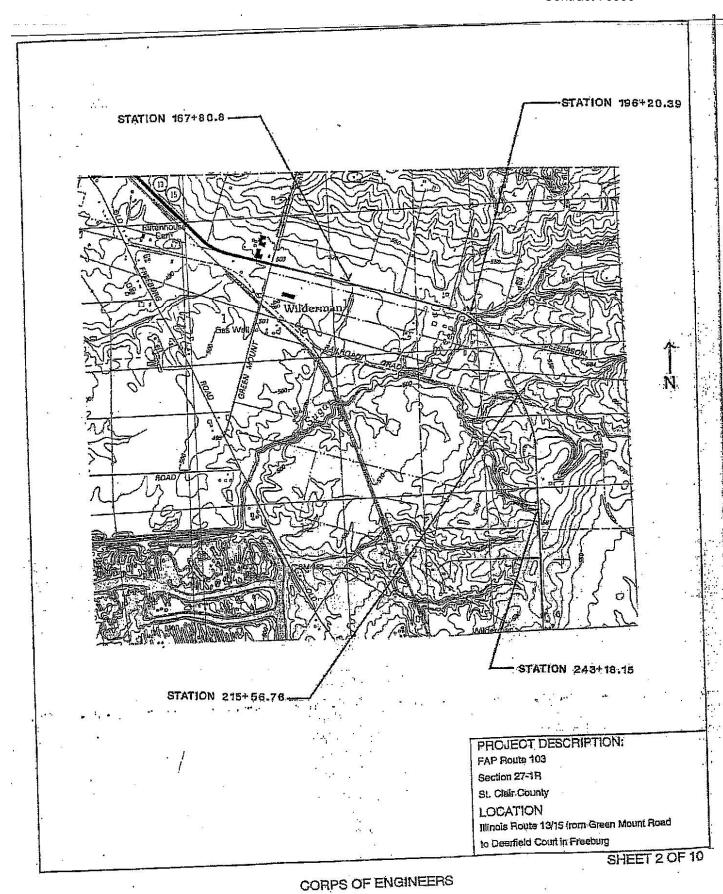
BY:TJF:0753-03.doc

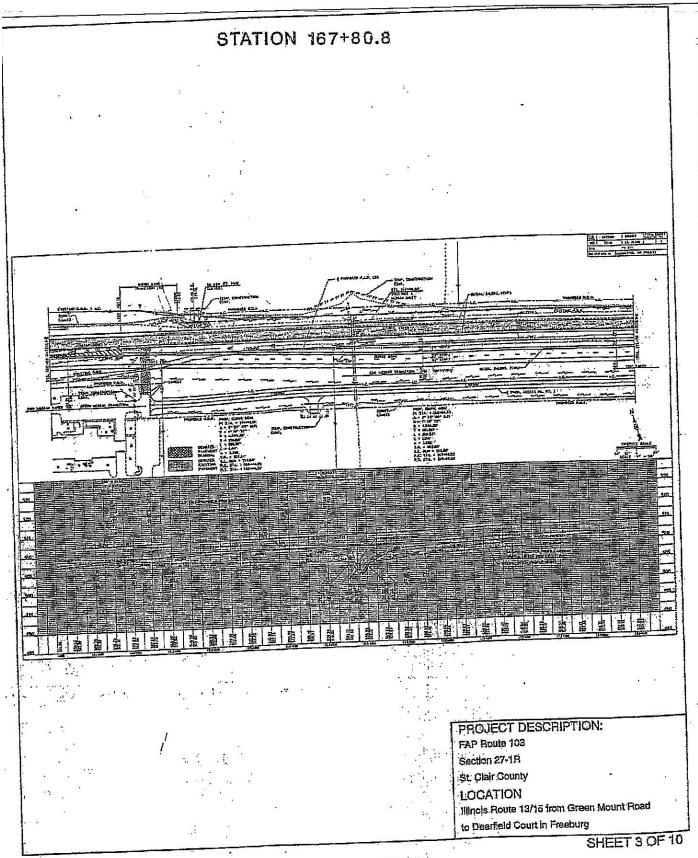
cc: IEPA, Records Unit
IEPA, DWPC, FOS, Collinsville
IDNR, OWR, Springfield
USEPA, Region 5
Ms. Mary Lamie, IDOT, District 8
Mr. Victor Modeer, IDOT, District 8



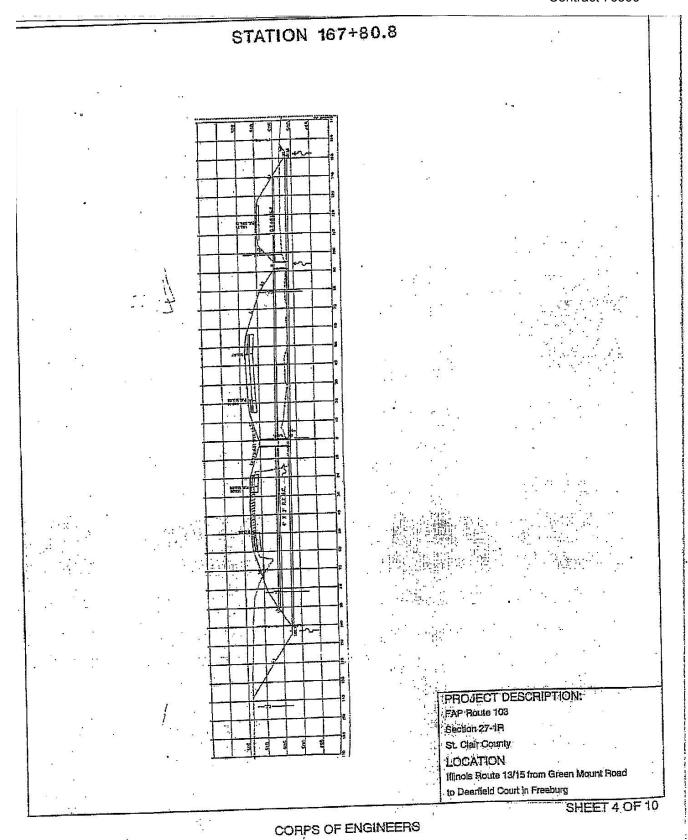
	JOINT APP	PLICATION FORM	1 3. For Agency use only	
The second by Appared	2. Date		(Date Received)	<u>1</u>
Application Number (To be assigned by Agency)		e 1		
	Day Month	Уват		
	Day Month	1 5 Name addres	ss and fille of authorized agent	A THOUSE AND
Name and address of applicant	(let	Idean Adode	er, District Engineer	•
ois Department of Transportation		Winnie Denadi	ment of Transportation	
101s Department of Marse Drive	2	1 4400 Eachard	Plaza Drive	
Uz Essipolit Piazza Ilinsville, Illinois 62234-6198		Collinsville, Illi	nois 62234-6188	
ephone no. during business hours	2	Telephone no. d	uning business frours	
		A/G (618)	346-3100	
0 (618) 346-3100	9	4.0.2 (0.1.2)		matics to each agency application
Describe in detail the proposed activity, its purpose, and the proposed project consist of improvements along Rt. 1 pressway from Green Mount Road to Peabody Road; were lanes from Rogers Drive to Washington, Street. The treat design policy, and to improve safety and operation proximately 50' in length will be replaced with a 41' X' 1 in existing 10' X 6' box approximately 94' in length will be stating 6' X 5' box approximately 50' in length xill be replaced of the stating 6' X 5' box approximately 100' in length will be replaced by the proposed project. No utility of the proposed project. No utility of the proposed project. No utility of the proposed project. The proposed project is promiserial. Tree removal with be minimized but where no	idening the existing roads indening the existing roads of proposed project will bross. In-stream work will take box culvert approximately replaced by a double 10° 216+50 will be replaced by placed with a 2° X.2° box a placed with a 2° X.2° box a control of the	way to five lanes from Povide wider shoulders, of the place at four location (250° in length, At Station (250° in length, At Station (250° in length, At Station (250° in length), as approximately 253° in length (250° in length).	eabody Road to Rogers Driver, trainage improvements, and m is within the project. At Station on 1864-20.39 an existing 4' X - by 164' in length with 12' of ripre imately 265' in length at I continued night. The roadway will remain night. The adjacent land use is	and widering the existing the way alor intersection improvements to me. 167+80.8 an existing 64" X 43" cm 4" box approximately 83" in fength ar ap at each and for scour protection. P15+56.75. Al Station 243+18.15 open by utilizing stage construction. residential; agricultural, and
issing 24° RCCO* approximately too eilands will be affected by the proposed project. No utili immercial. Tree removal will be minimized but where no smoval will be restricted to the dates between September provided to the propriet and September Control.	eeded they will be replace	ed in accordance with I	DUI is the telliporar point of the	easures consistent with the "Stander
mmercial. Tree removal was be full interest Septembe	ar 30 and April 1 pl any ye	ist. The Debarmancan	Battipio//term	
mmercial. The restricted to the dates between September involved the restricted to the dates between September of Specification for Erosion and Sediment Control. Name, addresses, and telephone numbers of all adjoin	ining and botentially affect	and property owners, in	cluding the pwner of the subjec	d bicharthir cimarastrupius abbusine
Name, addresses, and telephone numbers or all adjoin	twill are beautiful.			
NA				
(A)				
	*	22		
		7		
5 CES			3•	900 E
			<b>5</b> 3	
		1 Assessed	Cont ,	
. Location of activity:		Legal Descrip	EDUCA	The state of the s
			VAR 1-S	7-W 3 rd.
Address		1/4:	Sec. Twp:	Age. P.M.
Street, road, or other descriptive location		Tax Assessor	's Description (il known):	
Character 1			5	Ev No Lot1
Freeburg		Map No.		iv. No. Lot
in or near city or town		Name of water	erway at location of the activity	
St. Clair IL	62243	unnamed sin	eams + Sugar Creek	
County State	Zip Code		A.J. 1. 1 1	to available to a
				December 2004
5. Date activity if proposed to commence. July 2004	4 A Robert	Date activity	is expected to be completed	1, 2, 4 / 3 · ( · , 2 · )
H man arrivity i impossed to commence.			W 111-	answer is Pyes give reasons in the
A' Dataloctory is it.	- amucht now complete?	Yes	No. V	dicate the existing work on drawings
9, Date Source, 19	12 Subditt lines desired	at the second		
notaxinothus divide and the action visits or	completed			
10. Is any portion of the activity for which authorization			ny structures, construction, dis	charges, deposits, or other activities
10. Is any portion of the activity for which authorization			ny structures, construction, dis ingineers, Illinois Department o	charges, deposits or other activities Transportation vand illinois Environ
10. Is any portion of the activity for which guiltonization remarks section. Month and Year the activity was 11. List all approvals or cartifications required by other	r lederal , interstate, state used for concurrent applic	or local agencies for a cation to the Corps of E	A. 1	charges, deposits of other activities if Transportation vand illinois Environ
10. Is any portion of the activity for which authorization remarks section. Month and Year the activity was 11. List all approvals or certifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be its	r tederal , interstate, state used for concurrent applic sted.		A. 1	charges, deposits of other activities   Transportation varietitinois Environ   Date of App
10. Is any portion of the activity for which guiltonization remarks section. Month and Year the activity was 11. List all approvals or cartifications required by other described in this application. If this form is being to the control of the party these spencies peed not be its	r lederal , interstate, state used for concurrent applic	or local agencies for a cation to the Corps of E	A. 1	charges, deposits of other activities   Transportation yand titinois Environ   Date of App
10. Is any portion of the activity for which authorization remarks section. Month and Year the activity was 11. List all approvals or certifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be its	r tederal , interstate, state used for concurrent applic sted.	or local agencies for a cation to the Corps of E	A. 1	charges, deposits of other activities   Transportation yand titinois Environ   Date of App
remarks section. Month and Year the activity was  11. List all approvals or certifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be is issuing Agency.  Type	r lederal , interstate, slate used for concurrent applic steri. Approval	a or lical agencies for a callon to the Corps of E Identification N	<u>lo.                                    </u>	polication Date of Asset
remarks section. Month and Year the activity was  11. List all approvals or certifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be is issuing Agency.  Type	r lederal , interstate, slate used for concurrent applic steri. Approval	a or lical agencies for a callon to the Corps of E Identification N	<u>lo.                                    </u>	polication Date of Asset
remarks section. Month and Year the activity was  11. List all approvals or certifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be is issuing Agency.  Type	r lederal , interstate, slate used for concurrent applic steri. Approval	a or lical agencies for a callon to the Corps of E Identification N	<u>lo.                                    </u>	polication Date of Asset
Toj Js: any portion of the activity for which authorization remarks section. Month and Year the activity was:  11. List all approvals or cartifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be is issuing Agency.  Type	r lederal , interstate, slate used for concurrent applic steri. Approval	a or lical agencies for a callon to the Corps of E Identification N	<u>lo.                                    </u>	polication Date of Asset
10. Is any portion of the activity for which authorization remarks section. Month and Year the activity was 11. List all approvals or cartifications required by other described in this application. If this form is being the Protection Agency, these agencies need not be its issuing Agency.  12. Has any agency denied approval for the activity of Yes.  13. No. (If Yes.)	r lederal , interstate, slate used for concurrent applic steri. Approval	a or lical agencies for a callon to the Corps of E Identification N	<u>lo.                                    </u>	polication Date of Asset
10. Is any portion of the activity for which authorization remarks section. Month and Year the activity was 11. List all approvals or cartifications required by other described in this application. If this form is being the Protection Agency, these agencies need not be its issuing Agency.  Type  12. Has any agency denied approval for the activity of the activity o	r lederal , interstate, slate used for concurrent applic steri. Approval	a or lical agencies for a callon to the Corps of E Identification N	<u>lo.                                    </u>	polication Date of Asset
10. Is any portion of the activity for which authorization remarks section. Month and Year the activity was 11. List all approvals or cartifications required by other described in this application. If this form is being the Protection Agency, these agencies need not be its issuing Agency.  12. Has any agency denied approval for the activity of Yes.  13. No. (If Yes.)	r lederal , interstate, slate used for concurrent applic sted. Approval	a or lical agencies for a callon to the Corps of E Identification N	<u>lo.                                    </u>	polication Date of Asset
10. Is any portion of the activity for which authorization remarks section. Month and Year the activity was 11. List all approvals or certifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be is issuing Agency.  Type  12. Has any agency denied approval for the activity of the Xeronal Street Remarks.	r lederal , interstate, state used for concurrent applic sted. Approval escribed herein or for any explain in remarks)	a or incal agencies for a calion to the Corps of E <u>Identification N</u> y activity directly related	o Date of A	n.
10. Is any portion of the activity for which authorization remarks section. Month and Year the activity was:  11. List all approvals or cartifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be its issuing Agency.  12. Has any agency denied approval for the activity of Yes.  3. Remarks	r lederal , interstate, state used for concurrent applicated.  Approval  lescribed hereig or for any explain in remarks)	a or incal agencies for a calion to the Corps of Education N Identification N y activity directly related	o Date of A	n.
10. List all approvals or certifications required by other described in this application. If this form is being the protection Agency, these agencies need not be its sulne Agency. Type  12. Has any agency denied approval for the activity of Yes. X. No. (If Yes.)  3. Remarks	r lederal , interstate, slate used for concurrent applicated for concurrent applicated for approval lescribed herein or for any explain in remarks)	e or incel agencies for a calion to the Corps of E Identification N Identification N y activity directly related accurate.	o Date of A	n.
10. List all approvals or certifications required by other described in this application. If this form is being the protection Agency, these agencies need not be its sulne Agency. Type  12. Has any agency denied approval for the activity of Yes. X. No. (If Yes.)  3. Remarks	r lederal , interstate, slate used for concurrent applicated for concurrent applicated for approval lescribed herein or for any explain in remarks)	e or incel agencies for a calion to the Corps of E Identification N Identification N y activity directly related accurate.	o Date of A	n.
10. Is any portion of the activity for which pultiorization remarks section. Month and Year the activity was:  11. List all approvals or cartifications required by other described in this application. If this form is being to Protection Agency, these agencies need not be its issuing Agency.  12. Has any agency denied approval for the activity of Yes.  3. Remarks	r lederal , interstate, slate used for concurrent applicated for concurrent applicated for approval lescribed herein or for any explain in remarks)	e or incel agencies for a calion to the Corps of E Identification N Identification N y activity directly related accurate.	o Date of A	n.



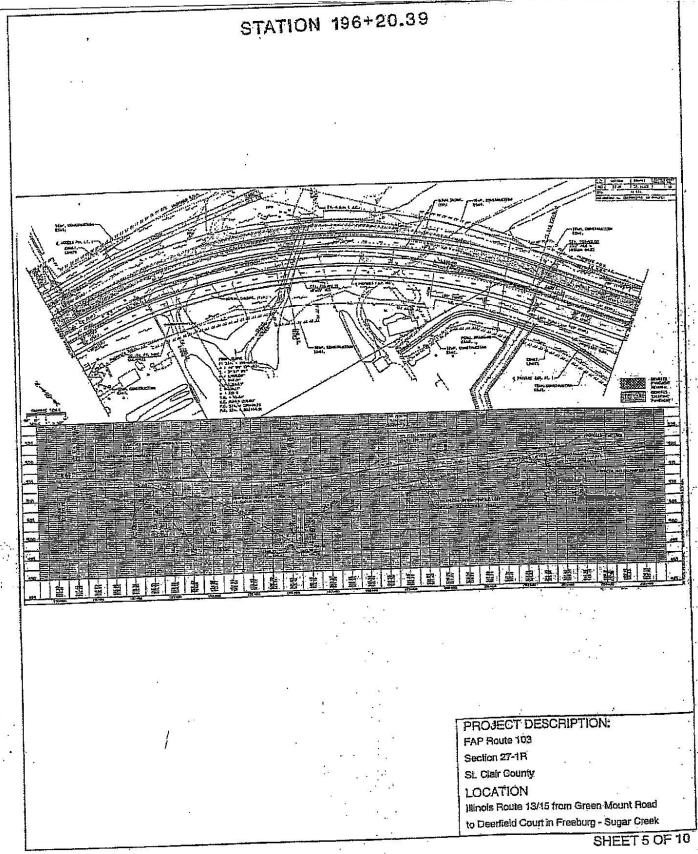




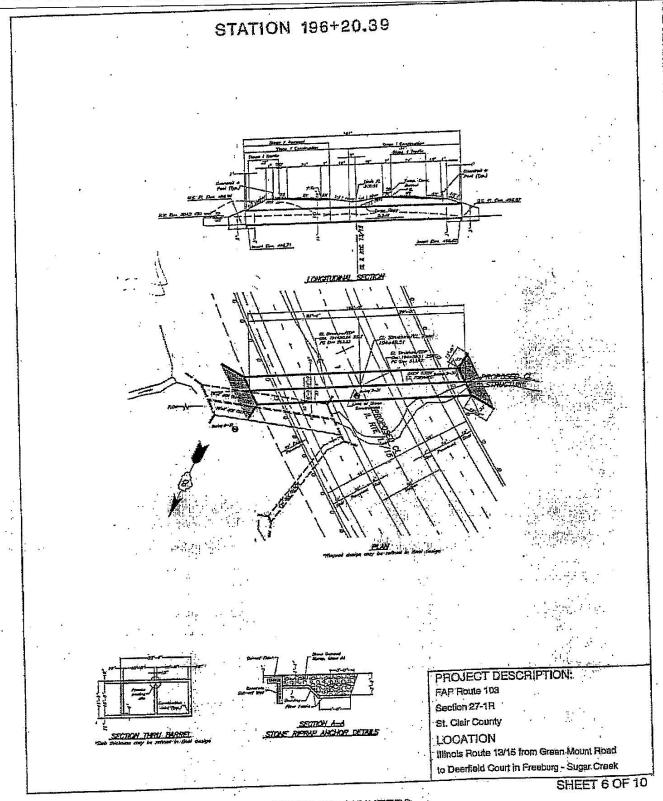
CORPS OF ENGINEERS



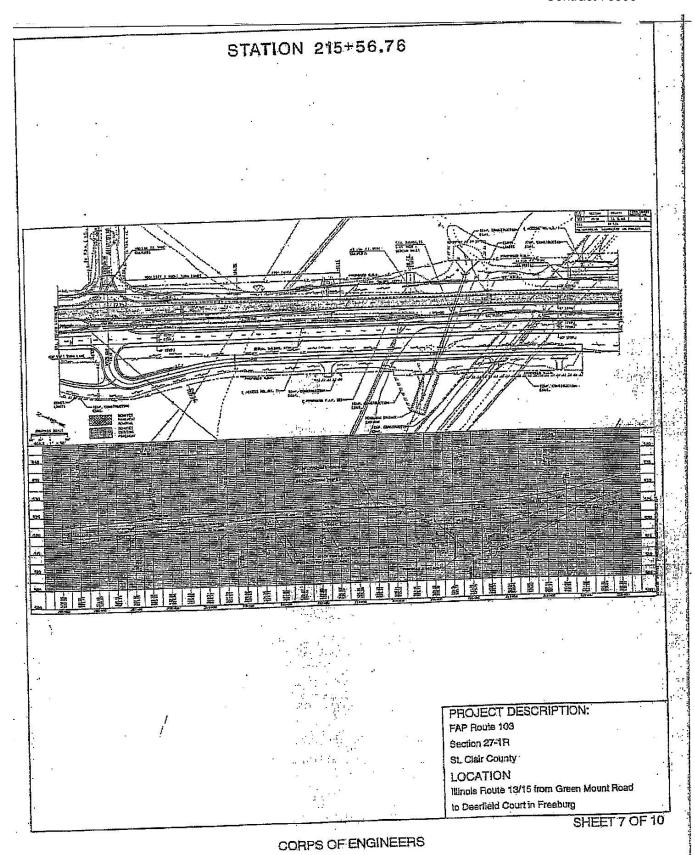
184



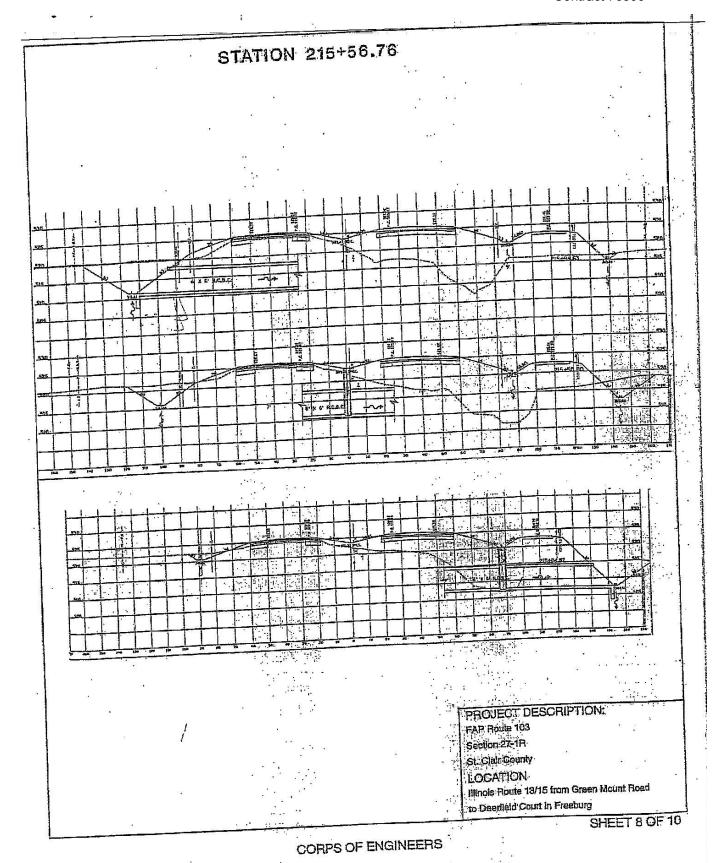
CORPS OF ENGINEERS

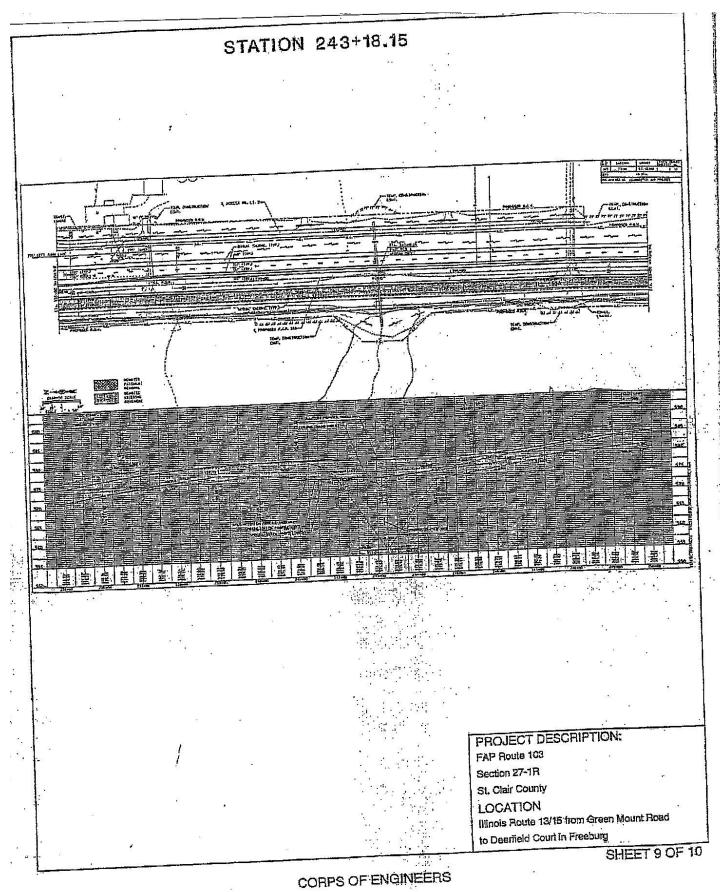


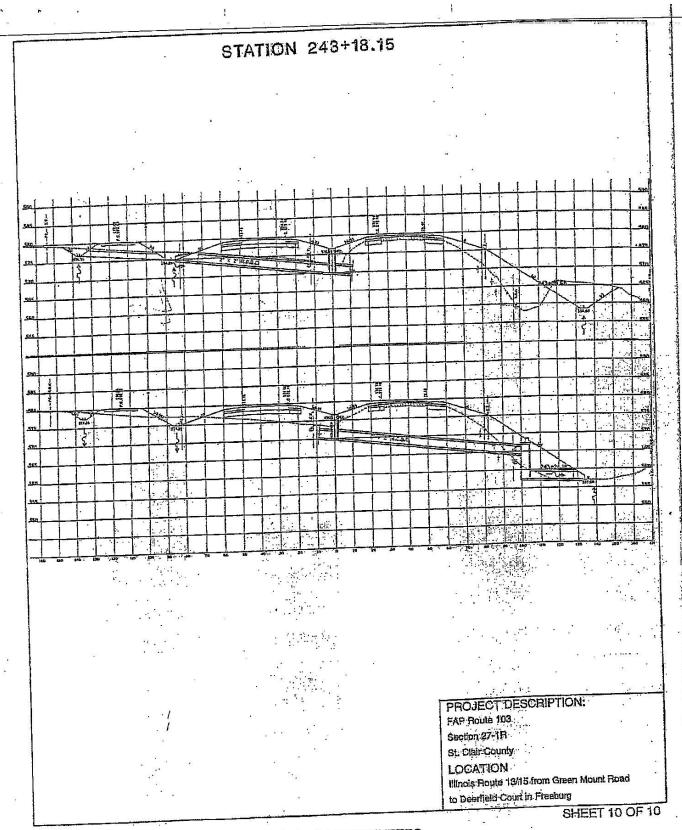
CORPS OF ENGINEERS



187







CORPS OF ENGINEERS



# ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGHEID, ILLINOIS 62794-9276, 217-782-3397 JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601, 312-814-6026

217/782-3362

ROD R. BLAGOIEVICH, GOVERNOR

RENEE CIPRIANO, DIRECTOR

July 6, 2004

St. Louis District Corps of Engineers 1222 Spruce Street St. Louis, MO 63103

Re: Illinois Department of Transportation, District 8 (St. Clair County) improvements to Illinois Route 13/15 - Sugar Creek & tributaries Log # C-0753-93 [CoE appl. # 200305530]

#### Gentlemen:

This Agency received a request on July 17, 2003 from the Illinois Department of Transportation District 8 requesting necessary comments concerning the improvements to Illinois Route 13/15 which will include the replacement of drainage structures over Sugar Creek and three of its tributaries. We offer the following comments.

Based on the information included in this submittal, it is our engineering judgment that the proposed project may be completed without causing water pollution as defined in the Illinois Environmental Protection Act. provided the project is carefully planned and supervised.

These comments are directed at the effect on water quality of the construction procedures involved in the above described project and are <u>not</u> an approval of any discharge resulting from the completed facility, nor an approval of the design of the facility. These comments do <u>not</u> supplant any permit responsibilities of the applicant toward the Agency.

This Agency hereby issues certification under Section 401 of the Clean Water Act (PL 95-217), subject to the applicant's compliance with the following conditions:

- 1. The applicant shall not cause:
  - a. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35,
     Subtitle C: Water Pollution Rules and Regulations;
  - b. water pollution defined and prohibited by the Illinois Environmental Protection Act; or
  - c. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall provide adequate planning and supervision during the project construction period
  for implementing construction methods, processes and cleanup procedures necessary to prevent water
  pollution and control erosion.

ROPERTORID = 4302 North Main Street. Rockford, IL 61103 = 4815 987-7760 • DES Plantes = 9511 W. Harrison St., Des Plaines, IL 60016 = 4847 (494-4000 Proria = 5415 N. University St., Peoria, IL 61014 = 1809 693-5463 Proria = 5415 N. University St., Peoria, IL 61014 = 1809 693-5463 Charrison = 2125 South First Street, Champaign, IL 6120 = 4217: 278-5800 Proria = 7620 N. University St., Peoria, II, 61614 = 4309 693-5462 Charrison = 2125 South First Street, Champaign, IL 6120 = 4217: 278-5800 Prorial = 7620 N. University St., Peoria, II, 61614 = 4309 693-5462 Collinsville = 2009 Mail Street, Collinsville, IL 62234 = 46181 346-5120 Marion = 2309 W. Main St., Suite 116, Marion, IL 62059 = 4618) 993-7200

PARTE PAPER

<del>-Page No. 2</del> Log No. C-0753-03

- 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 this Agency. 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 constructed 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 on or after March 10, 2003. 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 Pellution Control, Permit Section.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
- Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/streambanks, or 3) placed in waters of the State.
- 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 downstream.

This certification becomes effective when the Department of the Army, Corps of Engineers, includes the above conditions # 1 through # 7 as conditions of the requested permit issued pursuant to Section 404 of PL 95-217.

This certification does not grant immunity from any enforcement action found necessary by this Agency to meet its responsibilities in prevention, abatement, and control of water pollution.

1. Heaver

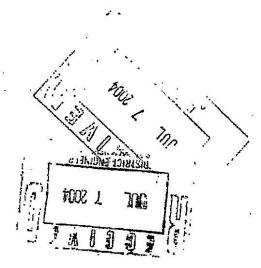
Sincerely,

Bruce J. Yurdin / Management Section

Bureau of Water

BY:TJF:0753-03.doc

ce: IEPA, Records Unit
IEPA, DWPC, FOS, Collinsville
IDNR, OWR, Springfield
USEPA, Region 5
Ms. Mary Lamie, IDOT, District 8
Mr. Victor Modeer, IDOT, District 8



# APPENDIX D SHIPPING MANIFEST Generator

	O	Nama	Owne	r'e	
1. Work Site Name and Mailing Address	Owner's	s Name	Telephor		ļ
897 - 8 - 228 W - 1974 W - 197			Operate		
2. Operator's Name and Address	\$ 5297		Telepho		
542 2			OW CW		
3. Waste Disposal Site (WDS) Name			Telepho		i
Mailing Address, and Physical			relebito	HE NO.	
Site Location					
Name and Address of Responsible Agen	су				
5. Description of Materials				NO.	
6. Containers	No.	Туре			
7. Total Quantity	M³	(Yd³)			
8. Special Handling Instructions and Addition	nal Inform	ation	·	733	
9. OPERATOR'S CERTIFICATION: I here	by declare	that the conte	ents of this	•	
the second and accurately des	crinea apo	ME DA DI ODEL	SHIPPING		
	and labe	ieu, aliu ale i	II all 109hr	ecis 	
in proper condition for transport by highw	ay accord	ing to applica	ble interna	tional	
and government regulations.					
Printed/Typed Name & Title		nature	Month	Day Ye	ar_
	ransporter				
10. Transporter 1 (Acknowledgement of Re	ceint of M				
Printed/Typed Name & Title	CCIPL OF ST	ateriais)			
	Sig	ateriais) nature	Month	Day Ye	ar
Ellifent Taben Tanne of Line	Sig	ateriais) nature	Month	Day Ye	ar
Address and Telephone No.	Sig	atenais) nature	Month	Day Ye	ar
Address and Telephone No.	Sig	jatule	Month	Day Ye	ar
Address and Telephone No.  11. Transporter 2 (Acknowledgement of Re	eceipt of M	aterials)		Day Ye	
Address and Telephone No.	eceipt of M	jatule			
Address and Telephone No.  11. Transporter 2 (Acknowledgement of Re Printed/Typed Name & Title  Address and Telephone No.	eceipt of M Sig	aterials) nature			
Address and Telephone No.  11. Transporter 2 (Acknowledgement of Reprinted/Typed Name & Title  Address and Telephone No.	eceipt of M	aterials) nature			
Address and Telephone No.  11. Transporter 2 (Acknowledgement of Re Printed/Typed Name & Title  Address and Telephone No.	eceipt of M Sig	aterials) nature	Month	Day Ye	
Address and Telephone No.  11. Transporter 2 (Acknowledgement of Reprinted/Typed Name & Title  Address and Telephone No.	eceipt of M Sig	aterials) nature	Month  pt of Asbe	Day Ye	
Address and Telephone No.  11. Transporter 2 (Acknowledgement of Reprinted/Typed Name & Title  Address and Telephone No.	eceipt of M Sig isposal Site or: Certifica	aterials) nature ation of Recei	Month pt of Asbe	Day Ye	
Address and Telephone No.  11. Transporter 2 (Acknowledgement of Re Printed/Typed Name & Title  Address and Telephone No.	eceipt of M Sig isposal Site or: Certifica Materia Except	aterials) nature ation of Recei	Month  pt of Asbe y This Ma tem 12	Day Ye	ear
Address and Telephone No.  11. Transporter 2 (Acknowledgement of Re Printed/Typed Name & Title  Address and Telephone No.	eceipt of M Sig isposal Site or: Certifica Materia Except	aterials) nature ation of Recei	Month  pt of Asbe y This Ma tem 12	Day Ye	ear

#### APPENDIX D

#### INSTRUCTIONS

Waste Generator Section (Items 1-9)

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

FAP Route 103 (IL Route 13/15) Section 27-1R St. Clair County Contract 76300

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

195

#### APPENDIX D

#### INSTRUCTIONS

Transporter Section (Items 10 & 11)

10. & 11. Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport.

NOTE: The transporter shall retain a copy of this form.

Disposal Site Section (Items 12 & 13)

- 12. The authorized representative of the WDS shall note in this space any discrepancy between waste described on this mainfest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.
- 13. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in Item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS shall retain a completed copy of this form. The WDS shall also send a completed copy to the operator listed in Item 2.

FAP Route 103 (IL Route 13/15) Section 27-1R St. Clair County Contract 76300

#### WORK ZONE TRAFFIC CONTROL DEVICES (BDE)

Effective: January 1, 2003 Revised: November 1, 2004

Add the following to Article 702.01 of the Standard Specifications:

"All devices and combinations of devices shall meet the requirements of the National Cooperative Highway Research Program (NCHRP) Report 350 for their respective categories. The categories are as follows:

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, flexible delineators and plastic drums with no attachments. Category 1 devices shall be crash tested and accepted or may be self-certified by the manufacturer.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include drums and vertical panels with lights, barricades and portable sign supports. Category 2 devices shall be crash tested and accepted for Test Level 3.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions, truck mounted attenuators and other devices not meeting the definitions of Category 1 or 2. Category 3 devices shall be crash tested and accepted for either Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals and area lighting supports. Currently, there is no implementation date set for this category and it is exempt from the NCHRP 350 compliance requirement.

The Contractor shall provide a manufacturer's self-certification letter for each Category 1 device and an FHWA acceptance letter for each Category 2 and Category 3 device used on the contract. The letters shall state the device meets the NCHRP 350 requirements for its respective category and test level, and shall include a detail drawing of the device."

Delete the third, fourth and fifth paragraphs of Article 702.03(b) of the Standard Specifications.

Delete the third sentence of the first paragraph of Article 702.03(c) of the Standard Specifications.

Revise the first sentence of the first paragraph of Article 702.03(e) of the Standard Specifications to read:

"Drums shall be nonmetallic and have alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes."

FAP Route 103 (IL Route 13/15) Section 27-1R St. Clair County Contract 76300

Add the following to Article 702.03 of the Standard Specifications:

"(h) Vertical Barricades. Vertical barricades may be used in lieu of cones, drums or Type II barricades to channelize traffic."

Delete the fourth paragraph of Article 702.05(a) of the Standard Specifications.

Revise the sixth paragraph of Article 702.05(a) of the Standard Specifications to read:

"When the work operations exceed four days, all signs shall be post mounted unless the signs are located on the pavement or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at 1.2 m (5 ft) minimum where posts are impractical. Longitudinal dimensions shown on the plans for the placement of signs may be increased up to 30 m (100 ft) to avoid obstacles, hazards or to improve sight distance, when approved by the Engineer. "ROAD CONSTRUCTION AHEAD" signs will also be required on side roads located within the limits of the mainline "ROAD CONSTRUCTION AHEAD" signs."

Delete all references to "Type 1A barricades" and "wing barricades" throughout Section 702 of the Standard Specifications.

### REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

		Page
l.	General	1
II.	Nondiscrimination	1
III.	Nonsegregated Facilities	3
IV.	Payment of Predetermined Minimum Wage	3
V.	Statements and Payrolls	6
VI.	Record of Materials, Supplies, and Labor	7
VIII.	Safety: Accident Prevention	7
IX.	False Statements Concerning Highway Projects.	7
Χ.	Implementation of Clean Air Act and Federal	
	Water Pollution Control Act	8
XI.	Certification Regarding Debarment, Suspension,	
	Ineligibility, and Voluntary Exclusion	8
XII.	Certification Regarding Use of Contract Funds for	or
	Lobbying	9

#### **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.
- 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 (DDL) 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.

(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 seg.) 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 FFO:
  - 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

Page 1

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

paid within each classification to determ

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

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 Federallyassisted 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 the submission of copies of payrolls by all suncontractors.

- 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 he 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 form the total original contract price before computing the amount of work required to be performed by the contractor's 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.

\*\*\*\*\*

### 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.
- Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\*\*\*\*

### Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier 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.

\*\*\*\*

### 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

#### **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 <a href="http://www.dot.il.gov/desenv/delett.html">http://www.dot.il.gov/desenv/delett.html</a>.

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.il.gov/desenv/subsc.html">http://www.dot.il.gov/desenv/subsc.html</a>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.