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 http://www.dot.il.gov/desenv/delett.html 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.

RETURN WITH BID

4

Proposal Submitted By Name
Address
City

Letting November 18, 2005

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

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

Illinois Department of Transportation

Springfield, Illinois 62764

Contract No. 87267
MCLEAN County
Section 93-00295-02-PV (Bloomington)
Route FAU 6371 (Hamilton Road)
Project ACM-5227(42)
District 3 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

Checked by F

(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 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).

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.

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 CD-ROMS	217/782-7806

RETURN WITH BID

PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

   _____

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

Contract No. 87267
MCLEAN County
Section 93-00295-02-PV (Bloomington)
Project ACM-5227(42)
Route FAU 6371 (Hamilton Road)
District 3 Construction Funds

Reconstruction of 0.55 mile of Hamilton Road from Greenwood Avenue to Timberlake Lane, the reconstruction of Morris Avenue from Heatherhill Road to Witten Woods Drive, the signalization of the Hamilton Road/Morris Avenue intersection with storm sewer and water main replacement in the City of Bloomington.

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:

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

Bank cashier's checks or properly certified checks accompanying proposals shall be made payable to the Treasurer, State of Illinois, when the state is awarding authority; the county treasurer, when a county is the awarding authority; or the city, village, or town treasurer, when a city, village, or town is the awarding authority.

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

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

Attach Cashier's Check or Certified Check Here

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

The proposal guaranty check will be found in the proposal for:

Item _____

Section No. _____

County _____

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 No.	Sections Included in Combination	Combination Bid Dollars	Cents

7. **SCHEDULE OF PRICES.** The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.

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

COUNTY NAME	CODE	DIST	SECTION NUMBER	PROJECT NUMBER	ROUTE
MCLEAN	113	03	93-00295-02-PV (BLOOMINGTON)	ACM-5227/042/000	FAU 6371

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
A2000116	T-ACERX FREM AB 2	EACH	8.000	X			=		
A2003216	T-CORYLUS COLU 2	EACH	8.000	X			=		
A2004416	T-GINKGO BILOBA 2	EACH	9.000	X			=		
A2004616	T-GLEDIT TRI IN 2	EACH	4.000	X			=		
A2005016	T-GYMNOCLA DIO 2	EACH	2.000	X			=		
A2005516	T-NYSSA SYLVAT 2	EACH	3.000	X			=		
A2005716	T-PHELLO AMUR 2	EACH	1.000	X			=		
A2006516	T-QUERCUS BICOL 2	EACH	5.000	X			=		
A2007116	T-QUERCUS RUBRA 2	EACH	3.000	X			=		
A2008416	T-TILIA TOM STR 2	EACH	5.000	X			=		
A2013816	T-FRAX PENN LEPR 2	EACH	2.000	X			=		
B2000116	T-ACER CAMP TF 2	EACH	1.000	X			=		
B2000416	T-ACER GRIS TF 2	EACH	2.000	X			=		
B2000766	T-AMEL X GF AB SF 6'	EACH	9.000	X			=		
B2001262	T-CORNUS ALT CL 4'	EACH	4.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
B2001616	T-CRAT CRU-I TF 2	EACH	3.000	X			=		
B2002716	T-MALUS ADIR TF 2	EACH	3.000	X			=		
B2003516	T-MALUS HG TF 2	EACH	19.000	X			=		
B2004116	T-MALUS PF TF 2	EACH	3.000	X			=		
B2005216	T-MALUS SUT TF 2	EACH	2.000	X			=		
B2006316	T-SYRG RT IS TF 2	EACH	6.000	X			=		
D2000148	E-ABIES CONCOLOR 4'	EACH	6.000	X			=		
D2001748	E-PICEA ABIES 4'	EACH	5.000	X			=		
D2002048	E-PICEA OMORIKA 4'	EACH	6.000	X			=		
XX000613	MODULAR BLOC RET WALL	SQ FT	2,328.000	X			=		
XX002161	ABAND EX WATER MAIN	EACH	1.000	X			=		
XX003327	CON AUG 4 HI DP COIL	FOOT	130.000	X			=		
XX003503	FLARED END SEC REM	EACH	1.000	X			=		
XX004205	OUTSIDE DROP CONN	EACH	4.000	X			=		
XX005470	RD MAN 4 DIA T37M G	EACH	1.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
XX005476	DI WM 12 RJ	FOOT	188.000			=		
XX005478	DI WM 6 RJ	FOOT	154.000			=		
XX005479	DI WM 8 RJ	FOOT	63.000			=		
XX005480	DI WM 16 RJ	FOOT	962.000			=		
XX005483	RD INLET TY B T1F OL	EACH	3.000			=		
XX006372	SS T1 WM 4	FOOT	45.000			=		
XX006373	SS T1 WM 8	FOOT	42.000			=		
XX006374	DI WM 20 RJ	FOOT	74.000			=		
XX006375	CHAIN LNK GATES 5X24	EACH	2.000			=		
XX006376	CEM AGGR MIX CAM II 4	SQ YD	19,184.000			=		
XX006377	SEPTIC TANK TO BE PUMPED	EACH	2.000			=		
XX006378	SAN SEW T4 8	FOOT	1,481.000			=		
XX006379	COND AUG 3 HDP, COIL	FOOT	118.000			=		
XX006380	PHOTOCELL CONTROLLER	EACH	1.000			=		
X0321905	SS 1 WAT MN 12	FOOT	250.000			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
X0321906	SS 1 WAT MN 15	FOOT	47.000	X			=		
X0321907	SS 2 WAT MN 12	FOOT	123.000	X			=		
X0321908	SS 2 WAT MN 15	FOOT	20.000	X			=		
X0321909	SS 2 WAT MN 24	FOOT	26.000	X			=		
X0322630	CONCRETE ENCASEMENTS	EACH	1.000	X			=		
X0488100	REM EX SEPTIC TANK	EACH	4.000	X			=		
X4066490	BCSC SUPER IL9.5L LE	TON	183.000	X			=		
X6020125	RD INLET TY B T3 F&G	EACH	3.000	X			=		
X8801310	SH P LED 1F 3S MAM	EACH	6.000	X			=		
X8801345	SH P LED 1F 4S BM	EACH	4.000	X			=		
X8801350	SH P LED 1F 4S MAM	EACH	4.000	X			=		
X8810400	PED SH P LED 1F BM SP	EACH	4.000	X			=		
X8850106	IND LOOP DETECT (RM)	EACH	18.000	X			=		
X8850107	IND LOOP DET (RM) SO	EACH	10.000	X			=		
Z0000990	AGG FOR TEMP ACCESS	TON	529.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
Z0007601	BLDG REMOV NO 1	L SUM	1.000	X			=		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000	X			=		
Z0022800	FENCE REMOVAL	FOOT	3,488.000	X			=		
Z0049801	R&D FRIABL ASB BLD 1	L SUM	1.000	X			=		
Z0051500	REM & RESET ST SIGNS	EACH	2.000	X			=		
Z0059500	SAN SEW T2 6	FOOT	105.000	X			=		
Z0059600	SAN SEW T2 8	FOOT	182.000	X			=		
Z0060800	SAN SEW T3 6	FOOT	400.000	X			=		
Z0060900	SAN SEW T3 8	FOOT	718.000	X			=		
Z0064225	SEAL ABAN WATER WELLS	EACH	1.000	X			=		
Z0068200	STEEL CASINGS 30	FOOT	98.000	X			=		
Z0076600	TRAINEES	HOUR	1,000.000	X	0	.80	=	800	.00
20100110	TREE REMOV 6-15	UNIT	836.000	X			=		
20100210	TREE REMOV OVER 15	UNIT	1,052.000	X			=		
20200100	EARTH EXCAVATION	CU YD	28,696.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
20201200	REM & DISP UNS MATL	CU YD	1,325.000	X			=		
20800150	TRENCH BACKFILL	CU YD	8,591.000	X			=		
20900330	GRANULAR BACKFILL	TON	2,717.000	X			=		
21101505	TOPSOIL EXC & PLAC	CU YD	3,458.000	X			=		
25000110	SEEDING CL 1A	ACRE	6.500	X			=		
25000400	NITROGEN FERT NUTR	POUND	585.000	X			=		
25000500	PHOSPHORUS FERT NUTR	POUND	585.000	X			=		
25000600	POTASSIUM FERT NUTR	POUND	585.000	X			=		
25100125	MULCH METHOD 3	ACRE	6.500	X			=		
25200100	SODDING	SQ YD	305.000	X			=		
25200200	SUPPLE WATERING	UNIT	5.000	X			=		
25300910	SALV & TRANSP TREE SP	EACH	61.000	X			=		
28000255	TEMP EROS CONTR SEED	ACRE	6.500	X			=		
28000300	TEMP DITCH CHECKS	EACH	10.000	X			=		
28000400	PERIMETER EROS BAR	FOOT	4,603.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
28000500	INLET & PIPE PROTECT	EACH	4.000	X			=		
28000510	INLET FILTERS	EACH	68.000	X			=		
28100229	STONE RIPRAP CL B5	TON	10.000	X			=		
28200200	FILTER FABRIC	SQ YD	11.000	X			=		
31100910	SUB GRAN MAT A 12	SQ YD	27,699.000	X			=		
35100500	AGG BASE CSE A 6	SQ YD	4,983.000	X			=		
40200800	AGG SURF CSE B	TON	17.000	X			=		
40600100	BIT MATLS PR CT	GALLON	776.000	X			=		
40600300	AGG PR CT	TON	4.000	X			=		
40600400	MIX CR JTS FLANGEWYS	TON	1.000	X			=		
40600980	BIT SURF REM BUTT JT	SQ YD	75.000	X			=		
40600990	TEMPORARY RAMP	SQ YD	42.000	X			=		
40800040	INCIDENTAL BIT SURF	TON	616.000	X			=		
42000200	PCC PVT 7	SQ YD	7,290.000	X			=		
42000300	PCC PVT 8	SQ YD	17,364.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
42001300	PROTECTIVE COAT	SQ YD	27,128.000	X		=		
42300200	PCC DRIVEWAY PAVT 6	SQ YD	1,952.000	X		=		
42300400	PCC DRIVEWAY PAVT 8	SQ YD	607.000	X		=		
42400100	PC CONC SIDEWALK 4	SQ FT	18,196.000	X		=		
42400300	PC CONC SIDEWALK 6	SQ FT	15,242.000	X		=		
44000006	BIT SURF REM 1 1/2	SQ YD	2,103.000	X		=		
44000100	PAVEMENT REM	SQ YD	7,643.000	X		=		
44000200	DRIVE PAVEMENT REM	SQ YD	2,806.000	X		=		
44000300	CURB REM	FOOT	78.000	X		=		
44000500	COMB CURB GUTTER REM	FOOT	457.000	X		=		
44000600	SIDEWALK REM	SQ FT	716.000	X		=		
44004000	PAVED DITCH REMOVAL	FOOT	20.000	X		=		
44004300	PAVT BREAKING	SQ YD	1,206.000	X		=		
44201741	CL D PATCH T2 8	SQ YD	29.000	X		=		
44201745	CL D PATCH T3 8	SQ YD	36.000	X		=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
44201794	CL D PATCH T3 12	SQ YD	35.000	X			=		
44201796	CL D PATCH T4 12	SQ YD	76.000	X			=		
44300200	STRIP REF CR CON TR	FOOT	1,103.000	X			=		
50105210	REM EXIST CULVERTS	FOOT	663.000	X			=		
54213660	PRC FLAR END SEC 15	EACH	2.000	X			=		
54213669	PRC FLAR END SEC 24	EACH	1.000	X			=		
54248515	CONCRETE COLLAR	EACH	10.000	X			=		
550A0050	STORM SEW CL A 1 12	FOOT	207.000	X			=		
550A0070	STORM SEW CL A 1 15	FOOT	84.000	X			=		
550A0120	STORM SEW CL A 1 24	FOOT	173.000	X			=		
550A0340	STORM SEW CL A 2 12	FOOT	2,050.000	X			=		
550A0360	STORM SEW CL A 2 15	FOOT	1,430.000	X			=		
550A0380	STORM SEW CL A 2 18	FOOT	1,009.000	X			=		
550A0410	STORM SEW CL A 2 24	FOOT	345.000	X			=		
55100500	STORM SEWER REM 12	FOOT	145.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
55100700	STORM SEWER REM 15	FOOT	12.000	X			=		
55101200	STORM SEWER REM 24	FOOT	6.000	X			=		
56103300	D I WATER MAIN 12	FOOT	291.000	X			=		
56103400	D I WATER MAIN 16	FOOT	3,188.000	X			=		
56104400	WATER VALVES 1	EACH	16.000	X			=		
56104500	WATER VALVES 1 1/2	EACH	4.000	X			=		
56104900	WATER VALVES 6	EACH	2.000	X			=		
56105000	WATER VALVES 8	EACH	2.000	X			=		
56105200	WATER VALVES 12	EACH	1.000	X			=		
56105760	BUTTERFLY VALVES 16	EACH	12.000	X			=		
56105780	BUTTERFLY VALVES 20	EACH	2.000	X			=		
56200300	WATER SERV LINE 1	FOOT	379.000	X			=		
56200500	WATER SERV LINE 1 1/2	FOOT	52.000	X			=		
56400100	FIRE HYDNTS TO BE MVD	EACH	1.000	X			=		
56400500	FIRE HYDNTS TO BE REM	EACH	6.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
56400820	FIRE HYD W/AUX V & VB	EACH	12.000	X			=		
56500600	DOM WAT SER BOX ADJ	EACH	1.000	X			=		
60218300	MAN TA 4 DIA T1F OL	EACH	3.000	X			=		
60221200	MAN TA 5 DIA T3F&G	EACH	1.000	X			=		
60224500	RD MAN 4 DIA T1F OL	EACH	18.000	X			=		
60225300	RD MAN 5 DIA T1F OL	EACH	4.000	X			=		
60225500	RD MAN 5 DIA T3F&G	EACH	1.000	X			=		
60228000	MAN SANITARY	EACH	12.000	X			=		
60235700	INLETS TA T3F&G	EACH	1.000	X			=		
60240210	INLETS TB T1F OL	EACH	1.000	X			=		
60242400	INLETS SPL	EACH	1.000	X			=		
60242850	INLETS SPL TH	EACH	60.000	X			=		
60255500	MAN ADJUST	EACH	1.000	X			=		
60266600	VALVE BOX ADJ	EACH	3.000	X			=		
60500060	REMOV INLETS	EACH	2.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
60603500	COMB CC&G TB6.06	FOOT	40.000	X			=		
60604400	COMB CC&G TB6.18	FOOT	8,921.000	X			=		
66400555	CH LK FENCE 5 SPL	FOOT	3,154.000	X			=		
66410700	CH LK GATES SPL	EACH	4.000	X			=		
67100100	MOBILIZATION	L SUM	1.000	X			=		
70101800	TRAF CONT & PROT SPL	L SUM	1.000	X			=		
70101855	TR CONT-PROT BLR21 SP	L SUM	1.000	X			=		
70101860	TR CONT-PROT BLR22 SP	L SUM	1.000	X			=		
70102620	TR CONT & PROT 701501	L SUM	1.000	X			=		
70102635	TR CONT & PROT 701701	L SUM	1.000	X			=		
70102640	TR CONT & PROT 701801	L SUM	1.000	X			=		
70102665	TC-PROT 701606 SPL	L SUM	1.000	X			=		
70300220	TEMP PVT MK LINE 4	FOOT	1,830.000	X			=		
70300520	PAVT MARK TAPE T3 4	FOOT	4,040.000	X			=		
70300560	PAVT MARK TAPE T3 12	FOOT	63.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
70300570	PAVT MARK TAPE T3 24	FOOT	36.000	X			=		
70301000	WORK ZONE PAVT MK REM	SQ FT	1,021.000	X			=		
72000100	SIGN PANEL T1	SQ FT	20.000	X			=		
72000200	SIGN PANEL T2	SQ FT	50.000	X			=		
78000100	THPL PVT MK LTR & SYM	SQ FT	47.000	X			=		
78000200	THPL PVT MK LINE 4	FOOT	2,909.000	X			=		
78000400	THPL PVT MK LINE 6	FOOT	71.000	X			=		
78000600	THPL PVT MK LINE 12	FOOT	201.000	X			=		
78000650	THPL PVT MK LINE 24	FOOT	12.000	X			=		
78005100	EPOXY PVT MK LTR-SYM	SQ FT	437.000	X			=		
78005110	EPOXY PVT MK LINE 4	FOOT	5,058.000	X			=		
78005130	EPOXY PVT MK LINE 6	FOOT	9,507.000	X			=		
78005140	EPOXY PVT MK LINE 8	FOOT	745.000	X			=		
78005150	EPOXY PVT MK LINE 12	FOOT	1,309.000	X			=		
78005180	EPOXY PVT MK LINE 24	FOOT	243.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
80400105	ELECT SERV INSTALL SP	EACH	1.000	X			=		
80500100	SERV INSTALL TY A	EACH	1.000	X			=		
80500200	SERV INSTALL TY B	EACH	1.000	X			=		
80803560	TS WD POLE 30 CL 4	EACH	1.000	X			=		
81012600	CON T 2 PVC	FOOT	787.000	X			=		
81016400	CON T 1 1/4 HDP COIL	FOOT	164.000	X			=		
81016600	CON T 2 HDP COIL	FOOT	2,720.000	X			=		
81016700	CON T 2 1/2 HDP COIL	FOOT	120.000	X			=		
81017000	CON T 4 HDP COIL	FOOT	113.000	X			=		
81017100	CON T 5 HDP COIL	FOOT	111.000	X			=		
81306100	JUNCTION BOX SPL	EACH	10.000	X			=		
81400400	CONC HANDHOLE	EACH	6.000	X			=		
81400600	CONC DBL HANDHOLE	EACH	1.000	X			=		
81500200	TR & BKFIL F ELECT WK	FOOT	4,015.000	X			=		
81702130	EC C XLP USE 1C 6	FOOT	1,485.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
82102250	LUM SV HOR MT 250W	EACH	4.000	X			=		
84400105	RELOC EX LT UNIT	EACH	4.000	X			=		
85704804	FAC STD S4 8P T4 CAB	EACH	1.000	X			=		
86400100	TRANSCEIVER - FIB OPT	EACH	1.000	X			=		
87301215	ELCBL C SIGNAL 14 2C	FOOT	880.000	X			=		
87301225	ELCBL C SIGNAL 14 3C	FOOT	900.000	X			=		
87301245	ELCBL C SIGNAL 14 5C	FOOT	1,310.000	X			=		
87301255	ELCBL C SIGNAL 14 7C	FOOT	1,630.000	X			=		
87301305	ELCBL C LEAD 14 1PR	FOOT	8,005.000	X			=		
87301805	ELCBL C SERV 6 2C	FOOT	95.000	X			=		
87601200	PED P-B POST GALVS T2	EACH	1.000	X			=		
87702990	STL COMB MAA&P 54	EACH	4.000	X			=		
87800200	CONC FDN TY D	FOOT	4.000	X			=		
87800415	CONC FDN TY E 36D	FOOT	72.000	X			=		
87900200	DRILL EX HANDHOLE	EACH	1.000	X			=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY		UNIT PRICE DOLLARS	UNIT PRICE CENTS		TOTAL PRICE DOLLARS	TOTAL PRICE CTS
88200410	TS BACKPLATE L F PLAS	EACH	14.000	X			=		
88600100	DET LOOP T1	FOOT	2,520.000	X			=		
88700200	LIGHT DETECTOR	EACH	4.000	X			=		
88700300	LIGHT DETECTOR AMP	EACH	1.000	X			=		
88800100	PED PUSH-BUTTON	EACH	4.000	X			=		
							TOTAL	$	

NOTE:

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.

RETURN WITH BID

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.

RETURN WITH BID

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

C. Disclosure Form Instructions

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

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may 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 information previously submitted is current and accurate, and all forms are hereby incorporated by reference in this bid. Any necessary additional forms or amendments to previously submitted forms are attached to this bid.

_____
(Bidding Company)

_____ _____
Name of Authorized Representative (type or print) Title of Authorized Representative (type or print)

_____ _____
Signature of Authorized 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. 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 per person per bid even if a specific individual would require a yes answer to more than one question.)

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

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

Form B: Identifying Other Contracts & Procurement Related Information Disclosure Form B must be completed for each bid submitted by the bidding entity. It must be signed by an individual who is authorized to execute contracts for the bidding entity. *Note: Signing the NOT APPLICABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder may be considered nonresponsive and the bid will not be accepted.*

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

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

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

D. Bidders Submitting More Than One Bid

Bidders submitting multiple bids may submit one set of forms consisting of all required Form A disclosures and one Form B for use with all bids. Please indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms by reference.

- The bid submitted for letting item _____ contains the Form A disclosures or Certification Statement and the Form B disclosures. The following letting items incorporate the said forms by reference:

_____

_____

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ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A
Financial Information & Potential Conflicts of Interest Disclosure

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

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

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than $90,420.00 (60% of the Governor's salary as of 7/1/01). **(Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)**

FOR INDIVIDUAL (type or print information)

NAME: _____

ADDRESS _____

_____

Type of ownership/distributable income share:

stock _____ sole proprietorship _____ Partnership _____ other: (explain on separate sheet):

% or $ value of ownership/distributable income share: _____

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

(a) State employment, currently or in the previous 3 years, including contractual employment of services. Yes ___ No __

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

1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes ___ No __

2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds $90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name the State agency for which you are employed and your annual salary. _____
_____

3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds $90,420.00, (60% of the Governor's salary as of 7/1/01) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No __

4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds $90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes ___ No __

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

Yes ___No __

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

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois Toll Highway Authority? Yes ___No __

2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds $90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____
_____

3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds $90,420.00, (60% of the salary of the Governor as of 7/1/01) are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes ___ No __

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds $90,420.00, (60% of the Governor's salary as of 7/1/01) are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor?

Yes ___ No __

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

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

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

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

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

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(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No __

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
Yes ___ No __

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
Yes ___ No __

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous 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

I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.

_____
Name of Authorized Representative (type or print)

_____
Title of Authorized Representative (type or print)

_____ _____
Signature of Authorized Representative — Date

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ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B
Other Contracts & Procurement Related Information Disclosure

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

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of $10,000, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

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

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

THE FOLLOWING STATEMENT MUST BE SIGNED

_____
Name of Authorized Representative (type or print)

_____
Title of Authorized Representative (type or print)

_____ _____
Signature of Authorized Representative Date

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Department of Human Rights' Rules and Regulations are applicable to bidders on all construction contracts advertised by the Illinois Department of Transportation:

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

(a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.

(b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.

(c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.

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Illinois Department of Transportation

Contract No. 87267
MCLEAN County
Section 93-00295-02-PV (Bloomington)
Project ACM-5227(42)
Route FAU 6371 (Hamilton Road)
District 3 Construction Funds

PART I. IDENTIFICATION

Dept. Human Rights # _____ Duration of Project: _____

Name of Bidder: _____

PART II. WORKFORCE PROJECTION

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

TABLE A

TOTAL Workforce Projection for Contract													TABLE B: CURRENT EMPLOYEES TO BE ASSIGNED TO CONTRACT			
			MINORITY EMPLOYEES						TRAINEES				TOTAL EMPLOYEES		MINORITY EMPLOYEES	
JOB CATEGORIES	TOTAL EMPLOYEES		BLACK		HISPANIC		*OTHER MINOR.		APPREN-TICES		ON THE JOB TRAINEES					
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
OFFICIALS (MANAGERS)																
SUPERVISORS																
FOREMEN																
CLERICAL																
EQUIPMENT OPERATORS																
MECHANICS																
TRUCK DRIVERS																
IRONWORKERS																
CARPENTERS																
CEMENT MASONS																
ELECTRICIANS																
PIPEFITTERS, PLUMBERS																
PAINTERS																
LABORERS, SEMI-SKILLED																
LABORERS, UNSKILLED																
TOTAL																

TABLE C

TOTAL Training Projection for Contract								
EMPLOYEES IN TRAINING	TOTAL EMPLOYEES		BLACK		HISPANIC		*OTHER MINOR.	
	M	F	M	F	M	F	M	F
APPRENTICES								
ON THE JOB TRAINEES								

FOR DEPARTMENT USE ONLY

*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

PART II. WORKFORCE PROJECTION - continued

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

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

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company _____ Telephone Number _____

_____

Address _____

NOTICE REGARDING SIGNATURE

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: _____

Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.

Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.

Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.

Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

RETURN WITH BID

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. CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:

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 _____

RETURN WITH BID

Contract No. 87267
MCLEAN County
Section 93-00295-02-PV (Bloomington)
Project ACM-5227(42)
Route FAU 6371 (Hamilton Road)
District 3 Construction Funds

PROPOSAL SIGNATURE SHEET

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

Firm Name _____

(IF AN INDIVIDUAL)

Signature of Owner _____

Business Address _____

_____

Firm Name _____

By _____

(IF A CO-PARTNERSHIP)

Business Address _____

_____

Name and Address of All Members of the Firm:

_____ _____

Corporate Name _____

By _____
Signature of Authorized Representative

(IF A CORPORATION)

_____
Typed or printed name and title of Authorized Representative

Attest _____
Signature

(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)

Business Address _____

Corporate Name _____

By _____
Signature of Authorized Representative

(IF A JOINT VENTURE)

_____
Typed or printed name and title of Authorized Representative

Attest _____
Signature

Business Address _____

_____

If more than two parties are in the joint venture, please attach an additional signature sheet.

RETURN WITH BID

Illinois Department of Transportation

Division of Highways
Proposal Bid Bond
(Effective November 1, 1992)

Item No. _____
Letting Date _____

KNOW ALL MEN BY THESE PRESENTS, That We _____

_____

as PRINCIPAL, and _____

_____ as SURETY, are held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in Article 102.09 of the "Standard Specifications for Road and Bridge Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this _____ day of _____ A.D., _____.

PRINCIPAL	**SURETY**
_____ (Company Name)	_____ (Company Name)
By: _____ (Signature & Title)	By: _____ (Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,
COUNTY OF _____

I, _____, a Notary Public in and for said County, do hereby certify that

_____and _____

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this _____ day of _____, A.D. _____.

My commission expires _____ _____
Notary Public

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

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

PROPOSAL ENVELOPE

Illinois Department of Transportation

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. 87267
MCLEAN County
Section 93-00295-02-PV (Bloomington)
Project ACM-5227(42)
Route FAU 6371 (Hamilton Road)
District 3 Construction Funds

Illinois Department of Transportation

Illinois Department of Transportation

NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., November 18, 2005. 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. 87267
   MCLEAN County
   Section 93-00295-02-PV (Bloomington)
   Project ACM-5227(42)
   Route FAU 6371 (Hamilton Road)
   District 3 Construction Funds

Reconstruction of 0.55 mile of Hamilton Road from Greenwood Avenue to Timberlake Lane, the reconstruction of Morris Avenue from Heatherhill Road to Witten Woods Drive, the signalization of the Hamilton Road/Morris Avenue intersection with storm sewer and water main replacement in the City of Bloomington.

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 and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

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

SUPPLEMENTAL SPECIFICATIONS

RECURRING SPECIAL PROVISIONS

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

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

INDEX OF SPECIAL PROVISIONS

INDEX OF SPECIAL PROVISIONS

INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

BDE SPECIAL PROVISIONS
For The November 18, 2005 Letting

The following special provisions indicated by an "x" are applicable to this contract and will be included by the Project Development and Implementation Section of the BD&E. An * indicates a new or revised special provision for the letting.

	File Name	Pg.#		Special Provision Title	Effective	Revised
	80099			Accessible Pedestrian Signals (APS)	April 1, 2003	
	80141			Additional Award Criteria	June 1, 2004	
	80108			Asbestos Bearing Pad Removal	Nov. 1, 2003	
	7254I			Asbestos Waterproofing Membrane and Asbestos Bituminous Concrete Surface Removal	June 1, 1989	June 30,1994
	80128			Authority of Railroad Engineer	July 1, 2004	
	80065			Bituminous Base Course/Widening Superpave	April 1, 2002	Aug. 1, 2005
	80050	84	X	Bituminous Concrete Surface Course	April 1, 2001	April 1, 2003
	80142	85	X	Bituminous Equipment, Spreading and Finishing Machine	Jan. 1, 2005	
	80066			Bridge Deck Construction	April 1, 2002	April 1, 2004
	5026I			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	Aug. 1, 2001
	5048I			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	Aug. 1, 2001
	5049I	86	X	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	Aug. 1, 2001
	5053I	92	X	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	Aug. 1, 2001
	80118	94	X	Butt Joints	April 1, 2004	April 1, 2005
	80031			Calcium Chloride Accelerator for Portland Cement Concrete Patching	Jan. 1, 2001	
	80077			Chair Supports	Nov. 1, 2002	Nov. 2, 2002
	80051	95	X	Coarse Aggregate for Trench Backfill, Backfill and Bedding	April 1, 2001	Nov. 1, 2003
	80094	102	X	Concrete Admixtures	Jan. 1, 2003	July 1, 2004
	80112			Concrete Barrier	Jan. 1, 2004	April 2, 2004
	80102			Corrugated Metal Pipe Culverts	Aug. 1, 2003	July 1, 2004
*	80114	107	X	Curing and Protection of Concrete Construction	Jan. 1, 2004	Nov. 1, 2005
	80146	115	X	Detectable Warnings	Aug. 1, 2005	
*	80029	117	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	June 22, 2005
	80144			Elastomeric Bearings	April 1, 2005	
	31578			Epoxy Coating on Reinforcement	April 1, 1997	Jan. 1, 2003
	80041	125	X	Epoxy Pavement Marking	Jan. 1, 2001	Aug. 1, 2003
	80055	127	X	Erosion and Sediment Control Deficiency Deduction	Aug. 1, 2001	Nov. 1, 2001
	80103	128	X	Expansion Joints	Aug. 1, 2003	
	80101	129	X	Flagger Vests	April 1, 2003	Aug. 1, 2005
	80079	130	X	Freeze-Thaw Rating	Nov. 1, 2002	
	80072			Furnished Excavation	Aug. 1, 2002	Nov. 1, 2004
	80054	131	X	Hand Vibrator	Nov. 1, 2003	
	80147			Illuminated Sign	Aug. 1, 2005	
	80109			Impact Attenuators	Nov. 1, 2003	
	80110			Impact Attenuators, Temporary	Nov. 1, 2003	April 1, 2004
	80104	132	X	Inlet Filters	Aug. 1, 2003	
	80080			Insertion Lining of Pipe Culverts	Nov. 1, 2002	Aug. 1, 2003
*	80150	134	X	Light Emitting Diode (LED) Pedestrian Signal Head	Nov. 1, 2005	
*	80067	136	X	Light Emitting Diode (LED) Signal Head	April 1, 2002	Nov. 1, 2005
	80081			Lime Gradation Requirements	Nov. 1, 2002	
	80133			Lime Stabilized Soil Mixture	Nov. 1, 2004	April 1, 2005
	80045			Material Transfer Device	June 15, 1999	March 1, 2001
	80137			Minimum Lane Width with Lane Closure	Jan. 1, 2005	
	80138			Mulching Seeded Areas	Jan. 1, 2005	
	80082			Multilane Pavement Patching	Nov. 1, 2002	
	80129			Notched Wedge Longitudinal Joint	July 1, 2004	
	80069			Organic Zinc-Rich Paint System	Nov. 1, 2001	Aug. 1, 2003
	80116	138	X	Partial Payments	Sept. 1, 2003	
	80013			Pavement and Shoulder Resurfacing	Feb. 1, 2000	July 1, 2004

	File Name	Pg.#		Special Provision Title	Effective	Revised
	53600	139	X	Pavement Thickness Determination for Payment	April 1, 1999	Jan. 1, 2004
	80022	144	X	Payments to Subcontractors	June 1, 2000	Sept. 1, 2003
	80155	145	X	Payrolls and Payroll Records	Aug. 10, 2005	
	80130	147	X	Personal Protective Equipment	July 1, 2004	
	80134			Plastic Blockouts for Guardrail	Nov. 1, 2004	
	80073			Polymer Modified Emulsified Asphalt	Nov. 1, 2002	
	80119			Polyurea Pavement Marking	April 1, 2004	
	80124			Portable Changeable Message Signs	Nov. 1, 1993	April 2, 2004
*	80139	148	X	Portland Cement	Jan. 1, 2005	Nov. 1, 2005
	80083	149	X	Portland Cement Concrete	Nov. 1, 2002	
	80036			Portland Cement Concrete Patching	Jan. 1, 2001	Jan. 1, 2004
	419	150	X	Precast Concrete Products	July 1, 1999	Nov. 1, 2004
	80120			Precast, Prestressed Concrete Members	April 1, 2004	
	80084	151	X	Preformed Recycled Rubber Joint Filler	Nov. 1, 2002	
	80015			Public Convenience and Safety	Jan. 1, 2000	
	80121			PVC Pipeliner	April 1, 2004	April 1, 2005
	80122			Railroad, Full-Actuated Controller and Cabinet	April 1, 2004	
	3426I			Railroad Protective Liability Insurance	Dec. 1, 1986	May 1, 1988
	80105			Raised Reflective Pavement Markers (Bridge)	Aug. 1, 2003	
	80011	152	X	RAP for Use in Bituminous Concrete Mixtures	Jan. 1, 2000	April 1, 2002
*	80151			Reinforcement Bars	Nov. 1, 2005	
	80032			Remove and Re-Erect Steel Plate Beam Guardrail and Traffic Barrier Terminals	Jan. 1, 2001	Jan. 1, 2005
	80085			Sealing Abandoned Water Wells	Nov. 1, 2002	
	80131	156	X	Seeding and Sodding	July 1, 2004	Aug. 1, 2005
*	80152			Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	
*	80132	159	X	Self-Consolidating Concrete for Precast Products	July 1, 2004	Nov. 1, 2005
	80096			Shoulder Rumble Strips	Jan. 1, 2003	
	80140			Shoulder Stabilization at Guardrail	Jan. 1, 2005	
	80135			Soil Modification	Nov. 1, 2004	April 1, 2005
	80070			Stabilized Subbase and Bituminous Shoulders Superpave	April 1, 2002	Aug. 1, 2005
	80127			Steel Cost Adjustment	April 2, 2004	July 1, 2004
*	80153			Steel Plate Beam Guardrail	Nov. 1, 2005	
	80143	161	X	Subcontractor Mobilization Payments	April 2, 2005	
	80086	162	X	Subgrade Preparation	Nov. 1, 2002	
	80136			Superpave Bituminous Concrete Mixture IL-4.75	Nov. 1, 2004	
	80010	163	X	Superpave Bituminous Concrete Mixtures	Jan. 1, 2000	April 1, 2004
	80039	170	X	Superpave Bituminous Concrete Mixtures (Low ESAL)	Jan. 1, 2001	April 1, 2004
*	80075			Surface Testing of Pavements	April 1, 2002	Nov. 1, 2005
	80145			Suspension of Slipformed Parapets	June 11, 2004	
	80092			Temporary Concrete Barrier	Oct. 1, 2002	Nov. 1, 2003
	80087	175	X	Temporary Erosion Control	Nov. 1, 2002	
	80008			Temporary Module Glare Screen System	Jan. 1, 2000	
	80106			Temporary Portable Bridge Traffic Signals	Aug. 1, 2003	
	80098			Traffic Barrier Terminals	Jan. 1, 2003	
	5729I	177	X	Traffic Control Deficiency Deduction	April 1, 1992	Jan. 1, 2005
	20338	178	X	Training Special Provisions	Oct. 15, 1975	
	80107	181	X	Transient Voltage Surge Suppression	Aug. 1, 2003	
	80123	183	X	Truck Bed Release Agent	April 1, 2004	
*	80154			Turf Reinforcement Mat	Nov. 1, 2005	
	80149			Variable Spaced Tining	Aug. 1, 2005	
	80048	184	X	Weight Control Deficiency Deduction	April 1, 2001	Aug. 1, 2002
	80090			Work Zone Public Information Signs	Sept. 1, 2002	Jan. 1, 2005
	80125			Work Zone Speed Limit Signs	April 2, 2004	April 15, 2004
*	80126	186	X	Work Zone Traffic Control	April 2, 2004	Nov. 1, 2005
	80097			Work Zone Traffic Control Devices	Jan. 1, 2003	Nov. 1, 2004

File Name	Pg.#		Special Provision Title	Effective	Revised
80071	188	[X] Working Days		Jan. 1, 2002	

The following special provisions have been **deleted** from use:

80113 Curb Ramps for Sidewalk This special provision has been replaced by the BDE Special Provision, "Detectable Warnings".

43761 Driving Guardrail Posts This special provision has been made obsolete by revising Standard 630201 and issuing the BDE Special Provision, "Shoulder Stabilization at Guardrail".

80091 Underdrain Operations This special provision is no longer required and has been deleted.

The following special provisions are in the 2005 Supplemental Specifications and Recurring Special Provisions:

File Name	Special Provision Title	New Location	Effective	Revised
80052	Adjusting Frames and Grates	Sections 602, 603, and 1043	Aug. 1, 2001	Nov. 1, 2001
80093	Articulated Block Revetment Mat	Sections 285 and 1005	Jan. 1, 2003	
80078	Controlled Aggregate Mixing System	Sections 311, 351, and 481	Nov. 1, 2002	
80100	Epoxy Coatings for Steel Reinforcement	Section 1006	April 1, 2003	
80095	Precast Block Revetment Mat	Sections 285 and 1005	Jan. 1, 2003	
80074	Shoulder Inlets with Curb	Section 610	Aug. 1, 2002	
80117	Stone for Erosion Protection, Sediment Control, and Rockfill	Sections 281 and 1005	Jan. 1, 2004	
80088	Traffic Structures	Sections 1069 and 1077	Nov. 1, 2002	

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

- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

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 "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", in effect on the date of invitation for bids, the "Manual of Test Procedures for Materials", in effect on the date of invitation for bids, the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", City of Bloomington Design and Construction Standards for Water Distribution and Supply System, which apply to and govern the construction of Hamilton Road and Morris Avenue, Section 93-00295-02-PV, in the City of Bloomington, McLean County, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION AND DESCRIPTION OF WORK

The proposed street improvements are located at the intersection of Hamilton Road and Morris Avenue in the City of Bloomington, McLean County, Illinois.

The work under this contract shall consist of the construction of:

- construction of new a P.C. concrete pavement over cement aggregate mixture and sub-base granular material for Hamilton Road;
- construction of new a P.C. concrete pavement over sub-base granular material for Morris Avenue;
- a traffic signal system at the intersection of Hamilton Road and Morris Avenue;
- concrete curbs and gutters or earth ditches;
- storm sewers and associated storm drainage structures;
- water mains and sanitary sewers;
- Portland Cement concrete sidewalks and driveways;
- bituminous concrete pedestrian trail;
- pavement markings and other work necessary to complete construction as shown in the plans and required by the specifications.

The work shall include all labor, materials, tools and equipment necessary for the proper execution and completion of the work as shown in the plans and as specified. It shall also include all work not specifically mentioned but which is reasonably and properly inferable and necessary for the completion of the work.

SEQUENCE OF CONSTRUCTION

See the "Stage Construction and Maintenance of Traffic" detail sheets in the plans for the suggested sequence of construction. Due to the magnitude of the project and the number of utility facilities to be adjusted or relocated it may be necessary for the Contractor to sequence the work

to allow the utility company's time to complete their work. The Contractor should plan the construction sequence so that no work will be started that could not be completed prior to any winter shut down period. Open holes, trenches or drop offs adjacent to traffic lanes, entrances or sidewalks will not be permitted while the work is suspended.

TRAFFIC CONTROL AND PROTECTION

Description

This work shall consist of providing the necessary traffic control personnel and devices and the installation, maintenance, relocation and removal of these devices during construction of the improvement.

The City of Bloomington will be responsible for notifying the public, the United States Postal Service and the emergency service agencies for road closures and changes in the traffic maintenance plans.

Traffic Control Plan

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

Special attention is called to Articles 107.09, 107.14, 107.15, 107.25, and Sections 701,702 and 703 of the Standard Specifications, the following Highway Standards, listed Supplemental Specifications and Recurring Special Provisions and Special Plan Details and Notations.

Highway Standards

701301, 701311, 701501, 701606, 701701, 701801, 702001, BLR 21, BLR 22

Plan Details

Stage Construction and Maintenance of Traffic

Special Provisions

LRS 3	Construction Zone Traffic Control
LRS 4	Flaggers in Work Zones
BDE 80101	Flagger Vests
BDE 80130	Personal Protective Equipment
BDE 57291	Traffic Control Deficiency Deduction
BDE 80097	Work Zone Traffic Control Devices

LR 702 Construction and Maintenance Signs

Traffic Control Authorization Request Form

The following Traffic Control Authorization Request Form must be filled out by the Contractor and submitted to the Engineer at the pre-construction meeting.

CITY OF BLOOMINGTON

Traffic Control Authorization Request

PROJECT: Hamilton Road and Morris Avenue

LOCATION: Marked Routes FAU 6371 and FAU 6391

INCLUSIVE DAYS OF WORK: _____ WORK HOURS: _____

WORK TYPE: Maintenance Construction Traffic Other

Work Description _____

_____

_____

CONTRACTOR OR AGENCY DOING WORK: _____

RESPONSIBLE CONTACT: (Construction Foreman, or Traffic Maintenace Person)

Name: _____ Phone: _____ (Office) _____ (Mobile)
(If traffic control is to be employed between 5:00p.m.and 8:30a.m.or on Saturday, Sunday or holidays, give three additional contacts.)

Name: _____ Phone: _____ (Office) _____ (Mobile)

Name: _____ Phone: _____ (Office) _____ (Mobile)

Name: _____ Phone: _____ (Office) _____ (Home)

CONTROLS: (Describe specific controls to be used, including reference to appropriate Highway Standards or section of Manual, and set forth any special controls proposed.)

_____

_____

COMMENTS: _____

_____

Distribution:
Project File
City of Bloomington Engineer
City of Bloomington Police

Submitted by _____

Approved by _____
City Engineer

Maintenance of Traffic

It is the Department's intention to keep Hamilton Road, Heatherhill Road, Timberlake Lane and Witten Woods Drive open to traffic at all times with a minimum of one through lane in each direction. Morris Avenue shall be closed to traffic in segments as shown on the Stage Construction and Maintenance of Traffic Plan, but should be opened to traffic as soon as possible to allow access to residences. The conveyance of through and local traffic within and around the construction zone shall be provided for in accordance with the Plan Details noted above and the use of the above referenced Highway Standards as directed by the Engineer. Access shall be provided to the golf course club house parking lot at all times with one of the two entrances to the parking lot remaining open at all times as shown on Stage Construction and Maintenance of Traffic Plan. Residential entrances may be closed to traffic within the street segments under construction, but parking shall be provided within a reasonable walking distance as described on the Stage Construction and Maintenance of Traffic Plan. At no time shall a private entrance be closed for more than 60 calendar days. An estimated quantity of Aggregate For Temporary Access has been included in the plans for use in the conveyance of local traffic and the provision of temporary access.

With the approval of the Engineer, the Contractor may modify the suggested construction sequence and attendant traffic control procedures as shown. The Contractor shall submit his proposed sequence of operations and any necessary revisions to attendant traffic control to the Engineer for approval before actual construction operations begin.

Traffic Control Standards

The following traffic control standards shall be utilized during construction of this project and shall be paid for in accordance with Articles 701.07 and 701.08 of the Standard Specifications. Traffic control surveillance will be required, but will not be paid for separately on this project. The special provision check sheet LRS 3 "Construction Zone Traffic Control" will apply for the inspection of traffic control devices on this project.

TRAFFIC CONTROL AND PROTECTION, STANDARDS 701301 AND 701311

This work shall consist of furnishing, installing, moving, maintaining and removing the traffic control devices as shown on Standards 701301 and 701311, as specified herein and as directed by the Engineer. These standards shall be utilized for short term operations requiring the closure of one traffic lane, such as placement of pavement markings and sign installation.

Measurement and Payment

This work will not be paid for separately as described in Article 701.07 of the Standard Specifications.

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

This work shall consist of furnishing, installing, moving, maintaining and removing the traffic control signs and devices for road closures and detours at locations as shown on the Stage Construction and Maintenance of Traffic Plan, as specified herein and as directed by the Engineer. Detours shall be utilized to direct traffic around the construction work zone and will be modified as required due to the various stages of construction activities. The work will include moving of the traffic control signs and devices for the various construction stages and all additional signs and barricades as shown on the plans.

Measurement and Payment

This work will be paid for at the contract unit price lump sum for TRAFFIC CONTROL AND PROTECTION (SPECIAL), which price shall include all materials, labor and maintenance as required for the duration of the contract.

TRAFFIC CONTROL AND PROTECTION STANDARD BLR 21 (SPECIAL)

This work shall consist of furnishing, installing, moving, maintaining and removing the traffic control devices including additional signs and barricades at locations as shown on the Stage Construction and Maintenance of Traffic Plan, as specified herein and as directed by the Engineer. Standard BLR 21 shall be utilized to completely close segments of Morris Avenue to all traffic.

The standard will be used for removals, storm sewer installation, earthwork, pavements, curb and gutters, pavement marking, and anytime workers or construction activities encroach on the pavement requiring the closing of the road as shown on the Stage Construction and Maintenance of Traffic Plan. The work will include moving of the traffic control devices for the various construction stages and all additional signs and barricades as shown on the plans.

Measurement and Payment

This work will be paid for at the contract unit price lump sum for TRAFFIC CONTROL AND PROTECTION STANDARD BLR 21 (SPECIAL), which price shall include all materials, labor and maintenance as required for the duration of the contract.

TRAFFIC CONTROL AND PROTECTION STANDARD BLR 22 (SPECIAL)

This work shall consist of furnishing, installing, moving, maintaining and removing the traffic control devices including additional signs and barricades at locations as shown on the Stage Construction and Maintenance of Traffic Plan and as specified herein and as directed by the Engineer. Standard BLR 22 shall be utilized to close segments of Morris Avenue to through traffic, but allow access for local traffic to properties or residences.

The standard will be used for removals and earthwork and anytime workers or construction activities encroach on the pavement requiring the closing of the road as shown on the Stage Construction and Maintenance of Traffic Plan. The work will include moving of the traffic control devices for the various construction stages and all additional signs and barricades as shown on the plans.

Measurement and Payment

This work will be paid for at the contract unit price lump sum for TRAFFIC CONTROL AND PROTECTION STANDARD BLR 22 (SPECIAL), which price shall include all materials, labor and maintenance as required for the duration of the contract.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701501

This work shall consist of furnishing, installing, moving, maintaining and removing the traffic control devices including additional signs and barricades as shown on the Stage Construction and Maintenance of Traffic Plan, as specified herein and as directed by the Engineer.

Standard 701501 shall be utilized for removals, storm sewer installation, earthwork, curb and gutters, milling, bituminous paving, pavement marking, and anytime workers or construction activities encroach on the pavement requiring the closing of one traffic lane with two way traffic being maintained on a minimum of one lane. The work will include moving of the traffic control devices for the various construction stages and all additional signs and barricades as shown on the plans.

Measurement and Payment

This work will be paid for at the contract unit price lump sum for TRAFFIC CONTROL AND PROTECTION STANDARD 701501, which price shall include all materials, labor and maintenance as required for the duration of the contract.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701701

This work shall consist of furnishing, installing, moving, maintaining and removing the traffic control devices including additional signs and barricades at locations as shown on the Stage Construction and Maintenance of Traffic Plan, as specified herein and as directed by the Engineer.

Standard 701701 shall be utilized for removals, storm sewer installation, earthwork, pavements, curb and gutters, traffic signal, pavement marking, water mains, sanitary sewers and anytime workers or construction activities encroach on the pavement requiring the closing of traffic lanes with two way traffic being maintained as shown on the Stage Construction and Maintenance of

Traffic Plan. The work will include moving of the traffic control devices for the various construction stages and all additional signs and barricades as shown on the plans.

Measurement and Payment

This work will be paid for at the contract unit price lump sum for TRAFFIC CONTROL AND PROTECTION STANDARD 701701, which price shall include all materials, labor and maintenance as required for the duration of the contract.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701801

This work shall consist of furnishing, installing, moving, maintaining and removing the traffic control devices including additional signs and barricades at locations as shown on the Stage Construction and Maintenance of Traffic Plan, as specified herein and as directed by the Engineer.

Standard 701801 shall be utilized anytime workers or constriction activities encroach on the sidewalks or pedestrian trail requiring the pedestrian traffic to be rerouted. The work will include moving of the traffic control devices for the various construction stages.

Measurement and Payment

This work will be paid for at the contract unit price lump sum for TRAFFIC CONTROL AND PROTECTION STANDARD 701801, which price shall include all materials, labor and maintenance as required for the duration of the contract.

TRAFFIC CONTROL AND PROTECTION, STANDARD 701606, SPECIAL

This work shall consist of furnishing, installing, moving, maintaining and removing the traffic control devices including additional signs and barricades as shown on the Stage Construction and Maintenance of Traffic Plan, as specified herein and as directed by the Engineer.

Standard 701606 Special shall be utilized for removals, storm sewer installation, earthwork, pavements, curb and gutters, traffic signals, pavement marking, water mains, sanitary sewers and anytime workers or construction activities encroach on the pavement requiring the closing of traffic lanes with two way traffic being maintained on two traffic lanes as shown on the Stage Construction and Maintenance of Traffic Plan. The work will include moving of the traffic control devices for the various construction stages and all additional signs and barricades as shown on the plans.

Measurement and Payment

This work will be paid for at the contract unit price lump sum for TRAFFIC CONTROL AND PROTECTION STANDARD 701606, SPECIAL, which price shall include all materials, labor and maintenance as required for the duration of the contract.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT

This work shall be done in accordance with the "National Pollutant Discharge Elimination System Permit" (NPDES) requirements. The Contractor will be required to comply with all terms of the permit. The City of Bloomington has acquired a NPDES, MS4 permit, which covers the construction of this project. The Contractor will be required to fill out the "Contractor Certification Statement", form number BDE 2342a and submit it to the Engineer at the pre-construction conference. A copy of the form is attached.

Illinois Department of Transportation

Storm Water Pollution Prevention Plan

Route Hamilton Road and Morris Avenue Marked No

Section 93-00295-02-PV Project No. M-5227 (042)

County McLean

This plan has been prepared to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from Construction Site Activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature

4-7-04
Date

Director of Engineering
Title

1. Site Description

a. The following is a description of the construction activity which is the subject of this plan (use additional pages, as necessary):

Reconstruction of Hamilton Road and Morris Avenue including new pavements, curb and gutters, sidewalks, bikeway, drainage system, traffic signals and water mains.

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):

Grading for pavement construction, installation of storm sewers, traffic signals and water mains, top soil placement and seeding.

c. The total area of the construction site is estimated to be 9 acres.

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities is 9 acres.

d. The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained either in the Soils Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.

e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes 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 areal 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

(i) 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.(i).(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 portion of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occur for a 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):

Temporary seeding of disturbed areas will be done as soon as practicable. Bales will be placed at upstream ends of drainage culverts and at inlets in earth areas to prevent silt from entering the drainage system. Inlet filters will be installed at all drainage structures within paved areas to prevent silt from entering the drainage system. Silt fences will be erected in fill areas to prevent sediment form discharging off the limits of the right of way. Permanent seeding and mulching and sodding will be done when the grading is complete. Disturbance of existing vegetated areas will be limited to the minimum necessary to complete the project.

(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):

Temporary seeding of disturbed areas will be done as soon as practicable. Bales will be placed at upstream ends of drainage culverts and at inlets in earth areas to prevent silt from entering the drainage system. Inlet filters will be installed at all drainage structures within paved areas to prevent silt from entering the drainage system. Silt fences will be erected in fill areas to prevent sediment form discharging off the limits of the right of way. Permanent seeding and mulching and sodding will be done when the grading is complete. Disturbance of existing vegetated areas will be limited to the minimum necessary to complete the project.

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.

(I) 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.**

(ii) Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g., maintenance of hydrologic conditions, such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of Storm Water Management Controls (use additional pages, as necessary):

Storm water detention will not be provided on this project. Pollutants in storm water discharges will be filtered at the points of discharge by the natural vegetated swales. Roadside ditches that are disturbed will be lined with sod to prevent erosion and to filter pollutants.

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:

The drainage plan has been approved by IDOT and the City of Bloomington.

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):

The Contractor will be responsible for installing and maintaining the erosion control systems 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.

b. 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.

c. 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.

d. 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

5. Non-Storm Water Discharges

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).

There is no non storm water discharges combined with storm water on this project.

Illinois Department of Transportation

Contractor Certification Statement

This certification statement is a part of the Storm Water Pollution Prevention Plan for the project described below, in accordance with NPDES Permit No. ILR10, issued by the Illinois Environmental Protection Agency on May 14, 1998.

Project Information:

Route Hamilton Road and Morris Avenue Marked No

Section 93-00295-02-PV Project No. M-5227-(042)

County McLean

I certify under penalty of law that I understand the terms of the general National Pollutant Discharge Elimination System (NPDES) permit (ILR 10) that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

Signature Date

Title

Name of Firm

Street Address

City State

Zip Code

Telephone Number

CONSTRUCTION ON PRIVATE PROPERTY

Whenever excavation is made within a temporary or permanent construction easement on private property for driveways, sidewalks, steps, retaining walls, utility connections, or other construction, the topsoil disturbed by the excavation operations shall be restored as nearly as possible to its original position and the whole area involved in the construction operation shall be left in a neat and presentable condition.

The Contractor shall use reasonable care to avoid disturbing portions of private property not necessary to the construction operations. If, in the judgment of the Engineer, areas are disturbed unnecessarily, the Contractor shall restore these areas at his own expense including placement of sod. The Contractor shall not pile excavated material outside the limits of the R.O.W. upon adjacent private property without the written consent of the property owner and the Engineer.

The cost of compliance with this Special Provision will not be paid for separately but shall be considered, as incidental to the EARTH EXCAVATION pay item and no additional compensation will be allowed.

PRESERVING PROPERTY MARKERS

The Contractor shall locate the existing property corner markers along this section. Any such monuments unnecessarily destroyed by the Contractor's operations shall be replaced by a registered Illinois Land Surveyor at the Contractor's expense.

Any expense, inconveniences or delays caused the Contractor in complying with this Special Provision will be considered as incidental to the contract and no additional compensation will be allowed.

EXISTING TREES AND SHRUBS

Existing trees and shrubs in the area of the project site shall be protected from damage unless indicated on the Plans to be removed. The Contractor shall be liable for damages to trees and shrubs, which were to have been protected as directed by the Engineer, unless such damages are determined by the Engineer to have been unavoidable. Such trees or shrubs shall immediately be repaired or replaced as directed in Article 201.05 of the Standard Specifications.

REMOVAL OF EXISTING PAVEMENT MARKINGS

This work shall be performed at locations necessary which conflict with pavement markings required by the proposed traffic control plan and in accordance with Section 783 of the Standard Specifications. This work will not be paid for separately but shall be considered incidental to the various traffic control and protection pay items of the contract.

REMOVAL OF UNCLASSIFIED MATERIAL

Debris or unclassified materials shall be removed at the locations shown on the Plans or as designated by the Engineer. The material removed as required in this Special Provision shall be disposed of outside the limits of the right-of-way in accordance with Article 202.03 of the Standard Specifications and as directed by the Engineer. This work will not be paid for separately and should be included in the cost of the various removal items.

SALVABLE MATERIALS

All materials deemed salvable by the Engineer shall remain the property of the City of Bloomington and shall be stored on the job site as directed by the Engineer. The Contractor shall dispose of any materials off site that the Engineer determines should not be salvaged. This work will not be paid for separately and should be included in the cost of the various removal items.

STOCKPILE AREAS

Short-term stockpile of backfill and crushed stone material will be allowed only where directed by the Engineer. Temporary stockpiles of materials shall not interfere with local and through traffic as described on the traffic control plans.

Stockpiles of materials shall not be allowed on private property (unless permission is granted by owner in writing), outside street rights-of-way; and shall not be allowed to block private driveways or sidewalks. Any grass area that is damaged by stockpiled material shall be repaired by sodding as directed by the Engineer. These areas shall not be measured for payment and the Contractor shall repair them at his/her own expense.

HAND GRADING

Grading shall be done by hand around light poles, utility poles, sign posts, shrubs, trees or other natural or man-made objects where shallow fills or cuts are adjacent to the items. It is the intent that the limits of construction be such as to preserve in the original state as much area of temporary easements as possible. The decision as to items to remain in place shall be as directed by the Engineer. This work will not be paid for separately and should be included in the cost of the earthwork.

CUTTING EXISTING PAVEMENT, DRIVEWAY PAVEMENT, SIDEWALK, OR CURB AND GUTTER

At locations where it is necessary to cut bituminous concrete surfaces, concrete pavement, concrete or bituminous concrete driveway pavement, concrete sidewalk, or concrete curb and gutter, where it will abut the proposed new construction, a uniformly straight cut shall be obtained by the use of a diamond concrete saw. The use of pneumatic tools to make these cuts

will not be allowed. This work shall be considered incidental to the various pay items of the proposed construction involved and no additional compensation will be allowed.

CURB AND GUTTER TRANSITIONS AND THICKNESS

Whenever it is necessary to make a smooth connection between the proposed gutter or curb and gutter and the existing curb and gutter the Contractor shall vary the dimensions of the proposed gutter or curb and gutter as directed by the Engineer. This work will not be paid for separately but will be considered as included in the contract unit prices for the various gutter or curb and gutter pay items and no additional compensation will be allowed.

BROOMING ROADWAY

All traffic lanes which are closed to through traffic during construction shall be broomed or swept free of all loose gravel or construction debris before the traffic lane is reopened to traffic. The Engineer shall approve all roadway surface conditions before they are opened to traffic. The cost of complying with this Special Provision will not be paid for separately but shall be considered incidental to the various traffic control items and no additional compensation will be allowed.

EXISTING SEWERS AND DRAINAGE STRUCTURES TO BE PLUGGED

Where existing sewers are to be abandoned or removed as shown in the plans, or as directed by the Engineer, the abandoned sewers and drainage structure openings which remain shall be plugged with concrete or brick masonry plugs in a workmanlike manner and to the satisfaction of the Engineer. This work will not be paid for separately but will be considered as included in the contract unit prices for the various storm sewer pay items and no additional compensation will be allowed.

CONNECTING INTO EXISTING MANHOLES AND STORM SEWERS

At locations indicated in the plans, proposed storm sewers are to be connected into existing manholes or existing storm sewers. These connections shall be made in a workmanlike manner and brick masonry constructed around them so as to prevent leakage. This work will not be paid for separately, but shall be considered as included in the contract unit prices for storm sewers of the size and type specified, and no additional compensation will be allowed.

TREE REMOVAL

Description

Trees shall be removed at locations shown on the plans and as directed by the Engineer. Tree removal shall be in accordance with Section 201 of the Standard Specifications except that all trees, stumps and roots shall be completely removed and disposed of unless directed otherwise by

the Engineer.

Measurement and Payment

The trees identified on the plans for removal as individual trees will be measured and paid for by the unit in accordance with Section 201 of the Standard Specifications, which shall include the complete removal of the trees and roots. The removal of bushes, brush and trees less than six inches in diameter will not be measured for payment.

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

Description

This work shall consist of undercutting, removing and disposing of unsuitable material below the proposed subgrade limits at locations determined by the Engineer and in accordance with Section 202 of the Standard Specifications. All unsuitable materials shall be disposed of off the site unless directed otherwise by the Engineer. The excavations below the subgrade limits shall be filled with Granular Backfill as directed by the Engineer. A quantity has been included in the plans for the purpose of establishing a unit bid price in case unsuitable materials are discovered. It is hereby understood that the City of Bloomington reserves the right to delete any or all of this pay item from the contract. Should the City delete any or all of this pay item from the contract, the Contractor will receive no remuneration for the deleted item.

Measurement and Payment

This work of undercutting and removing unsuitable earth material will be measured in accordance with Article 202.07(b) of the Standard Specifications and will be paid for at the contract unit price per cubic yard for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL. Filling the excavated areas with Granular Backfill will be paid for separately as specified herein.

GRANULAR BACKFILL

Description

This work shall consist of placing granular backfill in excavations under proposed paved areas created by the removal of unsuitable material, buildings, structures, or foundations. The locations for the placement of the granular backfill will be as directed by the Engineer. A quantity has been included in the plans for the purpose of establishing a unit bid price for the granular backfill. It is hereby understood that the City of Bloomington reserves the right to delete any or all of this pay item from the contract. Should the City delete any or all of this pay item from the contract, the Contractor will receive no remuneration for the deleted item. The backfill shall consist of granular material placed in uniform layers not exceeding 8 inches loose measure and compacted by a vibratory roller meeting the requirements of Article 1101.01 of the

Standard Specifications or by ramming or tamping as directed by the Engineer. The granular material shall be crushed gravel, crushed stone or crushed concrete having a gradation of CA 1 or a gradation approved by the Engineer. The material shall meet the requirements of Article 1004.01 of the IDOT Standard Specifications.

Measurement and Payment

This work will be measured and paid for at the contract unit price per ton for GRANULAR BACKFILL, which price shall include furnishing, placing and compacting the material.

TOPSOIL EXCAVATION AND PLACEMENT

Description

This work shall consist of stripping, stockpiling, site preparation, and spreading topsoil in accordance with this special provision and Section 211 of the Standard Specifications. Strip topsoil to the limits shown on the plans in areas that will be disturbed by excavation, filling, compaction, road building or as otherwise directed by the Engineer. The depth of the stripping shall be 12 inches as shown on the plans, unless site conditions warrant a different thickness be stripped as directed by the Engineer. Generally, the upper part of the soil profile, which is richest in organic matter is most desirable for future placement; however, material excavated from deeper layers may be acceptable for topsoil placement if it meets the criteria specified herein.

After the site has been cleared and grubbed the topsoil shall be removed from the designated areas and shall be stockpiled at locations approved by the Engineer. Objectionable materials encountered during excavation shall either be used in embankment areas if the material is suitable or shall be removed from the site. Topsoil shall be free of debris, trash, stumps, rocks (1/2" or larger), and noxious weeds, and shall give evidence of being able to support healthy vegetation. Topsoil shall be reasonably free of grass, roots, weeds, sticks or other foreign materials. Topsoil shall contain no substance that is potentially toxic to plant growth. Topsoil shall be friable and loamy (loam, sandy loam, silt loam, sandy clay loam, or clay loam). Sand content shall generally be less than 70% by weight, and clay content shall generally be less than 35% by weight. Organic soil, such as peat or mulch, shall not be used as topsoil material. Organic mater content shall not be less than 1.5% by weight. pH shall be within the range 6.0 to 7.5. If pH is less than 6.0, lime shall be added in accordance with soil test results.

Topsoil shall be placed to a minimum thickness of 4 inches. Spreading shall not be done when the ground or topsoil is frozen, excessively wet or otherwise in a condition detrimental to the work. After placement is completed, the surface of the topsoil shall be finished to a reasonably smooth surface.

Measurement and Payment

This work will be measured and paid for at the contract unit price per cubic yard for TOPSOIL

EXCAVATION AND PLACEMENT, which price shall include all excavating, stockpiling, hauling, placing and fine grading. Lime will be paid for as extra work in accordance with Article 109.04 of the Standard Specifications. Excess topsoil material beyond that which is required for the topsoil placement will be added to the earth excavation quantities.

SEEDING AND MULCHING

Description

To prevent erosion and to satisfy the requirements of the NPDES permit seeding, fertilizing and mulching should be completed in conjunction with each separate stage of the project. The Contractor will be responsible for the seeded areas until they are fully established which may require re-seeding and mulching of any bare areas until seed growth is established. The Contractor shall maintain the seeded areas until such time as the requirements of the NPDES permit are satisfied and the permit is terminated.

Measurement and Payment

This work will be measured and paid for in accordance with Sections 250 and 251 of the Standard Specifications. Any additional seeding and mulching of bare areas after the initial seeding and mulching operation will not be paid for separately, but will be considered as included in the cost of the seeding and mulching pay items. The plan quantity for seeding and mulching includes the entire area within the construction limits. The Contractor is advised that payment for seeding and mulching will be made for only those areas which were necessarily disturbed by construction operations as determined by the Engineer. Turfed areas beyond the construction limits which are unnecessarily disturbed by construction operations shall be sodded as directed by the Engineer at the Contractor's expense.

SALVAGING AND TRANSPLANTING TREES, SPECIAL

Description

This work shall consist of removing, storing, transporting and planting existing trees at locations shown on the plans. The work shall be in accordance with the applicable articles of Section 253 of the Standard Specifications and as directed by the Engineer. The planting times specified in Section 253 shall apply. The trees shall be removed with a tree spade type of machine capable of removing the tree with the entire root system intact. The trees shall then be planted, mulched, braced, wrapped, watered and maintained as required in Section 253. The Contractor shall notify the Engineer of any existing trees to be transplanted that are dead, diseased or damaged prior to removing the trees. The Engineer will determine if the trees will be transplanted or removed.

Measurement and Payment

This work will be measured for payment at the contract unit price per each for SALVAGING AND TRANSPLANTING TREES, SPECIAL. Trees that are determined to be removed will be paid for in accordance with Section 201 of the Standard Specifications.

TEMPORARY EROSION CONTROL SEEDING

Description

This work shall consist of placing temporary seeding on erodable surfaces in accordance with Section 280 of the Standard Specifications and as directed by the Engineer. The seed mixture and rates shall be as specified in Article 280.04 (f).

Measurement and Payment

This work will be measured for payment at the contract unit price per acre for TEMPORARY EROSION CONTROL SEEDING.

INLET FILTERS

Description

This work shall consist of placing, maintaining and removing inlet filters at drainage structures at locations shown on the plans in accordance with Section 280 of the Standard Specifications and the special provision BDE 80104. The Contractor will be responsible for maintaining the inlet filters until such time that the filters can be removed. At the direction of the Engineer the Contractor shall remove the inlet filters and they shall become the property of the Contractor and be disposed of off the site.

Measurement and Payment

This work will be measured for payment at the contract unit price per each for INLET FILTERS, which price shall include installing and maintaining the inlet filters and the removal and disposal of all material.

TEMPORARY RAMP

Description

This work shall consist of constructing temporary bituminous ramps at locations shown on the plans in accordance with Section 406 of the Standard Specifications. The Contractor will be responsible for maintaining the temporary ramps until such time that the ramps can be removed. At the direction of the Engineer the Contractor shall remove the bituminous ramps and dispose of the material off the site.

Measurement and Payment

This work will be measured for payment at the contract unit price per square yard for TEMPORARY RAMP, which price shall include constructing and maintaining the bituminous ramps, removal and disposal of all material.

PAVEMENT BREAKING

Description

This work shall consist of breaking the existing pavement of various thicknesses and leaving it in place on Morris Avenue at the locations shown on the plans and as directed by the Engineer. The Contractor shall provide the necessary equipment and labor necessary to completely break the pavement into pieces that are no larger than two (2) feet measured in any direction. The pavement breaking shall not be destructive, but shall result in cracks with fine lines and aggregate interlock between the individual pieces. The equipment breaker shall incorporate a guided free-falling drop weight and be capable of delivering sufficient dynamic force to crack the pavement full depth. Unguided free failing weights such as headache or wrecking balls will not be allowed.

Measurement and Payment

This work will be measured for payment at the contract unit price per square yard for PAVEMENT BREAKING, which price shall be considered payment in full for all labor and equipment required to satisfactorily complete the work.

REMOVE EXISTING CULVERTS

Description

This work shall consist of the removal and disposal of existing box culverts and pipe culverts including prefabricated end sections at the locations shown on the plans and as directed by the Engineer. The Contractor shall dispose of the culverts in accordance with Article 202.03 of the Standard Specifications. Excavations resulting from the removal of the culverts that are within two feet of paved surfaces shall be backfilled with trench backfill material in accordance with Section 208 and Article 550.07 of the Standard Specifications.

Measurement and Payment

This work will be measured for payment at the contract unit price per foot for REMOVE EXISTING CULVERTS, which price shall be considered payment in full for all labor, equipment, and materials required for the satisfactory removal and disposal of the existing culverts and trench backfilling. The length of prefabricated end sections to be removed will also be included for payment.

CONCRETE COLLAR

Description

This work shall consist of constructing concrete collars around joints of pipes where the pipes being joined are of different diameters and types of materials. The collars shall be as shown on the detail in the plans and shall be constructed with class SI concrete in accordance with Section 1020 of the Standard Specifications. The excavation and backfilling shall be as specified for the associated pipe installation.

Measurement and Payment

This work will be measured and paid for at the contract unit price each for CONCRETE COLLAR, which price shall include all labor, equipment and materials required.

STORM SEWER REMOVAL

Description

This work shall consist of the removal and disposal of existing storm sewers including prefabricated end sections at the locations shown on the plans in accordance with Section 551 of the Standard Specifications and as directed by the Engineer. Storm sewer materials determined not to be salvageable by the Engineer shall be disposed of by the Contractor in accordance with Article 202.03 of the Standard Specifications. Excavations resulting from the removal of the storm sewers that are within two feet of paved surfaces shall be backfilled with trench backfill material in accordance with Section 208 and Article 550.07 of the Standard Specifications.

Measurement and Payment

This work will be measured for payment at the contract unit price per foot for STORM SEWER REMOVAL, of the diameter specified, which price shall be considered payment in full for all labor, equipment, and materials required for the satisfactory removal and disposal of the existing storm sewers. The length of prefabricated end sections to be removed will also be included for payment. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications. Removal of concrete headwalls will be paid for separately as specified herein.

DUCTILE IRON WATER MAIN
DUCTILE IRON WATER MAIN, RESTRAINED JOINT TYPE

Description

All work shall be performed in accordance with the latest edition of the Standard Specification

for Water and Sewer Main Construction in Illinois, City of Bloomington Design and Construction Standards for Water Distribution and Supply System, and Sections 561, 562, 565 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, except as modified herein.

Protection of Water Mains:

Water mains shall be protected from sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains as follows:

Horizontal Separation – Water Mains and Sewers:

A. Water mains shall be laid at least ten feet horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.

B. Water mains may be laid closer than ten feet to a sewer line when:

- local conditions prevent a lateral separation of ten feet;
- the water main invert is at least 18 inches above the crown of the sewer; and
- the watermain is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.

Both the water main and drain or sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, asbestos-cement pressure pipe, prestressed concrete pipe, or PVC pipe meeting the requirements of 35 Illinois Administrative Code (IAC) 653.111 when it is impossible to meet (A) or (B) above. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling.

Vertical Separation – Water Mains and Sewers:

A. A water main shall be laid so that its invert is 18 inches above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within ten feet horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or drain.

Both the water main and sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, asbestos-cement pressure pipe, prestressed concrete pipe, or PVC pipe meeting requirements of 35 IAC Section 653.111 when:

- it is impossible to obtain the proper vertical separation as described in (A) above; or
- the water main passes under a sewer or drain.

A vertical separation of 18 inches between the invert of the sewer or drain and the crown of the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main.

Construction shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least ten feet.

All granular material shall be omitted from the water main bedding and cover and Select Excavated Material compacted to 95% of Standard Proctor Maximum Density utilized for 10 feet on either side of the sewer line. If Granular Backfill exists for the sewer line, remove within limits of existing sewer line trench and replace with Select Excavated Material and compact to 95% of Standard Proctor Maximum Density.

When it is impossible to meet the vertical separation stated above or the water main passes under a sewer or drain, the water main shall be sleeved with steel pipe (water tight at both ends) for a minimum distance of ten (10) feet on each side of the sewer. This is to be done in lieu of "spot" lowering or raising the water main when possible.

Conflicts:

Where it is impossible to obtain proper horizontal and vertical separation as stipulated above, both the potable water line and sewer line shall be constructed of water main pipe within 10 feet of the crossing, and both shall be pressure tested to assure water tightness before backfilling.

In making such crossings, it is preferable to center a minimum 20-foot length of the sewer line under the potable line to be crossed so that the joints will be equidistant from the potable line and as remote there from as possible. Where a sewer line must cross over a potable water line, a vertical separation of 18 inches between the bottom of the non-potable water line and the top of the potable water line shall be maintained along with means to support non-potable water lines to prevent their settlement.

Pipeline Trenching:

Excavation in close proximity to existing utilities shall be performed in a manner to prevent damage.

All excavations shall be made by open cut unless otherwise indicated. Sides of trenches shall be kept as nearly vertical as possible from the trench bottom to a level of one foot above the top of the pipe. Trench bottoms shall be excavated true to line and shall be not less than 18 inches wider nor more than 24 inches wider than the outside diameter of the pipe so a clear space of 9 to 12 inches is provided on each side of the pipe. Grade of the trench bottom shall be consistent with the method of bedding specified.

Stabilization:

If portions of the bottom of trenches or excavations consist of material unstable to such a degree that, in the opinion of the Owner, it cannot adequately support the pipe or structure, the bottom shall be over excavated and stabilized with coarse granular stabilization material. Depth of stabilization shall be determined by the Owner.

Trench or Excavation Bottom Stabilization Material:

Provide coarse angular granular stabilization material, at least 70% of which shall range in size from 1 inch to 3 inches.

Shoring and Bracing:

Engage and assign supervision of shoring and bracing work to a qualified foundation consultant.

Comply with local codes and ordinances of governing authorities having jurisdiction.

Before starting work, check and verify governing dimensions and elevations. Survey condition of adjoining properties, take photographs, recording existing settlement or cracking of structures, pavements, and other improvements. Prepare list of such damages, verified by dated photographs, and signed by Contractor and others conducting investigation.

Protect existing active utility services and structures from damage during shoring and bracing work. Repair or replace damages to satisfaction of utility owner.

Provide suitable shoring and bracing materials which will support loads imposed.

Shoring -
Protect site from caving and unacceptable soil movement. Where shoring is required, locate system to clear permanent construction and to permit forming and finishing of concrete surfaces. Provide shoring system adequately anchored and braced to resist earth and hydrostatic pressures.

Shoring systems retaining earth on which support or stability of existing structures is dependent must be left in place at completion of work. If wood is part of shoring system near existing structures, use pressure preservative treated materials or remove before placement of backfill.

Bracing -
Locate bracing to clear permanent work. If necessary to move a brace, install new bracing prior to removal of original brace.

Install internal bracing, if required, to prevent spreading or distortion to braced frames.

Maintain bracing until structural elements are rebraced by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.

Remove sheeting, shoring, and bracing in stages to avoid disturbance to underlying soils and damage to structures, pavements, facilities, and utilities.

Repair or replace adjacent work damaged or displaced through installation or removal of shoring and bracing work.

Bedding, Haunching, Initial Backfill and Final Backfill:

Bedding shall include the full trench width from the bottom of the excavation to the bottom of the pipe in which the pipe is bedded. Bedding material shall be in accordance with Article 1003.04 of the IDOT Standard Specification and shall be 4 inches thick.

Haunching shall include the full trench width from the bottom of the pipe to the springline of the pipe. Haunching material shall be in accordance with Article 1003.04 of the IDOT Standard Specification.

Final backfill includes the portion of the trench from the springline of the pipe to topsoil or paving subgrade. The trenches shall be backfilled with select granular material (free of clay lumps, large stones and rocks, and debris, subject to approval of the Owner) and compacted in 8-inch lifts to 85% Standard Proctor Density (ASTM D698) to match the surrounding ground surface in non-paved areas. The trenches that are within proposed paved areas shall be backfilled with trench backfill in accordance with Section 208 and Article 550.07 of the IDOT Standard Specifications. All materials shall be carefully deposited to avoid damage to the pipe.

Testing and Cleanup:

Provide for testing and cleanup as soon as practicable, so these operations do not lag far behind pipe installation. Perform preliminary cleanup and grading operations immediately after backfilling. All surplus excavated material shall be disposed of off site by the Contractor.

Materials

Piping and Fittings:

Submit the following:

- Product data for gaskets.
- Product data and details showing general dimensions, construction details and full descriptive literature, which includes materials of construction, material specification and grade for pipe, fittings and joints.
- Piping specialties, installation details, and jointing details including restrained joints.

- Manufacturer's information on installation procedures.

Product Delivery, Storage, and Handling:

Exercise care in transporting and handling pipe and fittings in order to avoid damage to materials or coatings. Lifting shall be by hoist or on skids when hand lifting is not feasible. Dropping shall not be permitted. Store pipe as recommended by the manufacturer. Damaged pipe and fittings shall be replaced.

Pipe Materials:

Ductile iron pipe shall conform to AWWA C151. Casting, marking, testing, etc. shall be provided in accordance with applicable AWWA standards. Ductile iron pipe shall be Thickness Class 52 with single gasket joints.

Fittings for ductile iron pipe shall conform to AWWA C110 or AWWA C153. Mechanical and push-on joints for pipe and fittings shall conform to AWWA C111. Bolts and nuts shall conform to ASTM A307, Grade B. Joints shall be as specified above and as shown in the drawings.

Restrained joints shall meet one of the following:
-American Ductile Iron Pipe - Lok-Ring Joint
-U.S. Pipe - TR-Flex Joint
-Clow - Tyton or Fastite Joint
-Griffin Pipe - Snap-Lok or Bolt-Lok Joint
-14-inch and larger - EBBA Iron Sales – Meg-a-Lug Retainer Glands
-12-inch or smaller – standard retainer glands from approved manufactures

Interior lining for ductile iron pipe and fittings shall be cement mortar lining and bituminous seal coat in accordance with AWWA C-104. Bituminous lining shall be 1 mil thick.

Exterior coating for ductile iron pipe and fittings shall have minimum 1 mil thick asphaltic coating per AWWA C151 and ANSI A21.6 or A21.8.

Ductile iron pipe and fitting and valves shall be encased in polyethylene encasement sleeves which consist of linear low density polyethylene, 8 mil thickness, Class C (black) conforming to the requirements of AWWA C105/ANSI A21.5-99. Polyethylene wrap shall be secured with a polyethylene compatible adhesive tap and shall be installed in accordance with manufacturer's recommendations.

All fittings (including but not limited to bends, tees, reducers, and plugs) and valves shall be either restrained with retainer gland or manufactured restrained joints as described above. Fittings for ductile iron pipe shall be ductile iron of the type shown and shall conform to AWWA C110 or AWWA C153 and AWWA C111, 250 psi pressure rated. Joints shall be as specified above.

The Contractor shall expose existing water main and restrain the joints of the existing water main using methods and materials approved by the Owner, where indicated on the drawings or where directed by the Engineer. The Contractor, at no additional cost to the City of Bloomington, has the option to remove the existing water main and replace the main with restrained joint water main. This work is considered incidental to the contract.

Installation Requirements:

Pipe shall be installed in accordance with the manufacturer's specifications and recommendations.

All lengths of pipe shall be dimensioned accurately to measurements established at the site, and shall be worked into place without springing or forcing.

The Contractor shall cut all pipe that may be necessary. Cut sections of pipe shall be reamed or filed to remove all burrs. The pipe interior and joints shall be thoroughly cleaned before being installed and kept clean during construction.

All changes in direction shall be made with fittings or joint deflection. Bending of pipe is prohibited. The maximum deflection at any joint shall not exceed 3 degrees per a joint or 80% of the pipe manufacturers recommended maximum deflection, whichever is less. Contractor shall supply documentation from pipe manufacturer to verify the recommended deflection for any type pipe proposed for use.

Any transition from one pipe size to another shall be made with a reducing fitting.

Water mains shall be constructed sufficiently deep so as to prevent freezing, with four feet minimum bury measured from finished grade to top of the pipe, unless otherwise indicated on the drawings or as directed by the Engineer under critical circumstances.

Make adequate provision for expansion and contraction of piping.

Pipe embedment and backfilling the trench shall closely follow the installation and jointing of pipe in the trench, to prevent floating of the pipe by water which may enter the trench, and to prevent longitudinal movement caused by thermal expansion or contraction of the pipe. Not more than 50 feet of pipe shall be exposed at any time ahead of the backfilling in any section of the trench except as approved by Owner.

When connecting to an existing water main, work must be coordinated with the Owner with two working days notice. If the connection to an existing water main requires a shutdown of the existing main, the Contractor shall re-chlorinate that portion of the existing water main which is shutdown before it is put back into service. The Contractor shall provide the necessary restraining of the existing main when making the new connection.

Mechanical Joints: Pipe with mechanical joints and restrained joints shall be laid according to the manufacturer's specifications. Socket and gasket shall be clean and gasket shall be properly centered before joint is made.

Push-On Type Joints: Any foreign matter in the gasket seat shall be removed, the rubber gasket wiped clean, flexed and placed in the socket. A thin film of lubricant shall be applied to the inside surface of the gasket which will come in contact with entering plain end pipe. Joint assembly shall then be completed by forcing the plain end of the entering pipe past the gasket until it makes contact with the bottom of the socket.

Jointing Gasket Joint Pipe: The inside of the bell shall be thoroughly cleaned to remove all foreign matter from the joint. The gasket shall be inserted in the gasket seat provided. A thin film of gasket lubricant shall be applied to inside surface of the gasket. Gasket lubricant shall be a solution of vegetable soap or other solution supplied by the pipe manufacturer and approved by the Owner. The spigot end of the pipe shall be cleaned and entered into the rubber gasket in the bell, using care to keep the joint from contacting the ground. The joint shall then be completed by forcing the plain end to the seat of the bell.

Care must be taken not to damage exterior coating or interior lining when joining the pipe.

Field cut pipe lengths shall be beveled to avoid damage to the gasket and facilitate making the joint.

All pipe shall be furnished with a depth mark to assure that the spigot end is inserted to the full depth of the joint.

Plugs:

Installed piping systems shall be temporarily plugged at the end of each day's work, or other interruption to progress on a given line. Plugging shall be adequate to prevent entry of small animals or persons into the pipe or the entrance or insertion of deleterious materials.

Standard plugs shall be inserted into all dead-end pipes, tees, or crosses; spigot ends shall be capped. Mechanical joint ends shall have blind flanges of metal.

Plugs installed for pressure testing shall be blind flanges fully secured and blocked to withstand the test pressure.

Where plugging is required because of contract division or phasing for later connection, the ends of such lines shall be equipped with a permanent type plug or blind flange. Installation or removal of such plugging shall be considered incidental to the work.

Piping System Testing:

Provide all necessary equipment and instrumentation required for proper completion of testing. Water will be provided by the Owner at no cost. The Owner reserves the right to meter and charge for additional water used by the Contractor for additional testing, etc.

Test procedures and method of disposal of water shall be submitted for review by the Owner. All tests shall be made in the presence of the Owner. Preliminary tests made by the Contractor without being observed by the Owner will not be accepted. Notify the Owner at least eight hours before any work is to be performed or tested.

All defects in piping systems shall be repaired and/or replaced and retested until acceptable. Repairs shall be made to the standard of quality specified for the entire system.

Sections of the system may be tested separately, but any defect which may develop in a section previously tested and accepted shall be promptly corrected and retested. Pressure tests shall be made between valves to demonstrate ability of valves to sustain pressure.

All piping shall be tested in accordance with the following test methods, in addition to any test required by local and state codes or building authorities.

Provide for flushing and sampling taps every 1200 feet and at every connection.

Prior to testing, flush all piping systems with water at a minimum velocity of 3 fps to remove construction debris.

All water used must be potable and contain a chlorine residual of not less than 0.2 parts per million of free chlorine or 0.5 parts per million of combined chlorine.

Hydrostatic pressure test shall be made in accordance with the latest edition of ANSI/AWWA C600 and C603.

Pressure Piping Testing:

All piping shall pass a hydrostatic pressure test and a leakage test.

The pressure and leakage test shall be made after all jointing operations are completed. Lines tested before backfill is in place shall be retested after compacted backfill is placed.

Sections of piping between valves and other short sections of line may be isolated for testing. If shorter sections are tested, test plugs or bulkheads required at the ends of the test section shall be furnished and installed by the Contractor, together with all anchors, braces, and other devices required to withstand the hydrostatic pressure without imposing any thrust on the pipe line. The Contractor shall be solely responsible for any damage, which may result from the failure of test plugs or supports.

Air shall be expelled from the pipe before applying pressure tests.

Hydrostatic Pressure Test:

Piping shall be slowly filled with water and all air expelled. Care shall be taken that all air valves are installed and open in the section being filled and that the rate of filling does not exceed the venting capacity of the air valves.

After the section of line to be tested has been filled with water, the specified test pressure shall be applied and maintained for a minimum period of 10 minutes and for such additional period necessary for the Owner to complete the inspection of the line under test. Do not exceed pipe manufacturer's suggested time duration at the test pressure. If defects are noted, repairs shall be made and the test repeated until all parts of the line withstand the test pressure.

Hydrostatic test pressure shall be 100 psi for at least one two-hour duration and not vary more than 5 psi.

Leakage Test:

After the specified hydrostatic test has been completed, the line shall be subjected to a leakage test under a hydrostatic pressure of 100 psi (not to exceed the pressure rating of the type of pipe specified). The duration of the leakage test shall be not less than 4 hours not more than 6 hours and shall not vary by 5 psi. Leakage measurements shall not be started until a constant test pressure has been established. The line leakage shall be measured by means of a water meter installed on the supply side of the pressure pump.

Tested sections of buried piping with slip-type or mechanical joints will have an allowable a leakage rate determined by the formula:

$L = 0.00027\ NDp$, in which;

L = Maximum permissible leakage rate, in gallons per hour, throughout the entire length of line being tested.

N = Number of gasketed joints (two for each flexible coupling joint) in the line under test.

D = Nominal internal diameter (in inches) of the pipe.

p = The square root of the actual pressure in psig on all joints in the tested portion of the line. This actual pressure shall be determined by finding the difference between the average elevation of all tested pipe joints and the elevation of the pressure gauge and adding the difference in elevation head to the authorized test pressure.

Where the leakage rate exceeds the permissible maximum, the Contractor shall locate and repair leaking joints to the extent required to reduce the total leakage to within the prescribed amount.

All apparent leaks discovered within one year from the date of final certification of payment therefore issued by the Owner shall be located and repaired by the Contractor at no cost to the Owner, regardless of the total line leakage rate.

System Startup:

Applicable Codes:

All disinfection work shall be acceptable to the Illinois Environmental Protection Agency (IEPA). If any requirements of this Section are in conflict with requirements of the IEPA for disinfection, those of the IEPA shall govern. Methods of disinfection shall conform to AWWA C650, Standard Procedure for Disinfecting Water Mains, Article 41-2.14 of the Standard Specifications for Water and Sewer Construction in Illinois, and City of Bloomington's Manual of Practice for Design of Public Improvements.

Qualifications:

All work performed for and in connection with disinfection shall be under the direction of an experienced supervisor.

All equipment used in disinfection work shall be in proper working condition, and shall be adequate for the specified work.

Submittals:

Prior to starting any disinfection work, furnish for the Owner's review, a detailed outline of the proposed sequence of operation, manner of filling and flushing units, source and quality of water to be used, and disposal of wasted water. Admission of contaminated water into previously disinfected units must be prevented.

Chlorine Source:

Chlorine shall be applied either as liquid chlorine or as chlorine-bearing compounds in water.

Disinfection of Potable Water Piping Systems:

Contractor shall notify Owner 24 hours prior to disinfection operations.

Provide for flushing and sampling taps every 1200 feet and at every connection.

Water for the initial flushing and chlorination of the water main shall be supplied by the Owner. The Owner reserves the right to meter and charge for additional water used by the Contractor for additional flushing and rechlorination to meet bacteriological testing. The Contractor shall provide and install any hose necessary to direct the water being flushed away from any area it might damage. The Contractor shall take whatever precautions necessary during flushing to prevent ecological damage to any receiving stream, lake, or other body of water.

At the extreme ends of the proposed new water main or at locations as directed by the Owner, sampling and chlorinating taps shall be installed by the Contractor in accordance with the details as shown on the Drawings. After the chlorinating, sampling and testing is approved by the Owner, the corporation stop shall be shut off and the piping removed from the corporation stop.

Cleaning and Swabbing:

The interior of the pipe shall be cleaned during installation by swabbing or after installation by inserting a foam pig, prior to testing. A 1% hypochlorite disinfecting solution shall be used during swabbing or use of the foam pig.

Disinfection must be accomplished by either the continuous feed method or slug method. The tablet method is not acceptable and is not to be used except with the expressed written permission of the Owner. A chlorine residual of at least 50 parts per million must be attained initially and 25 parts per million residual present after 24 hours when the preferred continuous feed method is used. If the slug method is used, 300 parts per million must be retained for a minimum of 3 hours, or 500 parts per million retained for 30 minutes. Attainment of initial and final chlorine residuals must be verified by the Owner. Disinfecting chlorine doses shall not remain in the pipe for more than 24 hours.

In order to provide proper conditions for disinfection following construction, installation option "A" or "B" must be followed.

A. A minimum of three low density foam swabs shall be introduced into the first unit of pipe being installed and shall remain until the job is completed whereupon the swabs shall be propelled a minimum of three times, or until water is clear, in the direction of the extreme ends of the construction project during the initial filling and flushing process. When a dead-end main is involved the Contractor may return the swabs to the point of origin by using another water source with sufficient volume and pressure to propel the swabs, or he may retrieve the swabs at the exit point and reintroduce the swabs at the origin repeating the process until exit water is clear. The process must be performed on every run of pipe from each branch of newly constructed water main. In cases where foam swabs are too large to be retrieved from a fire hydrant, an exit tee or wye and a means of directing the water away from the trench must be provided. All swabs that are used must be accounted for when cleaning is completed.

B. Each unit of pipe, fitting and valve shall be hand swabbed or otherwise mechanically cleaned with a prior approved method before installation, and a cap or plug inserted in the pipe and

retained until just prior to joining with the next unit of pipe. Two caps or plugs must be utilized, one inserted in the last unit of pipe laid and one to be used in the unit of pipe being prepared for installation. The plug or cap in the last unit of pipe installed shall not be removed until the next pipe unit is lowered into the trench and is ready to be inserted. At the end of each working day a watertight plug or cap shall reside in the last unit of pipe or fitting installed, until construction resumes. During installation workman's hands, gloves, rags, tools, or any other foreign object must not be introduced into the open ends of any previously cleaned pipe. If dirt or mud is kicked into or falls into the open ends of the pipe during handling or joining, re-cleaning of the pipe or fitting affected must be performed. Cleaning water must be clear water containing a minimum of 10 ppm chlorine, and shall be changed whenever appropriate. Muddy or overly discolored cleaning solutions shall not be used at any time.

In the event a project is constructed where a flushing velocity of 2.5 feet per second cannot be attained the hand cleaning method must be employed. Where the hand cleaning method is employed, chlorine in the form of high test hypochlorite (HTH) may be introduced into each unit of pipe during construction to satisfy the disinfection requirements, providing a minimum of fifty parts per million (50 ppm) of chlorine is present in both ends of the new main following initial filling.

The preferred point of application of the chlorinating agent is at the beginning of the pipeline extension or any valved section of it, and through a corporation stop inserted in the pipe. The water injector for delivering the chlorine-bearing water into the pipe should be supplied from a tap made on the pressure side of the gate valve controlling the flow into the pipe line extension. Alternate points of application may be used when approved or directed by the Owner.

Water from the existing distribution system or other approved source of supply shall be controlled to flow very slowly into the newly laid pipeline during the application of the chlorine. The rate of chlorine mixture flow shall be in such proportion to the rate of water entering the newly laid pipe such that the dosage applied to the water will be at least fifty (50) parts per million.

In the process of chlorinating newly laid pipe, all valves or other appurtenances shall be operated while the pipeline is filled with the chlorinating agent and under normal operating pressure.

Valves shall be manipulated so that the strong chlorine solution in the line being treated will not flow back into the line supplying the water. Check valves may be used on chlorine equipment piping if desired.

Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipe at its extremity until the replacement water throughout its length shows a residual not in excess of that carried in the system. Before any flushing of water mains, the Contractor shall notify the Owner of the flushing date and time. Notify the Owner twenty-four (24) hours prior to filling the main.

After flushing, all water samples must be collected by a designated sample collector of the Owner. The water samples shall be collected from the treated piping system and arrange for analysis. Bacteriological analysis must be performed by an EPA approved laboratory. The samples shall show satisfactory bacteriological results on two (2) successive days.

Water mains that fail the initial bacterial test shall be flushed again before additional sampling is commenced. If the second sample also fails the bacterial test, then disinfection shall be repeated and flushing prior to additional sampling shall be required. If the third sample fails the bacterial test, then the next step shall be determined by the Owner.
Swabbing

Disinfection for pipe, fittings, or valves that must be placed in service immediately shall be accomplished by thoroughly flushing and swabbing with a strong (5 percent) solution of calcium hypochlorite immediately prior to assembly. Approval must be secured from the Owner before this method of disinfection will be accepted.

Measurement and Payment

This work will be paid for at the contract unit price per foot for DUCTILE IRON WATER MAIN or DUCTILE IRON WATER MAIN, RESTRAINED JOINT TYPE, of the diameter specified. Water mains will be measured in lineal feet along the centerline of the pipe. The work shall include all material, labor and equipment necessary to construct the water mains including all excavation, except rock excavation; clearing and grubbing; locating and connecting to existing water mains, including restraining the existing water main, furnishing and installing transition fittings for dissimilar pipe materials; furnishing and installing pipe, and fittings; polyethylene wrap; watertight plugs; bedding and backfill (except trench backfill material, which will be paid in accordance with IDOT Section 208); testing; disinfection; protection, replacement or repair of utilities, drainage systems, structures, and miscellaneous property; removal of surplus excavated material; and clean-up.

WATER VALVES

Description

This work shall consist of furnishing and installing water valves of various sizes at locations shown on the plans and as directed by the Engineer and as specified herein.

Quality Assurance:

The valve manufacturer shall be responsible for compatibility and the required performance of valves and operators. Wherever possible, valves and operators shall be delivered as a complete assembly.

Submittals:

Submit shop drawings and product data for all valves and valve operators showing general dimensions, linings and coatings, construction details and full descriptive literature. Shop drawings shall indicate valve operator locations.

Valve manufacturer shall furnish certification that each valve has been subjected to a hydrostatic water pressure twice the pressure class and that each valve is free of defects. Valves shall be tested in both the open and closed positions.

Furnish one set of all special tools necessary for installation, operation, normal maintenance, and adjustment.

Valves:

All valves shall be of standard manufacture and of highest quality materials and workmanship.

All valves of a particular type shall be the product of one manufacturer regularly engaged in the continuous production of that size and type of valve.

Valves shall be suitable for working pressure as required and as specified for the pipeline in which it is installed. Manufacturer's name, service, and pressure class shall be cast into the body.

Unless otherwise indicated or specified, valves shall be iron body, fully bronze or bronze mounted and shall be epoxy coated. All valves shall be constructed for services up to 250 psi.

Buried valves 6 inch diameter and larger shall be set on a foundation of stone not less than 8 inches thick nor less than one cubic foot in volume. Foundations shall be set on firmly compacted ground.

The height of the valve and its supporting foundation shall conform to the height of the

connecting pipe. Valves shall be set in a vertical position unless otherwise indicated on the Drawings.

All valves shall be restrained with retainer glands or a manufactured pipe restraint system approved by the Owner.

Where required for satisfactory operation of valves, provide valve operators, cast iron valve boxes, tee handle wrench, and other valve appurtenances.

All valves shall be inspected upon delivery in the field to insure proper working order before installation. They shall be set and jointed to the pipe in the manner as set forth in the AWWA Standards for the type of connection ends furnished. Open and close each valve observing full operation prior to installing successive lengths of pipe.

All valves shall be provided with a standard valve chamber so arranged that no shock will be transmitted to the valve and the box opening shall be centered over the operation nut, and the cast iron cover shall be set flush with the road surface or finished surface.

After installation, all valves shall be subjected to the field test for piping as outlined in these specifications. Should any defects in materials or workmanship appear during these tests, the Contractor shall correct such defects with the least possible delay and to the satisfaction of the Owner.

Valve boxes shall rest on the valve and shall be adjusted so that the cover may be set flush with finish grade and paving. Boxes shall be set to allow equal movement above and below finish grade. The base of the box shall be centered over the valve, and the top of the base section shall be approximately on line with the nut on top of the valve stem. The entire assembly shall be plumb.

Cast iron valve boxes shall be slide type approximately 5-1/4 inches in diameter with a minimum thickness of 3/16 inch and shall be set to position during backfilling operations so they will be in a vertical alignment to and centered over the valve operating stem. The slide type valve box shall be adjustable by sliding the upper section over the lower section. The lower casting of the unit shall be installed first in such manner as to be cushioned and to not rest directly upon the body of the valve or upon the water main. The upper casting of the unit shall then be placed in proper alignment into such an elevation that its top will be at final grade. Extension sections shall be furnished, if necessary, to increase the length of the slide type valve box to ensure the top of the box will be at final grade. Where valve boxes to be adjusted require more than one additional section of box, the top section of the box shall be removed and a section of 6-inch diameter A.W.W.A. C900 P.V.C. pipe, cut to length, shall be inserted into the bottom section of buffalo box and the upper section installed on top of the P.V.C. extension. All extensions of the valve box shall be installed plum and straight. CA-6 granular material shall be utilized to backfill around the operating nut and valve box. Valve box covers shall be no-tilt drop cover marked "WATER".

Valve box shall be Tyler Pipe two piece, screw type #6850 Series or equal.

Testing and Adjusting:

All items including valves shall be given a thorough test. Valves, pipes, and other items that are non-operating or occasional-operating shall be tested for ability to meet design criteria. Verify that the valve wrench will seat solidly on the valve operating nut.

When a valve is found to be in conflict with the stated design criteria, an adjustment shall be made to the item by experienced personnel of the Contractor or a manufacturer's representative.

If adjustments fail to correct the operation of a valve, remove the valve from the Project Site and replace it with a workable replacement that will meet the Specification requirements.

Gate Valves:

Valves 12-inch diameter or less shall be resilient wedge gate valves with cast iron body, fully bronze mounted, non-rising stem with upper and lower thrust collars. Waterways shall be smooth. Gate valves shall be furnished with O-ring stem seals. Number, size and design shall conform to the AWWA Standard for R/W Valve O-Ring Stem Seals. All valves shall open by turning counterclockwise. Valves shall meet or exceed AWWA C-500.

Wrench nuts shall be made of cast iron and shall be one and fifteen-sixteenths (1-15/16) inches square at the top, two (2) inches square at the base and one and three-fourths (1-3/4) inches high.

Each gate valve shall be subjected to hydrostatic pressure test per AWWA C509-87.

Acceptable gate valve manufacturers are Clow F6100, Mueller or equal.

Water Service Valves:

New water service connections shall be installed with a corporation stop; curb stop and curb box as shown in the details of the Drawings. Corporation stops and curb valve shall meet or exceed AWWA C-800.

Acceptable corporation stop, curb stop, and curb box manufacturers:

Service Size	Corporation Stop	Curb Stop/Water Service Valve	Curb Box
¾"-1"	Mueller H-15000	Mueller H-15200 or AY McDonald 4T13	Muller H-10341 AY McDonald 5601
1 ¼"	Mueller H-15000	Mueller H-15204	AY McDonald 5603

		AY McDonald 6100	
1 ½"-2"	Ball Valve: Ford, Mueller or AY McDonald	Ball Valve: Ford, Mueller or AY McDonald	AY McDonald 5603

Measurement and Payment

This work will be measured for payment at the contract unit price each for WATER VALVES, of the size specified. This work shall include all labor, equipment and material including gate valves and boxes, excavation, except rock excavation; all necessary fittings, concrete block supports; bedding and backfill; testing; disinfection; protection, replacement or repair of utilities, drainage systems, structures, and miscellaneous property; removal of surplus excavated material; and clean-up. The water service valves shall also include locating existing service connections, service taps and connections; furnishing and installing corporation stops, elbows, (transition to existing service diameter after the curb stop), curb box, curb stop, and b-box; all necessary fittings for a complete installation. Each gate valve pay item shall include a valve box. Each water service valve pay item shall include a corporation stop, a curb stop, and a curb box.

BUTTERFLY VALVES 16" AND 20"

Description

This work shall consist of furnishing and installing butterfly valves of various sizes on the water main at locations shown on the plans and as directed by the Engineer and as specified herein.

All butterfly valves shall conform to the specifications outlined above in the general "Valves" section of WATER VALVES.

Submittals:

Submit shop drawings and product data for all valves and valve operators showing general dimensions, linings and coatings, construction details and full descriptive literature. Shop drawings shall indicate valve operator locations.

Valve manufacturer shall furnish certification that each valve has been subjected to a hydrostatic water pressure twice the pressure class and that each valve is free of defects. Valves shall be tested in both the open and closed positions.

Materials:

Valves 16-inch or larger in diameter shall be butterfly valves which are of the rubber-seated, tight-closing type. Butterfly valves and all accessories, including operators, shall meet the requirements of AWWA C504, Class 150-B, except as otherwise specified. Valve bodies shall

be short or long-body flanged type, lug type with drilled and tapped bolt holes, or mechanical joint-end type, as shown and specified. Wafer body type valves without lugs are not acceptable.

An affidavit of compliance with AWWA C504 and certified drawings shall be submitted and approved before shipment of butterfly valves and operators.

Butterfly valve pressure class shall be not less than Class 150-B, shall exceed the pipeline test pressure in which the valve is installed, or shall be as specified, whichever is greater.

Valves shall be constructed of materials resistant to corrosion for the required service. Valve materials shall be as specified below or as required for the service:

Valve bodies:	
Cast iron	ASTM A126, Class B ASTM A48, Class 40
Valve shafts:	Type 304, stainless steel or Carbon steel with Type 304 stainless steel journals
Valve discs:	
Cast iron	ASTM A48, Class 40
Alloy cast iron	ASTM A436, Type 1
Ductile iron	ASTM A536, Grade 65-45-12
Mating seat surface:	
Stainless steel (castings)	ASTM A296, Grade CF-8 or CF-8M
Stainless steel	ASTM A276, Type 304
Alloy cast iron	ASTM A436, Type 1
Seats:	Neoprene or Viton for Air Valves

If stub shafts are furnished, the shafts shall extend a minimum of 1-1/2 diameters into the discs and the clearance between the shaft and discs shall not exceed the following:

Shaft Diameter (Inches)	Maximum Radial Clearance (Inches)
½ to 1-1/2	.002
2 to 4	.0025
5	.003
6	.004

The operator shall be considered an integral part of the valve. Manual operators shall be of the traveling-nut or worm-gear type, as shown, specified, or required.

Traveling-nut type operators shall include a threaded steel screw and a bronze nut. A slotted-lever or link-lever system shall be provided to transfer the applied torque to the disc shaft. All rotating shafts, screws and links shall have separate bearings. Thrust bearings shall be provided.

Worm-gear type operators shall include a worm gear and matching drive worm. Bearings shall be provided for each rotating member.

The operator shall be designed to operate the valve with a maximum handwheel pull of 40 pounds. Stop-limiting devices shall be provided to prevent overtravel of the disc in either direction. The operator shall be designed to hold the disc in any position without flutter or wear on the valve or operator. The operator shall be housed in a watertight enclosure and shall be packed with grease or oil-filled.

All valves shall be restrained with restrainer glands or a manufactured pipe restraint system approval by the Director of Engineering and Water.

Manufacturers: Butterfly valves shall be manufactured by Mueller, Clow, American Ductile Iron, DeZurik, or Pratt.

Measurement and Payment

This work will be measured for payment at the contract unit price each for BUTTERFLY VALVES 16" or BUTTERFLY VALVES 20". This work shall include all labor, equipment and material including excavation, except rock excavation; butterfly valves and valve box; all necessary fittings; bedding and backfill; testing; disinfection; protection, replacement or repair of utilities, drainage systems, structures, and miscellaneous property; removal of surplus excavated material; and clean-up.

WATER SERVICE LINE

Description

All work shall be performed in accordance with the latest edition of the Standard Specification for Water and Sewer Main Construction in Illinois, City of Bloomington Design and Construction Standards for Water Distribution and Supply System, and Sections 561, 562, 565 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, except as modified herein. The maximum down time associated with any new service line shall be limited to 4 hours.

Materials

Service lines two inches or less in internal diameter shall be Type K copper tubing, soft temper, for underground service, conforming to ASTM B-88 and B-251. The pipe shall be marked with the manufacturer's name or trademark and a mark indicative of the pipe. Outside diameter and weight per foot shall not be less than that listed in ASTM B-251, Table II.

Measurement and Payment

This work will be paid for at the contract unit price per foot for WATER SERVICE LINE, of the diameter specified. Water service lines will be measured in lineal feet along the centerline of the pipe. The work shall include all material, labor and equipment necessary to construct the water service lines including all excavation, except rock excavation; locating existing service connections; copper service pipe, elbows, (transition to existing service diameter after the curb stop); all necessary fittings; bedding and backfill; testing; disinfection; protection, replacement or repair of utilities, drainage systems, structures, and miscellaneous property; removal of surplus excavated material; and clean-up.

FIRE HYDRANTS TO BE REMOVED

Description

This work shall consist of the complete removal of the existing fire hydrants for water mains at the location shown on the plans and as directed by the Engineer. The hydrants that are salvageable shall become the property of the City of Bloomington. Hydrants determined not to be salvaged by the Engineer shall be disposed of by the Contractor in accordance with Article 202.03. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill material. The other excavated areas not within paved areas shall be backfilled with select excavated material. The Contractor will also be responsible for exploring and determining the type, size, and depth of the hydrants.

When a water main is to remain in service and a fire hydrant will not be reinstalled on the tee, install a restrained plug into the tee at the water main. If the hydrant is on a side tap, remove the tapping sleeve and replace with a solid sleeve or cut the water main at the tap and install a new section of water main.

Measurement and Payment

This work will be measured for payment at the contract unit price each for FIRE HYDRANTS TO BE REMOVED, which price shall include removal and disposing of the hydrants, plugging pipes, and backfilling.

FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX

Description

All work shall be performed in accordance with the latest edition of the Standard Specification for Water and Sewer Main Construction in Illinois, City of Bloomington Design and Construction Standards for Water Distribution and Supply System, and Section 561 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, except as modified herein.

Submittals:

Submit shop drawings and product data showing general dimensions, linings and coatings, construction details and full descriptive literature, which includes materials of construction, material specification and grade for fire hydrants, hydrant parts, hydrant auxiliary valves and valve boxes.

Materials

These specifications are to be used in conjunction with the AWWA Standard C502 for fire hydrants for ordinary water works service.

All materials used in the production of fire hydrants for ordinary service shall conform to the specifications designated for each material listed in AWWA Standard C502.

All hydrants shall be steamer hydrants with two 2-1/2" hose nozzles with standard threads and one 4-1/2" pumper nozzle with Bloomington standard threads. All fittings and valves in connection with the fire hydrant shall be restrained.

As a minimum requirement, all hydrants shall be designed for a working pressure of 150 pounds per square inch. Workmanship, design and material shall conform to the AWWA Standard C502. The hydrant bodies shall be cast iron, fully mounted with approved non-corrodible metals. All wearing surfaces shall be either bronze or some other approved non-corrodible material and there shall be no moving bearing or contact surfaces of iron in contact with iron or steel. All contact surfaces shall be finished or machined in the best workmanlike manner and all wearing surfaces shall be easily renewable.

The design of the hydrant shall be such that all working parts may be removed through the top of the hydrant and shall have the required AWWA specified number of turns of the stem to open the R/W and are equal to the area of the valve opening. Any change in area of the water passage through the valve must have an easy curve, and all outlets must have round corners of good radius. Hydrant barrel shall be of such design that there is easy installation to top extensions and full rotation (360°) of the upper barrel without shutting off water to the hydrant.

Hydrants shall be provided with a sidewalk flange. Breaking devices shall be at the sidewalk flange, which will allow the hydrant barrel to separate at this point with a minimum breakage of hydrant parts in case of damage. There shall also be provided at this point, a safety stem coupling on the operating stem that will shear at the time of impact. All hydrants shall be

equipped with O-Ring stem seals. The breakaway flange is to be just above the proposed ground level per manufacturer specifications.

Hydrants shall utilize standard nozzle caps.

The hydrant valve shall be equipped with a 1-1/2" pentagon operating nut and a main operating rod travel stop capable of withstanding 200 foot pounds in the fully open or closed position and shall open by turning to the left (counterclockwise).

Before the hydrant is painted at the factory, it shall be subjected to an internal hydrostatic test of 300 pound per square inch with the hydrant valve in a closed position and again with the hydrant valve in an open position.

All iron parts of the hydrant, both inside and outside shall be thoroughly cleaned and thereafter painted with one coat of paint of a durable composition. The hydrants shall be painted with one additional coat of Tnemec-Gloss Safety Orange per national fire code specifications.

Fire hydrants shall have a 6-inch restrained joint opening. Fire hydrants shall open counterclockwise and close with pressure.

The hydrants shall be Waterous Pacer, Mueller Modern Centurion, Kennedy Guardian, or Clow F2500, of a pattern approved by the Owner and each supplied with all optional features. The seat must be bronze. The name or mark of the manufacturer, size of the valve opening shall be plainly cast in raised letters and so placed on the hydrant barrel as to be visible after the hydrant has been installed. The specific type of hydrant must be approved by the Owner prior to installation.

Construction Requirements

Hydrants shall not be located closer than 10 feet from any light standard, tree, sign post, or other permanent structure that would impeded access to the hydrant or reduce its visibility. No hydrant shall be placed closer than 2-1/2 feet from back of curb or edge of pavement to the centerline of hydrant.

Hydrants shall be set as shown on the Drawings, conforming to the Owner's 5 feet minimum bury, except that extensions required to meet existing grade shall be installed in such a manner that future adjustments shall conform to the plan elevations by removal for the extension.

Hydrants shall be plumb and rest on a precast solid concrete base. The hydrant shall be set so that the center of the hydrant port is eighteen (18) to twenty (20) inches above the surrounding finished grade ensuring the breakaway flange is at proper ground height. Under and around the drip of each hydrant shall be placed not less than one-half cubic yard of broken stone not less than 1 inch in size.

All hydrants shall be inspected in the field upon delivery to the job to insure proper operation before installation. A minimum of 2/3 cubic yard of washed coarse stone and polyethylene covering shall be placed at and around the base of the hydrant to insure proper drainage of the hydrant after use. The blocking of the hydrant shall consist of a masonry block and no poured in place concrete. The hydrant shall be set on precast solid concrete block base to insure a firm bearing for the hydrant base. The hydrant auxiliary valve shall not be located directly adjacent to the hydrant unless shown differently on the drawings. A minimum spool piece length of 2 feet is required.

If the location of for the hydrant is on an existing water main with a tapping sleeve, remove the tapping sleeve and replace with a tee.

Measurement and Payment

This work will be measured for payment at the contract unit price each for FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX. This work shall include all labor, equipment and material including hydrant, auxiliary valve and valve box, piping, fittings, drainage system, excavation, except rock excavation, bedding and backfill; testing; disinfection; protection, replacement or repair of utilities, drainage systems, structures, and miscellaneous property; removal of surplus excavated material; and clean-up.

DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED

Description

This work shall consist of adjusting the height of the existing domestic water service boxes at the location shown on the plans and as directed by the Engineer. If the existing water service boxes cannot be adjusted to the finished grade due to corrosion, deterioration, etc., they shall be removed and replaced with a new water service box and the excavation backfilled. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill material. The other excavated areas not within paved areas shall be backfilled with earth. The Contractor will also be responsible for exploring and determining the type, size, and depth of the valves.

Measurement and Payment

This work will be measured for payment at the contract unit price each for DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED, which price shall include all work necessary to adjust the existing domestic water service boxes to the finished grades as shown on the plans including backfilling. If new water service valves are required, they shall be paid as water valves of the diameter specified.

RESTRICTED DEPTH MANHOLES AND INLETS

Description

This work shall consist of the construction of manholes and inlets in accordance with Section 602 of the Standard Specifications and the details of Highway Standard Drawings 602306 and 602401, except that these structures shall be constructed with precast concrete flat slab tops as detailed in Standard Drawing 602601. Any necessary lengths of 24-inch diameter risers required to achieve the top-of-frame elevations as shown in the plans shall also be included. All manholes shall be type A.

Measurement and Payment

This work will be measured for payment at the contract unit price each for RESTRICTED DEPTH MANHOLES or RESTRICTED DEPTH INLETS, of the specified type and diameter, with frame and grate or lid. The price shall include the cost of all excavation and backfill, furnishing and installing the inlets, manholes, flat slab tops, and any required risers, and furnishing and installing the specified frame and grate or lid.

DRAINAGE STRUCTURE FRAMES AND GRATES WITH OPEN FACE CURB BOXES

Description

The Type 3 frames and grates and the Neenah R-3067 frames and grates or approved equal for the Type H inlets shall be provided with open face curb boxes.

Measurement and Payment

These frame and grate substitutions will not be paid for separately, but shall be considered as included in the contract unit price for the specified pay items involved.

DRAINAGE STRUCTURE GRATES TYPE 37M

Description

The Type 37M grates shall be Neenah R-4342 or approved equal.

Measurement and Payment

The grates will not be paid for separately, but shall be considered as included in the contract unit price for the specified pay items involved.

MANHOLES, SANITARY

Description

This work shall consist of the furnishing and installing new sanitary manholes in accordance with the details shown in the plans and Section 32 of the Standard Specifications for Water and Sewer Main Construction in Illinois. The frames and lids shall be Neenah Foundry number R-1713 with type B lid and type NF-9204 pickholes or approved equal. Other manufacturers' frames and lids are acceptable if the dimensions match. Shop drawings must be submitted at the preconstruction conference if a change in frame and lid manufacturer is desired.

Measurement and Payment

This work will be paid for at the contract unit price each for MANHOLES, SANITARY, which price shall include all work as shown on the plans and specified herein. The cost of constructing the manholes to depths in excess of eight feet will not be paid for separately and the cost shall be included in the cost of the manholes.

INLETS, SPECIAL

Description

This work shall consist of constructing a special trench type drainage inlet at location shown on the plans. The inlet shall be constructed in accordance with the applicable articles of Section 602 of the Standard Specifications and the detail in the plans. A Neenah Foundry No. R-4996-A2 trench frame and grate or approved equal shall be furnished and installed with an outlet pipe and elbow connection to the proposed storm sewer.

Measurement and Payment

This work will be measured and paid for at the contract unit price each for INLETS, SPECIAL, which price shall include furnishing and installing the inlets, frames and grates, outlet pipe, elbows, couplings, excavating and backfilling.

INLETS, SPECIAL, TYPE H

Description

This work shall consist of constructing special drainage inlets at locations shown on the plans. The inlets shall be constructed in accordance with the applicable articles of Section 602 of the Standard Specifications and the detail in the plans. Neenah Foundry No. R-3067 or No. R-3290-A frames and grates or approved equal shall be furnished and installed with the inlets.

Measurement and Payment

This work will be measured and paid for at the contract unit price each for INLETS, SPECIAL, TYPE H, which price shall include furnishing and installing the inlets, frames and grates and concrete fillets

CHAIN LINK FENCE 5' (SPECIAL)

Description

This work shall consist of constructing chain link fences at locations shown on the plans and as directed by the Engineer. The work shall be in accordance with the applicable parts of Standard 664001 and Section 664 of the Standard Specifications except the chain link fence materials shall be coated with a black polyvinyl chloride coating and a top horizontal rail shall be installed in place of the top tension wire. The Contractor shall make connections to the existing fences as shown on the plans and with methods approved by the Engineer.

Measurement and Payment

This work will be paid for at the contract unit price per foot for CHAIN LINK FENCE 5' (SPECIAL), which price shall include all labor and material required to construct the fence including the PVC coating of the materials, the additional top rail, excavation, concrete footings and backfilling.

CHAIN LINK GATES (SPECIAL)
CHAIN LINK GATES, 5' x 24' DOUBLE (SPECIAL)

Description

This work shall consist of constructing single or double chain link gates at locations shown on the plans and as directed by the Engineer. The work shall be in accordance with the applicable parts of Standard 664001 and Section 664 of the Standard Specifications except the chain link fence materials shall be coated with a black polyvinyl chloride coating and shall have devices so the gates can be locked. The chain link gates (special) shall be single gates 4' wide and 5' tall and the double gates shall be 24' wide and 5' tall.

Measurement and Payment

This work will be paid for at the contract unit price each for CHAIN LINK GATES (SPECIAL), or CHAIN LINK GATES, 5' x 24' DOUBLE (SPECIAL), which price shall include all labor and material required to construct the gates including the PVC coating of the materials, the locking devices, excavation, concrete footings and backfilling. Locks will not have to be provided.

ELECTRIC SERVICE INSTALLATION, SPECIAL

Description

This work shall consist of furnishing and installing a new electric service installation to the golf course as shown on the detail in the plans and as directed by the Engineer. The Contractor shall notify the utility company prior to beginning work to coordinate the installation of the electric service. It is the intent to provide electricity to the golf course at all times except for the time to make the connection at the existing transformer. All information furnished to the utility company shall be in writing, with a copy provided to the Engineer.

The Contractor shall furnish and install the steel and PVC conduits, fittings and couplings and make the necessary connections to the existing conduits at the transformer. The conduit materials shall meet the requirements of Section 1088 of the Standard Specifications. After the new service is operational the existing conduits shall be removed and disposed of by the Contractor. The utility company will be responsible for installing the service pole and electric cables and energizing the new service.

Basis of Payment

This work will be paid for at the contract unit price each for ELECTRIC SERVICE INSTALLATION, SPECIAL, which price shall be payment in full for all labor, material, and equipment necessary to perform the work including excavating, backfilling and removing the existing conduits.

RELOCATE EXISTING LIGHTING UNIT

Description

This work shall consist of the removal, storage and re-installation of the existing light units and appurtenances at the locations shown on the plans as directed by the Engineer. The Contractor will be responsible for storing the lights to prevent damage to the units. If the lights are damaged by the Contractor they shall be replaced with the same type of light at the Contractor's expense. The Contractor shall re-install the lights at the locations shown and extend new conduits to the lights. New wiring shall be supplied to the lights from the nearest existing splice box and shall match the existing wire size and type.

Measurement and Payment

This work will be measured for payment at the contract unit price each for RELOCATE EXISTING LIGHTING UNIT, which price shall include all work as specified including additional conduits and new wiring.

STORM SEWERS, WATER MAIN QUALITY PIPE

Description

This item is intended to satisfy the EPA requirements for horizontal and vertical separation of sewer and water mains outlined in Section 41 of the "Standard Specifications for Water and Sewer Main Construction in Illinois."

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

Materials

The materials allowed for the water main quality storm sewer pipe shall be a reinforced concrete pressure pipe or a ductile iron pipe of the size and type indicated on the plans. The materials shall be in accordance with Articles 40-2.01, 40-2.02 and 40-2.05A of the "Standard Specifications for Water and Sewer Main Construction in Illinois". Joints between different pipe material types shall be water tight and made with concrete collars as detailed on the plans and as approved by the Engineer. The water main quality pipe joints shall be of the type approved by the Illinois Environmental Protection Agency for storm sewer lines crossing above water mains.

Measurement and Payment

This work will be measured and paid for at the contract unit price per foot for STORM SEWERS, WATER MAIN QUALITY PIPE of the type and size indicated, which price shall include labor, equipment and materials required except for the concrete collars. The concrete collars will be paid for as specified herein. The pipe types shown on the plans refer to the fill heights over the pipe as indicated in Article 550.03 of the Standard Specifications.

CONCRETE ENCASEMENTS

Description

This work shall consist of constructing a concrete encasement around the sanitary sewer to protect it from collapsing at the location shown on the plans. The encasement shall be constructed as shown on the detail in the plans and as directed by the Engineer. The pipe joints shall not be encased. The concrete for the encasement shall be class SI in accordance with Section 1020 of the Standard Specifications. The reinforcement bars shall be in accordance with Article 1006.10 of the Standard Specifications. The excavation shall be backfilled with trench backfill material.

Measurement and Payment

This work will be measured and paid for at the contract unit price each for CONCRETE ENCASEMENTS, which price shall include all labor, equipment, concrete, reinforcement bars and excavating. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications.

REMOVING EXISTING SEPTIC TANK

Description

This work shall consist of the complete removal and disposal of the existing septic tanks and associated leach fields at the locations shown on the plans and as directed by the Engineer. The work shall be done in accordance with the applicable sections of the "Private Sewage Disposal Licensing Act and Code" current edition, set forth by the Illinois Department of Public Health. The Contractor will be responsible for notifying the McLean County Health Department a minimum of 48 hours prior to starting the removal of septic tanks.

The tanks shall be pumped and completely removed and disposed of. Only companies licensed by the McLean County Health Department will be allowed to pump the tanks. A list of the licensed companies can be obtained from the Health Department. Influent pipes from buildings and leach field piping shall be removed and disposed of and the trenches backfilled. The septic tanks shall not be removed until directed so by the Engineer. The area shall be backfilled with earth material and compacted in 8-inch lifts to match the surrounding ground surface. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill or granular backfill material as directed by the Engineer. The Contractor will be responsible for inspecting the tanks to familiarize himself with the work to be done.

Measurement and Payment

This work will be measured for payment at the contract unit price each for REMOVING EXISTING SEPTIC TANK, which price shall include the cost of locating the tanks, pumping and disposing of the waste, removal and disposing of the tanks, piping, appurtenances, and backfilling with earth. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications.

MODULAR BLOCK RETAINING WALL

Description

This work shall consist of constructing a modular block retaining wall as shown on the detail in the plans and as directed by the Engineer. The block wall shall match and be connected to the existing wall including any drainage pipes as directed by the Engineer.

Materials

The modular block wall system shall be the "Classic 6" type as manufactured by Rockwood Retaining Walls, Inc., Rochester Minnesota, or approved equal. The blocks shall be interlocked and have a textured beveled split face with a width of 18 inches, a height of 6 inches, a depth of 12 inches, a setback of 3/4 inch and a minimum weight of 56 pounds. The blocks shall have a minimum compressive strength of 3000 PSI at 28 days. Color samples shall be submitted to the Engineer for approval prior to ordering the blocks. The geogrid material shall have .a minimum ultimate tensile strength of 3600 lbs. per foot and a minimum junction strength of 3240 lbs. per foot and be approved by the Engineer. The coarse aggregate materials shall meet the requirements of Article 1004.04 of the Standard Specifications. The perforated corrugated polyethylene pipe shall meet the requirements of Article 1040.11 of the Standard Specifications.

Construction Requirements

The wall shall be constructed in accordance with the details on the plans and the manufacture's instructions. The aggregate base and modular blocks shall be placed level and aligned to provide straight lines and smooth curves with each course offset by one half of a block width. The perforated pipe shall be installed as shown on the detail and shall outlet to the manhole at Station 211+48 Rt. The cavities of the blocks as well as the area behind the blocks shall be filled with coarse aggregate and compacted after each course. A single geogrid layer shall be installed horizontally on the compacted backfill and be connected to the modular blocks per the manufacture's recommendations. The geogrid shall be taut and staked to prevent slack. Horizontal layers of geogrid shall be continuous except if a joint is required an overlap of 18 inches shall be made and staked to prevent slack. Caps shall be installed to the top of the wall with construction adhesive the entire length of the wall as directed by the Engineer. Topsoil 8 inches thick shall be placed to backfill along the back of the wall.

Measurement and Payment

This work will be measured and paid for at the contract unit price per square foot for MODULAR BLOCK RETAINING WALL, which price shall include labor, equipment and materials required including the excavation, aggregate base and backfill, pipes, blocks, caps, geogrid and backfill. The wall shall be measured along the vertical front face of the blocks from the top of the cap to the bottom of the bottom course of blocks.

ABANDON EXISTING WATER MAIN

Description

This work shall consist of abandoning existing water mains and service lines at the locations shown on the plans and as directed by the Engineer. Abandoning of the water mains and service lines shall consist of leaving the existing pipes in place except where they conflict with the new construction in which case the water mains or service lines shall be removed and disposed of. Existing valves that do not conflict with the proposed work shall remain in place but the valve boxes shall be removed. The material that is salvageable shall become the property of the City of

Bloomington. Materials determined not to be salvaged by the Engineer shall be disposed of by the Contractor in accordance with Article 202.03. The remaining piping shall be abandoned in place and the pipe ends plugged with concrete. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill material. The other excavated areas not within paved areas shall be backfilled with select earth material. The Contractor will also be responsible for exploring and determining the type, size, and depth of the water mains and service lines.

Measurement and Payment

This work will be measured for payment at the contract unit price each for ABANDON EXISTING WATER MAIN, which price shall include removal and disposing of piping, valve bonnets and boxes, dewatering the abandoned line, cutting and removing sections of pipe, plugging pipes, and backfilling with earth or trench backfill material, protection, replacement or repair of utilities, drainage systems, structures, and miscellaneous property; removal of surplus excavated material, and clean up. The removal of fire hydrants will be paid for separately as specified herein.

FLARED END SECTION REMOVAL

Description

This work shall consist of the removal and disposal of existing concrete flared end sections at the locations shown on the plans in accordance with Section 551 of the Standard Specifications and as directed by the Engineer. Materials determined not to be salvageable by the Engineer shall be disposed of by the Contractor in accordance with Article 202.03 of the Standard Specifications. Excavations resulting from the removal of the end sections that are within two feet of paved surfaces shall be backfilled with trench backfill material in accordance with Section 208 and Article 550.07 of the Standard Specifications.

Measurement and Payment

This work will be measured for payment at the contract unit price per each for FLARED END SECTION REMOVAL, which price shall be considered payment in full for all labor, equipment, and materials required for the satisfactory removal and disposal of the existing end sections. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications.

OUTSIDE DROP CONNECTION

Description

This work shall consist of constructing a sanitary sewer drop connections on the outside of manholes of the required inside diameter with the necessary fittings as shown on the detail in the

plans. The drop connection shall be encased with class SI concrete as shown on the detail in the plans. All construction related to the installation of the sanitary sewers drop connection shall be in accordance with the following sections from the "Standard Specifications for Water and Sewer Main Construction in Illinois", current edition, and the attached I.E.P.A. Water Pollution Control Permit.

a. Sanitary sewer installation shall be in accordance with Division II, Section 20-2 and Division III, Section 31. The sewer trenches shall be shored by a method described in Section 20-2.09A.

b. Sanitary sewer pipe materials shall be extra strength vitrified clay pipe ASTM C-700 or ductile iron pipe class AWWA C-150 conforming to ANSI A 21.51. Ductile iron pipe shall have a standard cement mortar lining and shall be tar (seal) coated. Vitrified clay pipe joints shall conform to ASTM C-425. Ductile iron pipe joints shall be mechanical or rubber ring (slip seal or push-on) joints.

c. Sanitary sewer pipe testing shall be in accordance with Division III, Section 31-1.11A except for the following:

    Delete paragraphs 2, 3 and 4 and substitute the following:
    All sections of the sewer shall be tested, except for those designated portions of the sewer that are placed into service during the construction process.

The trenches shall be backfilled as shown on the detail in the plans. The trenches shall be backfilled with earth material and compacted in 8-inch lifts to match the surrounding ground surface. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill material in accordance with Section 208 of the IDOT Standard Specifications.

Measurement and Payment

This work will be measured for payment at the contract unit price per each for OUTSIDE DROP CONNECTION. The price shall include the cost of all excavation, installing the pipe, fittings, concrete encasement, testing and backfilling with earth. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications.

AGGREGATE FOR TEMPORARY ACCESS

Description

This work shall consist of furnishing and placing aggregate surface course, type B material to provide temporary access to side streets and properties adjacent to the project. Open trenches or other excavations blocking access to side streets or properties shall be filled with aggregate as directed by the Engineer at the end of construction each day. The aggregate for the temporary access shall be salvaged and reused where possible and as directed by the Engineer. The

Contractor will be responsible for maintaining the temporary aggregate surfaces until such time that the permanent pavements are constructed. The aggregate that is removed from side streets and entrances that is no longer required for reuse may be used in embankment areas or other fill areas as approved by the Engineer. Excess aggregate material not used on the site shall be disposed of by the Contractor off the site in accordance with Article 202.03. This work shall be in accordance with the applicable articles of Section 402 of the Standard Specifications except delete all reference to measurement and payment.

Measurement and Payment

This work will be measured for payment at the contract unit price per ton for AGGREGATE FOR TEMPORARY ACCESS which price shall include furnishing, transporting, placing, maintaining, reusing and the ultimate disposal of the aggregate. The aggregate material will only be paid for when delivered to the site. Salvaging, transporting and reusing the material within the project limits will not be paid for.

BUILDING REMOVAL

Description

This special provision modifies and supersedes the BDE specification "Building Removal – Case IV (No Asbestos) which is also a part of the specifications. This work shall consist of the complete removal, transportation and disposal of the existing buildings including concrete and masonry foundations, basements, floor slabs, utilities and appurtenances at the location shown on the plans and as directed by the Engineer. An asbestos inspection was done by the City of Bloomington Engineering Department and no asbestos materials were detected. The City will have a trained representative at the site when the demolition work is being performed to inspect the materials to ensure asbestos is not present. If asbestos is found in any of the materials the building removal operation will cease until the amount and type of asbestos can be determined by the City. When directed by the Engineer the Contractor will be required to remove the remainder of the building in accordance with the specifications contained herein for Removal and Disposal of Friable or Non-Friable Asbestos as the case may be. The work shall be done in accordance with the Illinois Environmental Protection Act, published in January 1999, Title I: Air Pollution, Section 9a. At least 15 working days before demolition begins the Contractor must submit to the Engineer the date that demolition will begin. At least 10 working days before demolition begins the Engineer must submit to IEPA a completed notification form (IL 532 1296). If the date of the start of the demolition changes the Contractor must notify the Engineer in writing and the Engineer must submit a revised notification form to the IEPA.

Materials not containing asbestos shall be disposed of by the Contractor in accordance with Article 202.03. The area shall be backfilled with earth material and compacted in 8-inch lifts to match the surrounding ground surface. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill or granular backfill material as directed by the Engineer. The Contractor will be responsible for inspecting the buildings and foundations to familiarize

himself with the work to be done. The Contractor will be responsible for inspecting the foundations to familiarize himself with the type; size and amount of reinforcing that may be present in the foundations. The Contractor will also be responsible for determining what utilities service the buildings and shall coordinate the removal and capping of the utilities with the applicable utility company. All abandoned utilities shall be removed by the Contractor to at least the property line. The Contractor shall comply with all state and local regulations regarding the removal and disposal of the buildings.

Measurement and Payment

This work will be measured for payment at the contract unit price lump sum for BUILDING REMOVAL, for each individual building being removed, which price shall include the cost of removal and disposing of the buildings, foundations, utilities and appurtenances and backfilling with earth. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications. Granular backfill material if required will be paid for as specified herein.

CONSTRUCTION LAYOUT

Description

This work shall consist of furnishing and placing construction layout stakes in accordance with the recurring special provision check sheet number 10 for Construction Layout Stakes Except for Bridges with the following modification. The Contractor will also be required to furnish and place construction layout stakes to define the limits of all the temporary construction limits. The temporary construction limits should be staked prior to the start of any construction activities and shall be as directed by the Engineer.

Measurement and Payment

This work will be measured and paid for at the contract lump sum price for CONSTRUCTION LAYOUT, which price shall include all labor, equipment, and stakes.

FENCE REMOVAL

Description

This work shall consist of the removal and disposal of the existing fences of various types at the locations shown on the plans. The existing fences shall be satisfactorily disposed of by the Contractor in accordance with Article 202.03. The resultant voids at the fence post locations shall be backfilled and compacted with trench backfill material. The Contractor will be responsible for constructing a suitable termination post and if necessary a concrete base for the part of the fence that is to remain in place. The end posts may be of salvaged materials from the

fence removal or new materials. The materials and methods for constructing the fence terminations shall meet the approval of the Engineer.

Measurement and Payment

This work will be measured for payment at the contract unit price per foot for FENCE REMOVAL which price shall be considered payment in full for all materials, labor and equipment to perform the work including constructing the termination posts, concrete bases and placing trench backfill in the holes.

REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING

Description

This special provision modifies and supersedes the BDE specification "Building Removal – Case III (Friable Asbestos Abatement) which is also a part of the specifications. This work shall consist of the complete removal, transportation and disposal of the existing buildings including materials containing asbestos, concrete and masonry foundations, basements, floor slabs, utilities and appurtenances at the location shown on the plans and as directed by the Engineer. An asbestos report is available for viewing by contacting the City of Bloomington Engineering Department. The work shall be done in accordance with the Illinois Environmental Protection Act, published in January 1999, Title I: Air Pollution, Section 9a. The use of a licensed or accredited Contractor will be required for the asbestos removal. The City will have a trained representative at the site when the demolition work is being performed. At least 15 working days before demolition begins the Contractor must submit to the Engineer the date that demolition will begin. At least 10 working days before demolition begins the Engineer must submit to IEPA a completed notification form (IL 532 1296). If the date of the start of the demolition changes the Contractor must notify the Engineer in writing and the Engineer must submit a revised notification form to the IEPA.

Materials containing asbestos shall be removed, transported and disposed of in accordance with all rules and regulations of the Federal, State and Local governments. Materials not containing asbestos shall be disposed of by the Contractor in accordance with Article 202.03. The area shall be backfilled with earth material and compacted in 8-inch lifts to match the surrounding ground surface. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill or granular backfill material as directed by the Engineer. The Contractor will be responsible for inspecting the buildings and foundations to familiarize himself with the work to be done. The Contractor will be responsible for inspecting the foundations to familiarize himself with the type; size and amount of reinforcing that may be present in the foundations. The Contractor will also be responsible for determining what utilities service the buildings and shall coordinate the removal and capping of the utilities with the applicable utility company. All abandoned utilities shall be removed by the Contractor to at least the property line. The Contractor shall comply with all state and local regulations regarding the removal and disposal of the buildings.

Measurement and Payment

This work will be measured for payment at the contract unit price lump sum for REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING, for each individual building being removed. The price shall include the cost of removal and disposing of the buildings, asbestos, foundations, utilities and appurtenances and backfilling with earth. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications. Granular backfill material will be paid for as specified herein.

REMOVING AND RESETTING STREET SIGNS

Description

This work shall consist of the removal, storage and re-erection of the existing street name signs at the locations shown on the plans and as directed by the Engineer. The existing signs and posts shall be removed and stored so as to prevent damage to the materials except for the concrete footings, which will not be salvaged. Any signs or posts damaged by the Contractor shall be replaced at his/her expense. The resultant voids at the sign post locations shall be backfilled and compacted with trench backfill material. The signs shall be re-erected to a proper mounting height as directed by the Engineer. New concrete bases shall be constructed to support the posts and shall be a minimum of 12 inches in diameter and 24 inches deep.

Measurement and Payment

This work will be measured for payment at the contract unit price each for REMOVING AND RESETTING STREET SIGNS. The price shall be considered payment in full for all materials, labor and equipment to perform this work including constructing the concrete bases and placing trench backfill in the holes.

SANITARY SEWER

Description

This work shall consist of constructing sanitary sewers of the required inside diameter with the necessary fittings at locations shown on the plans. All construction related to the installation of the sanitary sewers shall be in accordance with the details in the plans and the following sections from the "Standard Specifications for Water and Sewer Main Construction in Illinois", current edition, and the I.E.P.A. Water Pollution Control Permit.

a. Sanitary sewer installation shall be in accordance with Division II, Section 20-2 and Division III, Section 31. The sewer trenches shall be shored by a method described in Section 20-2.09A and the use of double trench boxes will also be allowed.

b. Sanitary sewer pipe materials shall be extra strength vitrified clay pipe ASTM C-700 or ductile iron pipe class AWWA C-150 conforming to ANSI A21.51. Ductile iron pipe shall have a standard cement mortar lining and shall be tar (seal) coated. Vitrified clay pipe joints shall conform to ASTM C-425. Ductile iron pipe joints shall be mechanical or rubber ring (slip seal or push-on) joints.

c. Sanitary sewer pipe testing shall be in accordance with Division III, Section 31-1.11A except for the following:

Delete paragraphs 2, 3 and 4 and substitute the following:
All sections of the sewer shall be tested, except for those designated portions of the sewer that are placed into service during the construction process.

d. Horizontal and vertical separation between water mains and sanitary sewers shall be in accordance with Division IV, Section 41-2.01.

The trenches shall be backfilled as shown on the detail in the plans. The trenches shall be backfilled with earth material and compacted in 8-inch lifts to match the surrounding ground surface. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill material in accordance with Section 208 of the IDOT Standard Specifications.

Measurement and Payment

This work will be measured for payment at the contract unit price per foot for SANITARY SEWER of the type and size indicated on the plans. The price shall include the cost of all trenching, bedding, haunching, laying the pipe, tees, fittings, plugs, testing and backfilling with earth. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications. The pipe types shown on the plans refer to the fill heights over the pipe as indicated in Article 550.03 of the Standard Specifications.

SEALING ABANDONED WATER WELLS

Description

This work shall consist of sealing the existing water wells at the locations shown on the plans and as directed by the Engineer. The work shall be done in accordance with Section 920.120 of the Illinois Water Well Construction Code of the Illinois Department of Public Health and the procedures for sealing drilled and dug wells set forth by the McLean County Health Department. The Contractor will be responsible for notifying the McLean County Health Department a minimum of 48 hours prior to starting the sealing of the wells. Only companies licensed by the McLean County Health Department will be allowed to seal the wells. A list of the licensed companies can be obtained from the Health Department. A water well sealing form (IL 482-0631) must be filled out and submitted to the McLean County Health Department at the completion of the work.

The wells shall be sealed by first removing pumps, water lines and appurtenances. The casing pipe and any other slabs, covers or appurtenances shall be removed to a minimum of 2 feet below the existing ground level or the proposed sub-grade level, which ever is lowest. The materials removed shall be satisfactorily disposed of by the Contractor in accordance with Article 202.03. The well shall be chlorinated by pouring in 2 gallons of household bleach and filling the wells with pea gravel or limestone chips to within 20 feet of the surface. The remainder of the well shall be filled with cement or bentonite. The area shall be backfilled with earth material and compacted in 8-inch lifts to match the surrounding ground surface. The excavated areas that are within proposed paved areas shall be backfilled with trench backfill or granular backfill material as directed by the Engineer. The Contractor will be responsible for inspecting the wells to familiarize himself with the work to be done.

Measurement and Payment

This work will be measured for payment at the contract unit price each for SEALING ABANDONED WATER WELLS, which price shall include the cost of all work described herein and backfilling with earth. Trench backfill material will be paid for in accordance with Section 208 of the Standard Specifications. Granular backfill material if required will be paid for as specified herein.

STEEL CASINGS

Description

This work shall consist of constructing steel casing pipes of various diameters for the water mains at locations shown on the plans and as directed by the Engineer.

Materials

Steel casing pipe shall conform to ASTM A139, Grade B (60,000 PSI tensile strength) and shall be of the diameter indicated on the Drawings. Wall thickness shall be 3/8-inch minimum.

Interior lining of pipe shall be a coal tar lining conforming to AWWA C203.

Exterior coating of pipe shall be multiple coats of heavy duty coal-tar base coating built up to 30 mils total dry thickness, and applied in accordance with the coating manufacturer's recommendations.

Joints in steel casing pipe shall be welded in accordance with AWWA C206.

Construction Requirements

The water main pipe may be pushed or pulled (depending upon piping material, joint type and method of pipe support) into the casing as assembled. The proposed method of installation shall be approved by the Engineer prior to starting the crossing.

Stainless steel casing spacers shall be used to support the pipe. The spacers shall be Model CCS as manufactured by Cascade Waterworks Manufacturing Company in Yorkville, IL.

Measurement and Payment

This work will be measured for payment at the contract unit price per foot for STEEL CASINGS per the diameter specified. The casing pipes will be measured in lineal feet along the centerline of the pipe. The steel casing pipes include installation by open cut method including all excavation, except rock excavation; clearing and grubbing, casing pipe, casing spacers for carrier piping; bedding and backfill (except trench backfill material which will be paid in accordance with IDOT Section 208); testing; protection, replacement or repair of utilities, drainage systems, structures, and miscellaneous property; removal of surplus excavated material; finish grading and clean-up.

CEMENT AGGREGATE MIXTURE (CAM II) 4"

Description

This work shall consist of constructing a stabilized sub-base consisting of a cement and aggregate mixture 4 inches thick at locations shown on the plans. The work shall be in accordance with paragraphs 2 through 4 of Article 312.02; Articles 312.29 through 312.36 of the Standard Specifications.

Measurement and Payment

This work will be measured in accordance with Article 312.37 of the Standard Specifications and paid for at the contract unit price per square yard for CEMENT AGGREGATE MIXTURE (CAM II) 4", which price shall be payment in full for all work including the membrane curing compound.

SEPTIC TANK TO BE PUMPED

Description

This work shall consist of pumping existing septic tanks at the locations shown on the plans and disposing of the waste as directed by the Engineer. The work shall be done in accordance with the applicable sections of the "Private Sewage Disposal Licensing Act and Code" current edition, set forth by the Illinois Department of Public Health. Only companies licensed by the McLean County Health Department will be allowed to pump the tanks. A list of the licensed companies can be obtained from the Health Department. The Contractor pump the septic tanks within 48 hours of notification by the Engineer.

Measurement and Payment

This work will be measured for payment at the contract unit price each for SEPTIC TANK TO BE PUMPED, which price shall include the cost of locating the tanks, pumping and disposing of the waste. Payment will be made for each pumping and disposal operation.

TRAFFIC SIGNALS

Traffic Signals shall be constructed in accordance with the "Manual on Uniform Traffic Control Devices for Streets and Highways" latest edition; the latest edition of the Illinois Supplement to the Manual on Uniform Traffic Control Devices; the "Standard Specifications for Road and Bridge Construction" adopted January 1, 2002, herein referred to as the Standard Specifications; the "National Electrical Code", herein referred to as NEC; the "National Electrical Manufacturers Association", herein referred to as NEMA; Standards Publication No. TS 1-1976 "Traffic Control Systems"; and the Institute of Traffic Engineers, herein referred to as ITE, Technical Report No. 1 "A Standard for Adjustable Face Vehicular Traffic Control Heads".

The following Special Provisions supplement the above specifications, manuals, and codes. In case of conflict between any part or parts of said documents, the Special Provisions shall take precedence and shall govern.

TRAFFIC SIGNALS

The Contractor may install posts, poles, heads, and controller cabinets prior to all of the traffic signal control equipment being located on the Contractor's material storing facility.

SERVICE INSTALLATION, TYPE A

Description

This work shall consist of furnishing and installing a Type A service installation according to Section 805 of the Standard Specifications and Standard 805001. The 2" conduit below the circuit breaker shall be galvanized steel. The Type A service installation shall be mounted on the same wood pole as the Type B service installation. In addition to the requirements of Section 805, the Contractor shall notify the utility company prior to beginning work to determine the utility company regulations relating to electrical service.

The Contractor shall provide the utility company with an estimated date that the service connection will be required and the agency that will be responsible for monthly service charges. The responsible agency is listed in the plans. The customer service agreement with the utility company shall be executed by the agency responsible for monthly service charges. The Contractor shall be required to pay for all service connection charges by the utility, with the Contractor being reimbursed by the Illinois Department of Transportation according to Article 109.05 of the Standard Specifications.

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

transfer billing to the responsible agency.

All information furnished to the utility company shall be in writing, with a copy provided to the Engineer.

Basis of Payment

This work will be paid for at the contract unit price each for SERVICE INSTALLATION, TYPE A, which price shall be payment in full for all labor, material, and equipment necessary to perform the work as specified. The wood pole will be paid for separately.

SERVICE INSTALLATION, TYPE B

Description

This work shall consist of furnishing and installing a Type B service installation according to Section 805 of the Standard Specifications and Standard 805001. The 2" conduit below the circuit breaker shall be galvanized steel. The Type B service installation shall be mounted on the same wood pole as the Type A service installation. In addition to the requirements of Section 805, the Contractor shall notify the utility company prior to beginning work to determine the utility company regulations relating to electrical service.

The Contractor shall provide the utility company with an estimated date that the service connection will be required, the agency that will be responsible for monthly service charges and the connected load for flat rate billing if required. The responsible agency and connected load information are listed in the plans. The customer service agreement with the utility company shall be executed by the agency responsible for monthly service charges.

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

All information furnished to the utility company shall be in writing, with a copy provided to the Engineer.

All energy charges for the intersection shall be paid by the responsible agency listed in the plans.

Basis of Payment

This work will be paid for at the contract unit price each for SERVICE INSTALLATION, TYPE B, which price shall be payment in full for all labor, material, and equipment necessary

to perform the work as specified. The wood pole will be paid for separately.

CONDUIT

Description

This work shall consist of furnishing and installing conduit according to Section 810 of the Standard Specifications. All conduits shall be high density polyethylene (HDPE) according to Article 1088.01(c) of the Standard Specifications or schedule 80 polyvinyl chloride (PVC) according to Article 1088.01(b) of the Standard Specifications, except for conduit in trench containing traffic signal service cables and lighting service cables, which shall be schedule 40 polyvinyl chloride (PVC) according to Article 1088.01(b) of the Standard Specifications.

The term augered shall include both the pushed and bored method of installing the conduit. Because of the differences in equipment and techniques, the Contractor may use either method to install the conduit for the term augered.

If the Contractor chooses to install conduit runs designated as trenched in the plans by augering, payment shall be made at the contract unit prices for Conduit in Trench and Trench and Backfill for Electrical Work.

The Contractor shall furnish and install a 12 gauge stranded THHN wire in all conduits between handholes and foundations with six (6) feet of slack at each handhole as incidental to this pay item.

Method of Measurement

This work will be measured for payment according to Article 810.04 of the Standard Specifications. The 12 gauge stranded THHN wire will not be measured for payment.

Basis of Payment

This work will be paid for at the contract unit price per foot for CONDUIT IN TRENCH or CONDUIT AUGERED of the size and type specified. Furnishing and installing the 12 gauge stranded THHN wire shall be included in the cost of the respective conduit pay item.

JUNCTION BOX (SPECIAL)

Description

This work shall consist of furnishing and installing a junction box according to Section 813 of the Standard Specifications.

The junction box shall be composite concrete according to Article 1088.05 of the Standard

Specifications and shall be 17" wide, 30" long, and 18" deep. The junction box shall be the straight-walled, heavy duty, SA24-1730-18 manufactured by CDR Systems Corporation or approved equal.

The junction box cover shall be constructed of the same material as the junction box and shall have the words "TRAFFIC SIGNALS" cast into the cover. The junction box cover and collar shall have a light gray color for use in sidewalks and shall have a dark green color for use in grassy areas.

The junction box shall have a French drain that is 18" deep. The French drain shall be constructed of crushed stone or gravel, gradation CA 5 or CA 7, and according to Section 601 of the Standard Specifications. Furnishing and installing the French drain shall be included in this item.

Basis for Payment

This work will be paid for at the contract unit price each for JUNCTION BOX (SPECIAL) of the type and size specified herein. The French drain shall be included in the cost of the junction box.

HANDHOLE

Description

This work shall consist of furnishing the materials and constructing a concrete handhole or a concrete double handhole according to Section 814 of the Standard Specifications. Precast handholes are not allowed.

The lift ring for the handhole cover shall consist of a solid closed ring of stainless steel at least ⅜ inch in diameter. The lift ring shall be attached to the handhole cover by a loop of stainless steel at least ⅜ inch in diameter. The lift ring and loop shall be recessed in the handhole cover.

Basis of Payment

This work will be paid for at the contract unit price each for CONCRETE HANDHOLE or CONCRETE DOUBLE HANDHOLE, which price shall be payment in full for all excavating, backfilling, disposal of unsuitable materials, and furnishing of materials necessary to perform the work as specified.

PHOTOCELL CONTROLLER

Description

This work shall consist of furnishing and installing a photocell controller with enclosure, photocell, equipment, and wiring for control of roadway lighting. The construction and

installation shall be according to the NEC.

The photocell controller shall be the CC Series Lighting Contactor Control manufactured by Ripley Photocontrols, part number CC-60-2-NO-E-I-S-T-X-120V. The controller shall include a matching twist lock photocell with integral surge arrestors and time delay relay to prevent nuisance switching.

The photocell controller shall be mounted on the same wood pole as the Type B service installation.

Basis of Payment

This work will be paid for at the contract unit price each for PHOTOCELL CONTROLLER, which price shall include all labor, components, equipment, parts, connectors, wiring, and testing required for a complete working photocell controller.

FULL-ACTUATED CONTROLLER AND CABINET

Description

This work shall consist of furnishing and installing a Full-Actuated Controller, Standard Sequence IV, with 8 Phases in a Type IV Cabinet according to Section 857 of the Standard Specifications.

Materials

Add the following to Section 1073.01(b)(1): "The screen shall be readable under any natural light condition, including darkness."

Add the following to Section 1073.01(c)(2): "Internal preemption sequences shall be capable of use for fire lane and/or railroad preemption and shall be provided with delay and internally timed maximum dwell."

Traffic Signal Controller and Cabinet

The traffic signal controller shall include a fiber optic transceiver according to Section 864 of the Standard Specifications.

The controller shall be capable of telemetry for controller to controller, to computer, and to system data transfer. Through telemetry the intersection shall be capable of being monitored on an IBM XT or compatible personal computer. Typically the controller shall be completely uploaded or downloaded through telemetry. The latest computer software shall be provided so data, including all timing parameters, can be transferred. The supplying of software will be waived if identical to that already owned by the City of Bloomington. The controller shall use

non-volatile EPROM memory and have selectable shortway and maximum dwell smoothing. One possible start up mode shall be an all red display with a minimum eight-second period. All harnesses shall be furnished for controller to controller, controller to computer, and computer to modem communication. The "D" connector shall be provided and completely terminated in the cabinet, even if not required in this application.

Normal operation of the signals at the intersection shall not be possible with the monitor removed. The monitor shall prevent any display not allowed in the Manual on Uniform Traffic Control Devices. Also, the flash transfer relays shall not be energized during flash operation (conflict or manual).

The controller shall be EPAC300 Series, Type 3808 M42, as manufactured by Eagle Signal Controls, Austin, Texas, or an approved equal. An Innovative Technologies model HS-P-SP-120A-30A-RJ suppressor or approved equal with a 3 position terminal block shall be mounted on an aluminum plate below the cabinet power distribution panel. Incoming power shall connect to the terminal block which shall feed the IT suppressor through 10 gauge solid copper wire (AC+, AC-, Gnd.) with approximately ten 1.5 to 2 inch coils in the AC+ and AC- lines.

The cabinet for the controller shall be a ground mount, Type IV NEMA TS-2 Type 2 with MMU, with SDLC harnesses for the controller MMU and a TS-2 detector rack with power supply, according to Article 1074.03 of the Standard Specifications. The controller cabinet door shall normally be placed on the side of the controller cabinet furthest from the center of the intersection. The police door compartment shall contain a manual control cord from which the signals may be operated manually.

The Contractor shall supply and install on the inside of the cabinet door one three-position switch for each phase. The switch positions shall be off, on, and test. The test position shall be a momentary closure position which returns to the on position upon release. The test position shall allow a call to be manually placed to the controller for that phase.

The Contractor shall supply and install a wiring harness for the count output of the loop detector amplifiers. The harness shall be compatible with the Traffic Logging System used by the City of Bloomington as manufactured by Detector Systems Inc., Stanton, California, 800-828-7775. The wiring harness shall have pin assignments as shown on the 'Traffic Logging System Detector Input Numbering Scheme' detail in the plans.

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

At the preconstruction meeting, the Contractor shall provide the names and phone numbers of two technicians who would be able to respond to controller malfunctions that occur within the

thirty-day acceptance period after the controller is turned on. If neither person can be reached at the time of the malfunction or if neither person can be at the location within two hours of receiving the call, any available electrician capable of evaluating and correcting the malfunction may be called at the Engineer's discretion. Any and all bills resulting from defective operation of the controller or cabinet during the thirty-day acceptance period shall be the responsibility of the Contractor.

The Contractor shall furnish, immediately upon placing the signal in operation, four keys to the controller cabinet to the Director of Engineering and Water. All control equipment shall have the model and serial number permanently affixed to the front of the housing. These numbers shall be visible without lifting or tilting the control equipment out of position.

The Contractor shall provide five copies of a schematic diagram showing plug and terminal strip wiring for the traffic control installation. The diagram shall be clearly marked, indicating the intersection for which the diagram applies. The Director of Engineering and Water shall be the sole judge of the acceptability of the diagrams. The furnishing of these diagrams shall be incidental to the contract.

Basis of Payment

This work will be paid for at the contract unit price each for FULL-ACTUATED CONTROLLER, STANDARD SEQUENCE IV, 8 PHASES, IN TYPE IV CABINET, which price shall include all labor, components, equipment, parts, connectors, wiring, and testing required for a complete working traffic signal controller. The fiber optic transceiver will be paid for according to Article 864.05 of the Standard Specifications.

PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL

Description

This work shall consist of furnishing a pedestrian push-button post and installing it on a concrete foundation according to Section 876 of the Standard Specifications. The post and cap shall be unpainted galvanized steel. The concrete foundation shall be according to Standard 878001. Furnishing and installing the concrete foundation shall be included in this item.

Basis of Payment

This work will be paid for at the contract unit price each for PEDESTRIAN PUSH-BUTTON POST, GALVANIZED STEEL, TYPE II. The concrete foundation shall be included in the cost of the pedestrian push-button post.

STEEL COMBINATION MAST ARM ASSEMBLY AND POLE

Description

This work shall consist of furnishing and installing a steel combination mast arm assembly and pole of the signal arm length specified and according to Section 877 of the Standard Specifications. The luminaire davit arm shall measure 15 feet in length. The mast arms and poles shall be fabricated of unpainted galvanized steel.

Basis of Payment

This work will be paid for at the contract unit price each for STEEL COMBINATION MAST ARM ASSEMBLY AND POLE of the signal arm length specified.

CONCRETE FOUNDATION, TYPE E

Description

This work shall consist of furnishing and installing a Type E concrete foundation of the depth and diameter specified and according to Section 878 of the Standard Specifications and the details on Standard 878001.

Basis of Payment

This work will be measured for payment in feet in place according to Article 878.04 of the Standard Specifications. This work will be paid for at the contract unit price per foot for CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER according to Article 878.05 of the Standard Specifications.

INDUCTIVE LOOP DETECTOR, RACK MOUNTED

Description

This work shall consist of furnishing and installing an inductive loop detector according to Section 885 of the Standard Specifications and the following modifications.

Each inductive loop detector channel shall have the three usual modes of operation: delay, extension, and normal. The detection output shall allow either presence or pulse operation which may be selected from a front panel switch. The pulse output shall meet the requirements of the controller manufacturer's specifications.

Should the power to any detector fail, the detector shall exhibit a continuous call to the controller.

The inductive loop detectors shall be two-channel, rack-mounted units. Each channel of the inductive loop detector shall be clearly and permanently labeled above or below the detector with the abbreviations shown on the wiring diagram as to which loop is served by that detector. The labels shall not be placed on the detector but may be placed on the rack.

Basis of Payment

In measuring this item for payment, each complete detection channel will be considered as a detector. This work will be paid for at the contract unit price each for INDUCTIVE LOOP DETECTOR, RACK MOUNTED, which price shall be payment in full for all labor, material, and equipment necessary to provide a detector as specified complete and wired in place ready for use.

INDUCTIVE LOOP DETECTOR, RACK MOUNT WITH SYSTEM OUTPUT

Description

This work shall consist of furnishing and installing an inductive loop detector according to Section 885 of the Standard Specifications and the following modifications.

Each inductive loop detector channel shall have the three usual modes of operation: delay, extension, and normal, and in addition shall be capable of providing a simultaneous system output for traffic counting. The system output shall not be affected by delay or extension timings. The detection output shall allow either presence or pulse operation which may be selected from a front panel switch. The pulse output shall meet the requirements of the controller manufacturer's specifications.

Should the power to any detector fail, the detector shall exhibit a continuous call to the controller.

The inductive loop detectors shall be two-channel, rack-mounted units. Each channel of the inductive loop detector shall be clearly and permanently labeled above or below the detector with the abbreviations shown on the wiring diagram as to which loop is served by that detector. The labels shall not be placed on the detector but may be placed on the rack.

The detector shall have the count output connected to a wiring harness, to be furnished with the controller cabinet, that is compatible with the Traffic Logging System used by the City of Bloomington as manufactured by Detector Systems Inc., Stanton, California, 800-828-7775. The wiring harness shall be wired as shown on the wiring diagram.

After turn-on, the City will check with its Traffic Logging System unit to make sure that the system is counting correctly. Any problems with the system shall be corrected by the Contractor at his/her own expense.

Basis of Payment

In measuring this item for payment, each complete detection channel will be considered as a detector. This work will be paid for at the contract unit price each for INDUCTIVE LOOP DETECTOR, RACK MOUNT WITH SYSTEM OUTPUT, which price shall be payment in full for all labor, material, and equipment necessary to provide a detector as specified complete and wired in place ready for use.

DETECTOR LOOP, TYPE I

Description

This work shall consist of furnishing and installing a detector loop in the pavement according to Section 886 of the Standard Specifications and the following modifications.

The detector loop shall be tested according to Article 802.08(a) of the Standard Specifications. The second sentence of Article 802.08(a) of the Standard Specifications shall be revised to read: "The loop and lead-in circuit shall have an inductance between 200 and 700 microhenries."

Basis of Payment

This work will be measured for payment in feet in place according to Article 886.05 of the Standard Specifications. This work will be paid for at the contract unit price per foot for DETECTOR LOOP, TYPE I, which price shall be payment in full for all labor, material, and equipment necessary to perform the work as specified.

LIGHT DETECTOR

Description

This work shall consist of furnishing and installing a light detector according to Section 887 of the Standard Specifications, except that a confirmation beacon shall not be furnished and installed. The detector cable shall be a continuous unbroken run from the light detector to the light detector amplifier. Splices in the detector cable are not allowed.

Basis of Payment

This work will be paid for at the contract unit price each for LIGHT DETECTOR. Furnishing and installing a confirmation beacon shall not be included in the cost of the light detector. All required electric cable from the light detector to the light detector amplifier shall be included in the cost of the light detector.

SIGNAL HEAD, POLYCARBONATE, LED

Description

This work shall consist of furnishing and installing a signal head according to Section 880 of the Standard Specifications and the BDE Special Provision for Light Emitting Diode (LED) Signal Head. Dialight LEDs shall be used for all signal indications.

Yellow/Green Bi-Modal Arrow

Dialight Model 430-6370-001 shall be used for all bi-modal arrow locations and shall conform to the following specifications:

Lens: 12" Diameter, Hard Coated for Abrasion Resistance, UV Stabilized Dome.

LEDs: Interconnected to minimize the effect of single LED failures. Nominal Wattage: 10 W Green, 10 W Yellow or less. Nominal Wavelength: 505 - 508 nm Green, 590 - 592 nm Yellow.

Product Warranty: 5 Year Replacement (Materials, Workmanship, and Intensity).

The assembly shall be capable of operating from 80 to 135 VAC with less than 10% variation in intensity, shall have an operating temperature range of -40° C to +74° C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE specifications for LED traffic signals, including intensity requirements at -40° C to +74° C.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 per ITE VTCSH - STD Part 2.

Basis of Payment

This work will be paid for at the contract unit price each for SIGNAL HEAD, POLYCARBONATE, LED of the number of signal faces, the number of signal sections in each signal face, and the method of mounting specified.

PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED

Description

This work shall consist of furnishing and installing a pedestrian signal head according to Section 881 of the Standard Specifications and the BDE Special Provision for Light Emitting Diode

(LED) Signal Head. Dialight LEDs shall be used for all signal indications.

Pedestrian signal heads shall display the symbols for don't walk (orange upraised hand) and walk (white walking person). The text "don't walk" and "walk" shall not be allowed for pedestrian indications.

Basis of Payment

This work will be paid for at the contract unit price each for PEDESTRIAN SIGNAL HEAD, POLYCARBONATE, LED, of the number of signal faces and the method of mounting specified.

STATUS OF UTILITIES TO BE ADJUSTED

The intent is for adjustments to be made prior to the start of construction. It may be necessary for some of the utility relocations to be done during construction and the Contractor will be required to cooperate with the Utility Companies while they perform their work. See the section "Sequence of Construction" within these special provisions. Utility Companies have been provided the following information. All work associated with water mains will be done by the Contractor.

A – Indicates item to be adjusted
R – Indicates item to be relocated or removed
NW – Indicates no work required
* - Indicates possibility of a conflict with the proposed improvements requiring further field investigation by the Contractor and utility owner.

Name & Address of Utility Co.	Type	Location	Status
Ameren IP	Power Poles	Hamilton Road	
501 East Lafayette Street		211+77, 44' Rt.	NW
Bloomington, IL. 61701		225+12, 16' Lt.	R
		225+96, 47' Lt.	R
		227+63, 47' Lt.	R
		229+64, 48' Lt.	R
		231+26, 48' Lt.	R
		232+61, 41' Lt.	R
		234+42, 50' Lt.	R
		234+48, 1' Rt.	R
		236+72, 46' Lt.	R
		236+75, 10' Rt.	R
		237+62, 39' Lt.	R
		240+72, 12' Lt.	R
		Morris Avenue	
		887+76, 19' Lt.	R
		890+02, 20' Lt.	R
		890+07, 20' Rt.	R
		892+68, 20' Lt.	R
		895+32, 22' Lt.	R
		898+33, 23' Lt.	R
		899+04, 19' Rt.	R
		902+51, 42' Rt.	NW
		903+00, 20' Lt.	R
		903+28, 54' Lt.	NW
		905+63, 20' Lt.	R

Name & Address of Utility Co.	Type	Location	Status
Ameren IP	Guy Anchor	Morris Avenue	
		902+51, 26' Rt.	R
		903+30, 24' Lt.	R
	Underground Electric Line	Hamilton Road	
		234+42, 50' Lt.	NW
		234+48, 1' Rt.	R
		236+75, 10' Rt. to	
		237+11, 97' Rt'	R
		237+62, 39' Lt.	R
		Morris Avenue	
		890+07, 20' Rt. to	
		890+17, 40' Rt.	R
	Underground Electric Pedestal	Morris Avenue	
		892+66, 39' Lt.	
NICOR Gas	Gas Valve	Morris Avenue	
3000 East Cass Street		892+75, 19' Lt.	A
Joliet, IL. 60432		904+95, 28' Rt.	*A
		909+15, 19' Rt.	NW
	Gas Line	Hamilton Road	
		225+45, 43' Lt. to	
		229+00, 43' Lt.	A
		226+15, 43' Lt.	A
		226+42, 43' Lt. to	
		226+42, 97' Rt.	R
		226+71, 43' Lt.	A
		227+68, 43' Lt.	A
		228+73, 43' Lt.	A
		229+00, 43' Lt. to	
		232+00, 43' Lt.	NW
		232+00, 43' Lt. to	
		233+00, 43' Lt.	A
		233+00, 43' Lt. to	
		236+50, 37' Lt.	NW
		236+50, 37' Lt. to	
		238+77, 23' Lt.	R
		237+03, 37' Lt.	R
		237+75, 54' Lt. to	
		241+00, 21' Rt.	A
		238+20, 28' Lt.	R
		239+74, 11' Rt	A

Name & Address of Utility Co.	Type	Location	Status
NICOR Gas	Gas Line	Morris Avenue	
		885+73, 10' Lt. to	
		888+40, 15' Lt.	NW
		888+40, 15' Lt. to	
		889+00, 16' Lt.	A
		890+00, 16' Lt. to	
		890+40, 17' Lt.	A
		890+25, 17' Lt. to	
		890+25, 50' Rt.	A
		890+40, 17' Lt. to	
		891+70, 18' Lt.	NW
		891+70, 18' Lt. to	
		891+90, 18' Lt.	*A
		891+90, 18' Lt. to	
		896+17, 14' Lt.	NW
		896+17, 14' Lt. to	
		901+15, 14' Rt.	A
		898+92, 53' Lt. to	
		898+92, 13' Rt.	A
		901+15, 14' Rt. to	
		904+20, 18' Rt.	*A
		903+95, 19' Rt.	*A
		904+20, 18' Rt. to	
		904+60, 18' Rt.	R
		904+38, 18' Rt. to	
		904+38. 5' Rt	R
		904+60, 18' Rt. to	
		909+15, 19' Rt.	NW
	Gas Regulator	Hamilton Road	
		239+74, 35' Rt	R
Insight Communications	CATV Cable	At all locations where power	
1202 West Division Street		poles are being relocated.	R
Normal, IL. 61761	Poles	Hamilton Road	
		225+54, 7' Lt.	R
		Morris Avenue	
		897+90, 19' Rt.	R
		901+35, 19' Rt.	R
		902+54, 21' Rt.	R

Name & Address of Utility Co.	Type	Location	Status
Insight Communications	Poles	903+35, 22' Rt.	R
		904+48, 22' Rt.	R
		905+44, 26' Rt.	NW
		906+34, 27' Rt.	NW
		906+99, 27' Rt.	NW
Verizon	Telephone Pedestal	Hamilton Road	
1312 East Empire Street		211+76, 47' Rt.	NW
Bloomington, IL. 61701		225+56, 7' Lt.	R
		239+08, 20' Rt.	R
		239+11, 20' Rt.	R
		Morris Avenue	
		885+53, 23' Rt.	NW
		890+14, 20' Rt.	R
		895+85, 19' Rt.	R
		897+90, 19' Rt.	R
		902+55, 20' Rt.	R
		906+76, 32' Lt.	R
		906+94, 25' Lt.	NW
		907+02, 27' Rt.	NW
		907+03, 29' Rt.	NW
	Telephone Cable	Hamilton Road	
		225+56, 7' Lt. to	
		239+08, 20' Rt.	R
		238+68, 50' Lt. to	
		239+08, 20' Rt.	R
		239+08, 50' Lt. to	
		239+08, 20' Rt.	R
		239+08, 11' Rt. to	
		239+43, 50' Rt.	R
		Morris Avenue	
		885+53, 23' Rt. to	
		888+40, 19' Rt.	NW
		888+40, 19' Rt. to	
		897+90, 19' Rt.	R
		906+94, 25' Lt. to	
		907+02, 27' Rt.	NW

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets

SPECIAL PROVISION FOR CONSTRUCTION AND MAINTENANCE SIGNS

Effective: January 1, 2004

All references to Sections or Articles in this specification shall be construed to mean a specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

702.05 Signs. Add the following paragraph to subparagraph (a) in Article 702.05:

All warning signs shall have minimum dimensions of 1200 mm x 1200 mm (48" x 48") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

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.

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

and where:

G_{mb} = 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."

80050

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 placement of the surface course or at other times throughout the work."

80142

BUILDING REMOVAL - CASE III (FRIABLE ASBESTOS ABATEMENT) (BDE)

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

BUILDING REMOVAL: This item shall consist of the removal and disposal of 1 building(s), 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 No.	Location	Description
1	012	898+85 RT.	House

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).

All friable asbestos shall be removed from the building(s) prior to demolition. Refer to the Special Provisions titled "Asbestos Abatement (General Conditions)" and "Removal and Disposal of 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 friable asbestos has been removed prior to demolition. Any salvage value shall be reflected in the contract unit price for this item.

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

1. BUILDING REMOVAL NO.

2. REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO.

ASBESTOS ABATEMENT (GENERAL CONDITIONS): This work consists of the removal and disposal of 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 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 _____ thru _____. Also refer to the Materials Description Table on page ___ for a brief description and location of the various materials. Also included is a Materials Quantities Table on page _____. This table states the ACM is friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid.

The work involved in the removal and disposal of friable asbestos 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 _____, to the Engineer for the disposal of all ACM wastes.

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

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least 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.

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

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

Submittals:

A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.

B. Submittals that shall be made prior to start of work:

1. Submittals required under Asbestos Abatement Experience.

2. Submit documentation indicating that all employees have had medical examinations and instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures as specified in Worker Protection Procedures.

3. Submit manufacturer's certification stating that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI 29.2.

4. Submit to the Engineer the brand name, manufacturer, and specification of all sealants or surfactants to be used. Testing under existing conditions will be required at the direction of the Engineer.

5. Submit proof that all required permits, site locations, and arrangements for transport and disposal of asbestos-containing or asbestos-contaminated materials, supplies, and the like have been obtained (i.e., a letter of authorization to utilize designated landfill).

6. Submit a list of penalties, including liquidated damages, incurred through non-compliance with asbestos abatement project specifications.

7. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of

decontamination units, the sequencing of work, the respiratory protection plan to be used during this work, a site safety plan, a disposal plan including the location of an approved disposal site, and a detailed description of the methods to be used to control pollution. The plan shall be submitted to the Engineer prior to the start of work.

8. Submit proof of written notification and compliance with the "Notifications" paragraph.

C. Submittals that shall be made upon completion of abatement work:

1. Submit copies of all waste chain-of-custodies, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area;

2. Submit daily copies of work site entry logbooks with information on worker and visitor access;

3. Submit logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls; and

4. Submit results of any bulk material analysis and air sampling data collected during the course of the abatement including results of any on-site testing by any federal, state, or local agency.

Certificate of Insurance:

A. The Contractor shall document general liability insurance for personal injury, occupational disease and sickness or death, and property damage.

B. The Contractor shall document current Workmen's Compensation Insurance coverage.

C. The Contractor shall supply insurance certificates as specified by the Department.

Asbestos Abatement Experience:

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

B. Personnel Experience:

1. For Superintendent, the Contractor shall supply:

a. Evidence of knowledge of applicable regulations in safety and environmental protection is required as well as training in asbestos abatement as evidenced by

the successful completion of a training course in supervision of asbestos abatement as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to the Engineer prior to the start of work.

b. Documentation of experience with abatement work in a supervisory position as evidenced through supervising at least two asbestos abatement projects; provide names, contact, phone number, and locations of two projects in which the individual(s) has worked in a supervisory capacity.

2. For workers involved in the removal of asbestos, the Contractor shall provide training as evidenced by the participation and successful completion of an accredited training course for asbestos abatement workers as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to all employees who will be working on this project.

ABATEMENT AIR MONITORING: The Contractor shall comply with the following:

A. Personal Monitoring: All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits will be monitored daily. Personal monitoring is the responsibility of the contractor. Additional personal samples may be required by the Engineer at any time during the project.

B. Contained Work Areas for Removal of Friable Asbestos: Area samples shall be collected for the department within the work area daily. A minimum of one sample shall be taken outside of the abatement area removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.

C. Air Monitoring Professional

1. All air sampling will be conducted by a qualified Air Sampling Professional supplied by the contractor. The Air Sampling Professional shall submit documentation of successful completion of the National Institute for Occupational Safety and Health (NIOSH) course #582 - "Sampling and Evaluating Airborne Asbestos Dust".

2. Air sampling will be conducted according to NIOSH Method 7400. The results of these tests shall be provided to the Engineer within 24 hours of the collection of air samples.

REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1 : This

work consists of the removal and disposal of all friable asbestos from the building(s) prior to demolition. The work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)" and as outlined herein.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. __1__, as shown.

5049I

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

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

BUILDING REMOVAL: This item shall consist of the removal and disposal of 1 building(s), 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 No.	Location	Description
1	012	898+50 RT.	GARAGE

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).

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein.

The lump sum unit price(s) for this work shall represent the cost of demolition. Any salvage value shall be reflected in the contract unit price for this item.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least 10 days prior to commencement of any demolition activity.

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

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

Submittals:

A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.

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

50531

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 butt joints shall be filled to the elevation of the existing pavement surface with compacted bituminous concrete surface course or binder course."

80118

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:

(a) Fine Aggregate (Note 1) 1003.04
(b) Coarse Aggregate (Note 2) 1004.06

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:

"(bb) Fine Aggregate (Note 1) 1003.04
(cc) Coarse Aggregate (Note 2) 1004.06

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:

"(m) Fine Aggregate (Note 2) 1003.04
(n) Coarse Aggregate (Note 3) 1004.06

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 μm (No. 200) sieve shall be 2 ± 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"

80051

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)"

80094

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	
Type of Construction	Percent 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 CURING AND PROTECTION OF CONCRETE CONSTRUCTION			
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Cast-in-Place Concrete: [11/]			
Pavement Shoulder	1020.13(a)(1)(2)(3)(4)(5) [3/ 5/]	3	1020.13(c)
Base Course Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) [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) [16/]
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 [12/]	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	1020.13(a)(1)(2)(3)(4)(5) [4/ 6/]	7	1020.13(e)(1)(2)(3)
Substructure	1020.13(a)(1)(2)(3)(4)(5) [1/ 7/]	7	1020.13(e)(1)(2)(3)
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) [8/]	7	1020.13(e)(1)(2)
Deck	1020.13(a)(5)	7	1020.13(e)(1)(2) [17/]
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) [18/]
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)
Precast Concrete: [11/]			
Bridge Beams Piles Bridge Slabs Nelson Type Structural Member	1020.13(a)(3)(5) [9/ 10/]	As required. [13/]	504.06(c)(6), 1020.13(e)(2) [19/]
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/]	504.06(c)(6), 1020.13(e)(2) [19/]

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 ± 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 ± 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 °C (45 °F) and falling or below 4 °C (40 °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."

80114

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."

80146

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION

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

FEDERAL OBLIGATION. 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.

CONTRACTOR ASSURANCE. 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 9 % 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.

DBE LOCATOR REFERENCES. 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.

BIDDING PROCEDURES. 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.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments

made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

(a) DBE as the Contractor: 100% 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.

80029

EPOXY PAVEMENT MARKING (BDE)

Effective: January 1, 2001
Revised: August 1, 2003

Revise Article 1095.04(b) of the Standard Specifications to read:

"(b) The Epoxide Value (WPE) of Component A shall be tested according to ASTM D 1652 on a pigment free basis. The WPE shall not vary more than plus or minus 50 units of the qualification samples."

Revise Article 1095.04(c) of the Standard Specifications to read:

"(c) The Total Amine Value of Component B shall be tested according to ASTM D 2074. The Total Amine Value shall not vary more than plus or minus 50 units of the qualification samples."

Revise Article 1095.04(g) of the Standard Specifications to read:

"(g) The epoxy pavement marking material, when mixed in the proper mix ratio and applied at 0.35 mm to 0.41 mm (14 to 16 mils) wet film thickness and with the proper saturation of glass spheres, shall exhibit a dry no pick-up time of twenty minutes or less when tested according to ASTM D 711."

Revise Article 1095.04(m) of the Standard Specifications to read:

"(m) The glass beads meet the requirements of Article 1095.07 and the following:

(1) The first drop glass beads shall be tested by the standard visual method of large glass spheres adopted by the Department. The beads shall have a silane coating and meet the following sieve requirements.

Sieve Size	U.S. Standard Sieve Number	% Passing (by weight)
1.70 mm	12	95-100
1.40 mm	14	75-95
1.18 mm	16	10-47
1.00 mm	18	0-7
850 µm	20	0-5

(2) The second drop glass beads shall be Type B."

Revise the second sentence of the first paragraph of Article 1095.04(n) of the Standard Specifications to read:

"Subject the coated panel for 75 hours to accelerated weathering using the light and water exposure apparatus (fluorescent UV – condensation type) as specified in ASTM G 53 (equipped with UVB-313 lamps)."

80041

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.

80055

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."

80103

FLAGGER VESTS (BDE)

Effective: April 1, 2003
Revised: August 1, 2005

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 107-1999 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."

80101

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."

80079

HAND VIBRATOR (BDE)

Effective: November 1, 2003

Add the following paragraph to Article 1103.17(a) of the Standard Specifications:

"The vibrator shall have a non-metallic head for areas containing epoxy coated reinforcement. The head shall be coated by the manufacturer. The hardness of the non-metallic head shall be less than the epoxy coated reinforcement, resulting in no damage to the epoxy coating. Slip-on covers will not be allowed."

80054

INLET FILTERS (BDE)

Effective: August 1, 2003

Add the following to Article 280.02 of the Standard Specifications:

"(k) Inlet Filters..... 1081.15(h)"

Add the following paragraph after the first paragraph of Article 280.04(c) of the Standard Specifications:

"When specified, drainage structures shall be protected with inlet filters. Inlet filters shall be installed either directly on the drainage structure or under the grate of the drainage structure resting on the lip of the frame. The fabric bag shall hang down into the drainage structure. Prior to ordering materials, the Contractor shall determine the size and shape of the various drainage structures being protected."

Revise Article 280.07(d) of the Standard Specifications to read:

"(d) Inlet and Pipe Protection. This work will be paid for at the contract unit price per each for INLET AND PIPE PROTECTION.

Protection of drainage structures with inlet filters will be paid for at the contract unit price per each for INLET FILTERS."

Add the following to Article 1081.15 of the Standard Specifications:

"(h) Inlet Filters. An inlet filter shall consist of a steel frame with a two piece geotextile fabric bag attached with a stainless steel band and locking cap that is suspended from the frame. A clean, used bag and a used steel frame in good condition meeting the approval of the Engineer may be substituted for new materials. Materials for the inlet filter assembly shall conform to the following requirements:

(1) Frame Construction. Steel shall conform to Article 1006.04.

Frames designed to fit under a grate shall include an overflow feature that is welded to the frame's ring. The overflow feature shall be designed to allow full flow of water into the structure when the filter bag is full. The dimensions of the frame shall allow the drainage structure grate to fit into the inlet filter assembly frame opening. The assembly frame shall rest on the inside lip of the drainage structure frame for the full variety of existing and proposed drainage structure frames that are present on this contract. The inlet filter assembly frame shall not cause the drainage structure grate to extend higher than 6 mm (1/4 in.) above the drainage structure frame.

(2) Grate Lock. When the inlet is located in a traffic lane, a grate lock shall be used to secure the grate to the frame. The grate lock shall conform to the manufacturer's requirements for materials and installation.

(3) Geotextile Fabric Bag. The sediment bag shall be constructed of an inner filter bag and an outer reinforcement bag.

a. Inner Filter Bag. The inner filter bag shall be constructed of a polypropylene geotextile fabric with a minimum silt and debris capacity of 0.06 cu m (2.0 cu ft). The bag shall conform to the following requirements:

Inner Filter Bag		
Material Property	Test Method	Minimum Avg. Roll Value
Grab Tensile Strength	ASTM D 4632	45 kg (100 lb)
Grab Tensile Elongation	ASTM D 4632	50%
Puncture Strength	ASTM D 4833	29 kg (65 lb)
Trapezoidal Tear	ASTM D 4533	20 kg (45 lb)
UV Resistance	ASTM D 4355	70% at 500 hours
Actual Open Size	ASTM D 1420	212 µm (No. 70 sieve US)
Permittivity	ASTM D 4491	2.0/sec
Water Flow Rate	ASTM D 4491	5900 Lpm/sq m (145 gpm/sq ft)

b. Outer Reinforcement Bag. The outer reinforcement bag shall be constructed of polyester mesh material that conforms to the following requirements:

Outer Reinforcement Bag		
Material Property	Test Method	Value
Content	ASTM D 629	Polyester
Weight	ASTM D 3776	155 g/sq m (4.55 oz/sq yd) ±15%
Whales (holes)	ASTM D 3887	7.5 ± 2 holes/25 mm (1 in.)
Chorses (holes)	ASTM D 3887	15.5 ± 2holes/25 mm (1 in.)
Instronball Burst	ASTM D 3887	830 kPa (120 psi) min.
Thickness	ASTM D 1777	1.0 ± 0.1 mm (0.040 ± 0.005 in.)

(4) Certification. The manufacturer shall furnish a certification with each shipment of inlet filters, stating the amount of product furnished, and that the material complies with these requirements."

80104

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

Effective: November 1, 2005

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

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

Revise Article 881.01 of the Standard Specifications to read:

"**881.01 Description.** This work shall consist of furnishing and installing a conventional pedestrian signal head or light emitting diode (LED) pedestrian signal head."

Revise Article 881.02(a) of the Standard Specifications to read:

"(a) Signal Heads.....1078.01"

Revise the first paragraph of Article 881.04 of the Standard Specifications to read:

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

Revise Article 1078.02(b) of the Standard Specifications to read:

"(b) Optical Unit. Only symbolic walk (walking person) and don't walk (upraised palm) indications shall be used.

(1) Conventional Pedestrian Signal. Each signal section shall have an optical unit according to Article 1078.01(c), except the lamp for a 300 mm (12 in.) section shall be nominal 90 W, 1040 lumens with a minimum average rated life of 8,000 hours (0.91 years) and the lamp for a 225 mm (9 in.) section shall be nominal 54 W, 530 lumens with a minimum average rated life of 8,000 hours (0.91 years).

(2) LED Pedestrian Signal. The pedestrian LED signal heads shall meet the requirements of the Institute of Transportation Engineers (ITE) LED purchase specification, "Pedestrian Traffic Control Signal Indications - Part 2: LED Pedestrian Traffic Signal Modules", or applicable successor ITE specifications, except as modified herein. The LEDs utilized in the modules shall not be Aluminum Gallium Arsenide (AlGaAs) material technology. The LED signal heads shall also meet the following requirements:

a. Physical and Mechanical Requirements. The power supply for the LED module shall be integrated with the unit.

b. Photometric Requirements. The illuminated portion of the module shall be uniformly and completely dispersed with the LEDs.

c. Electrical Requirements. The pedestrian LED signal module shall be EPA Energy Star qualified.

The individual LEDs shall be wired such that a catastrophic loss or the failure of one LED will result in the loss of not more than five percent of the signal module light output.

d. Warranty. The LED modules shall be warrantied according to Article 802.03."

80150

LIGHT EMITTING DIODE (LED) SIGNAL HEAD (BDE)

Effective: April 1, 2002
Revised: August 1, 2003

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

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

Revise Article 880.01 of the Standard Specifications to read:

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

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

"(a) Signal Heads.....1078.01"

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

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

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

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

Revise Article 1078.01 of the Standard Specifications to read:

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

Add the following to Article 1078.01(c) of the Standard Specifications:

"(3) The LED signal section shall be according to the following:

a. General Requirements. The LED signal head shall meet the requirements of the Institute of Transportation Engineers (ITE) interim LED purchase specification, "Vehicle Traffic Control Signal Heads, Part 2: LED Vehicle Traffic Signal Modules", or applicable successor ITE specifications, except as modified herein. The LEDs utilized in the modules shall not be Aluminum Gallium Arsenide (AlGaAs) material technology.

b. Physical and Mechanical Requirements. The power supply for the LED module shall be integrated with the unit.

c. Photometric Requirements. The candlepower values for yellow 300 mm (12 in.) circular modules shall be equal to the corresponding values for green 300 mm (12 in.) circular modules as listed in Table 1 of Section 4 of the aforementioned ITE specification based on normal use in traffic signal operation over the operating temperature range.

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

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

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

The individual LEDs shall be wired such that a catastrophic loss or the failure of one LED will result in the loss of not more than 5 percent of the signal module light output.

e. Warranty. The LED modules shall be warrantied according to Article 802.03. The maintained minimum intensities for 300 mm (12 in.) arrow modules throughout the warranty period under the operating temperature and voltage range, and at the end of the warranty period shall not be less than the following values:

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

80067

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."

80116

PAVEMENT THICKNESS DETERMINATION FOR PAYMENT (BDE)

Effective: April 1, 1999
Revised: January 1, 2004

Description. 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.

Materials. 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.

Equipment. 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

Tolerance in Thickness. 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.

Patching Holes. 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.

Deficient Lot. 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 pavement. 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.

Profile Index Adjustment. 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.

Core Analysis. Cores will be analyzed according to the following:

(a) Definition:

x_i = Individual values (core lengths) under consideration
n = Number of individual values under consideration (10 per lot)

$\bar{x}$ = Average of the values under consideration
LSL = Lower Specification Limit (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:

$$S = \sqrt{\frac{\sum\left(x_i - \bar{x}\right)^2}{n-1}} \quad \text{where} \quad \Sigma(x_i - \bar{x})^2 = (x_1 - \bar{x})^2 + (x_2 - \bar{x})^2 + \ldots + (x_{10} - \bar{x})^2$$

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.

Pay Adjustment. 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.

Total Payment. 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.

53600

Percent Within Limits

Quality Index (Q)*	Percent in Limits (PWL)	Quality Index (Q)*	Percent in Limits (PWL)	Quality Index (Q)*	Percent in Limits (PWL)	Quality Index (Q)*	Percent in Limits (PWL)	Quality Index (Q)*	Percent in Limits (PWL)	Quality Index (Q)*	Percent in Limits (PWL)	Quality Index (Q)*	Percent in Limits (PWL)
0.00	50.00	.040	65.07	0.80	78.43	1.20	88.76	1.60	95.46	2.00	98.83	2.40	99.89
0.01	50.38	0.41	65.43	0.81	78.72	1.21	88.97	1.61	95.58	2.01	98.88	2.41	99.90
0.02	50.77	0.42	65.79	0.82	79.02	1.22	89.17	1.62	95.70	2.02	98.92	2.42	99.91
0.03	51.15	0.43	66.15	0.83	79.31	1.23	89.38	1.63	95.81	2.03	98.97	2.43	99.91
0.04	51.54	0.44	66.51	0.84	79.61	1.24	89.58	1.64	95.93	2.04	99.01	2.44	99.92
0.05	51.92	0.45	66.87	0.85	79.90	1.25	89.79	1.65	96.05	2.05	99.06	2.45	99.93
0.06	52.30	0.46	67.22	0.86	80.19	1.26	89.99	1.66	96.16	2.06	99.10	2.46	99.94
0.07	52.69	0.47	67.57	0.87	80.47	1.27	90.19	1.67	96.27	2.07	99.14	2.47	99.94
0.08	53.07	0.48	67.93	0.88	80.76	1.28	90.38	1.68	96.37	2.08	99.18	2.48	99.95
0.09	53.46	0.49	68.28	0.89	81.04	1.29	90.58	1.69	96.48	2.09	99.22	2.49	99.95
0.10	53.84	0.50	68.63	0.90	81.33	1.30	90.78	1.70	96.59	2.10	99.26	2.50	99.96
0.11	54.22	0.51	68.98	0.91	81.61	1.31	90.96	1.71	96.69	2.11	99.29	2.51	99.96
0.12	54.60	0.52	69.32	0.92	81.88	1.32	91.15	1.72	96.78	2.12	99.32	2.52	99.97
0.13	54.99	0.53	69.67	0.93	82.16	1.33	91.33	1.73	96.88	2.13	99.36	2.53	99.97
0.14	55.37	0.54	70.01	0.94	82.43	1.34	91.52	1.74	96.97	2.14	99.39	2.54	99.98
0.15	55.75	0.55	70.36	0.95	82.71	1.35	91.70	1.75	97.07	2.15	99.42	2.55	99.98
0.16	56.13	0.56	70.70	0.96	82.97	1.36	91.87	1.76	97.16	2.16	99.45	2.56	99.98
0.17	56.51	0.57	71.04	0.97	83.24	1.37	92.04	1.77	97.25	2.17	99.48	2.57	99.98
0.18	56.89	0.58	71.38	0.98	83.50	1.38	92.22	1.78	97.33	2.18	99.50	2.58	99.99
0.19	57.27	0.59	71.72	0.99	83.77	1.39	92.39	1.79	97.42	2.19	99.53	2.59	99.99
0.20	57.65	0.60	72.06	1.00	84.03	1.40	92.56	1.80	97.51	2.20	99.56	2.60	99.99
0.21	58.03	0.61	72.39	1.01	84.28	1.41	92.72	1.81	97.59	2.21	99.58	2.61	99.99
0.22	58.40	0.62	72.72	1.02	84.53	1.42	92.88	1.82	97.67	2.22	99.61	2.62	99.99
0.23	58.78	0.63	73.06	1.03	84.79	1.43	93.05	1.83	97.75	2.23	99.63	2.63	100.00
0.24	59.15	0.64	73.39	1.04	85.04	1.44	93.21	1.84	97.83	2.22	99.66	2.64	100.00
0.25	59.53	0.65	73.72	1.05	85.29	1.45	93.37	1.85	97.91	2.25	99.68	≥ 2.65	100.00
0.26	59.90	0.66	74.04	1.06	85.53	1.46	93.52	1.86	97.98	2.26	99.70		
0.27	60.28	0.67	74.36	1.07	85.77	1.47	93.67	1.87	98.05	2.27	99.72		
0.28	60.65	0.68	74.69	1.08	86.02	1.48	93.83	1.88	98.11	2.28	99.73		
0.29	61.03	0.69	75.01	1.09	86.26	1.49	93.98	1.89	98.18	2.29	99.75		
0.30	61.40	0.70	75.33	1.10	86.50	1.50	94.13	1.90	98.25	2.30	99.77		
0.31	61.77	0.71	75.64	1.11	86.73	1.51	94.27	1.91	98.31	2.31	99.78		
0.32	62.14	0.72	75.96	1.12	86.96	1.52	94.41	1.92	98.37	2.32	99.80		
0.33	62.51	0.73	76.27	1.13	87.20	1.53	94.54	1.93	98.44	2.33	99.81		
0.34	62.88	0.74	76.59	1.14	87.43	1.54	94.68	1.94	98.50	2.34	99.83		
0.35	63.25	0.75	76.90	1.15	87.66	1.55	94.82	1.95	98.56	2.35	99.84		
0.36	63.61	0.76	77.21	1.16	87.88	1.56	94.95	1.96	98.61	2.36	99.85		
0.37	63.98	0.77	77.51	1.17	88.10	1.57	95.08	1.97	98.67	2.37	99.86		
0.38	64.34	0.78	77.82	1.18	88.32	1.58	95.20	1.98	98.72	2.38	99.87		
0.39	64.71	0.79	78.12	1.19	88.54	1.59	95.33	1.99	98.78	2.39	99.88		

*For Q values less than zero, subtract the table value from 100 to obtain PWL

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000
Revised: September 1, 2003

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 no later than 30 days from the receipt of each payment made to the Contractor.

State law addresses the timing of payments to be made to subcontractors. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, generally requires that when a Contractor receives any payment from the Department, the Contractor is required to make corresponding, proportional payments to each subcontractor performing work within 15 calendar days after receipt of the state payment. Section 7 of the State Prompt Payment Act further provides that interest in the amount of 2% per month, in addition to the payment due, shall be paid to any subcontractor 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 throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

As progress payments are made to the Contractor in accordance with Article 109.07 of the Standard Specifications for Road and Bridge Construction, the Contractor shall make a corresponding partial payment within 15 calendar days to each subcontractor in proportion to the work satisfactorily completed by each subcontractor. The proportionate amount of partial payment due to each subcontractor 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 shall be paid in full within 15 calendar days after the subcontractor's work has been satisfactorily completed. The Contractor shall hold no retainage from the subcontractors.

This Special Provision does not create any rights in favor of any subcontractor against the State of Illinois or authorize any cause of action against the State of Illinois on account of any payment, nonpayment, delayed payment or interest claimed by application of the State Prompt Payment Act. The Department will neither determine the reasonableness of any cause for delay of payment nor enforce any claim to payment, including interest. Moreover, the Department will not approve any delay or postponement of the 15 day requirement. State law creates 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 in accordance with the Public Construction Bond Act, 30 ILCS 550.

80022

PAYROLLS AND PAYROLL RECORDS (BDE)

Effective: August 10, 2005

FEDERAL AID CONTRACTS. 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."

80155

KLo

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.

80130

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."

80139

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"."

80083

PRECAST CONCRETE PRODUCTS (BDE)

Effective: July 1, 1999
Revised: November 1, 2004

Product Approval. 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".

Precast Concrete Box Culverts. 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.)."

Portland Cement Replacement. 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.

Ready-Mixed Concrete. Delete the last paragraph of Article 1020.11(a) of the Standard Specifications.

Shipping. 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.

Acceptance. 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.

419.doc

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."

80084

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 in-situ 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.

80011

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 Lawn Mixture 7/	Bluegrass Perennial Ryegrass Audubon Red Fescue Rescue 911 Hard Fescue Fults Salt Grass*	70 (60) 20 (20) 20 (20) 20 (20) 70 (60)
2A	Salt Tolerant Roadside Mixture 7/	Alta Fescue or Ky 31 Perennial Ryegrass Audubon Red Fescue Rescue 911 Hard Fescue Fults Salt Grass 1/	70 (60) 20 (20) 20 (30) 20 (30) 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 Buchloe Dactyloides	30%
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:

TABLE II

Variety of Seeds	Hard Seed Percent Maximum	Purity Percent Minimum	Pure, Live Seed Percent Minimum	Weed Percent Maximum	Secondary Noxious Weeds No. per kg (oz) 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 (5)	4/
Ryegrass, Perennial, Annual	-	97	85	0.30	175 (5)	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/

80131

SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

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

Definition. 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) Self-Consolidating Admixtures. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete 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) Fine Aggregate. 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 x A) + (b/100 x B) + (c/100 x C) + ...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.

Mix Design Approval. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

80132

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.

80143

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."

80086

SUPERPAVE BITUMINOUS CONCRETE MIXTURES (BDE)

Effective: January 1, 2000
Revised: April 1, 2004

Description. 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 $\geq$ 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.

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 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)[1/]								
Sieve Size	IL-25.0 mm		IL-19.0 mm		IL-12.5 mm[4/]		IL-9.5 mm[4/]	
	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[2/]	24	50[2/]	28	65	28	65
2.36 mm (#8)	16	31	20	36	28	48[3/]	28	48[3/]
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 ≥ 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 μm (#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	IL-12.5	IL-9.5	
50	12.0	13.0	14.0	15	65 - 78
70					65 - 75
90					
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.

Personnel. 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

Parameter		Frequency of Tests	Test Method
Aggregate Gradation Hot bins for batch and continuous plants Individual cold-feeds or combined belt-feed for drier drum plants. (% passing sieves: 12.5 mm (1/2 in.), 4.75 mm (No. 4), 2.36 mm (No. 8), 600 µm (No. 30), 75 µm (No. 200))		1 dry gradation per day of production (either morning or afternoon sample). and 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). 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.	Illinois Procedure (See Manual of Test Procedures for Materials).
Asphalt Content by Ignition Oven (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 µm (#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 µm (#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 BINDER	
Nominal, Compacted, Leveling Binder Thickness, mm (in.)	Mixture
≤ 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.

Control Charts/Limits. 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%

Basis of Payment. 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.

80010

SUPERPAVE BITUMINOUS CONCRETE MIXTURES (LOW ESAL) (BDE)

Effective: January 1, 2001
Revised: April 1, 2004

Description. This work shall consist of constructing Bituminous Concrete Surface Course Superpave IL-9.5L and/or Bituminous Concrete Binder Course Superpave IL-19.0L according to Section 406 of the Standard Specifications and the special provision "Quality Control/Quality Assurance of Bituminous Concrete Mixtures", except as modified herein.

Materials.

(a) Coarse Aggregate. Coarse aggregate for the IL-19.0L shall meet the requirements of a Class I Type 3 binder course and the gradation specified below. For the IL-9.5L mixture, the coarse aggregate shall meet the requirements of a Class I Type 3 surface course except that gravel and Class C Quality, or better, aggregate may be used.

(b) Reclaimed Asphalt Pavement (RAP). RAP shall meet the requirements of the special provision, "RAP for Use in Bituminous Concrete Mixtures".

RAP containing steel slag will be permitted for use in top-lift surface mixtures only.

(c) Bituminous Material. The asphalt cement (AC), unless otherwise specified on the plans, shall be performance-graded (PG) 58-22. The AC shall meet the requirements of Article 1009.05 of the Standard Specifications for the grade specified.

If the Contractor is allowed to use more than 15 percent RAP, a softer PG binder may be required, as determined by the Engineer.

Laboratory Equipment.

(a) Superpave Gyratory Compactor. The superpave gyratory compactor (SGC) shall be used for all laboratory mixture compaction.

(b) Ignition Oven. The ignition oven shall be used for determination of 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 calibration factor exceeds 1.5 percent other IDOT approved methods shall be utilized for determination of AC content.

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 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 job mix formula (JMF) shall fall within the following limits:

TABLE 1. Mixture Composition

Sieve	Percent Passing	
	9.5L	19.0L
25.0 mm (1 in.)		100
19.0 mm (3/4 in.)		95-100
12.5 mm (1/2 in.)	100	
9.5 mm (3/8 in.)	95 –100	
4.75 mm (#4)	52 – 80	38-65
2.36 mm (#8)	38 – 65	
600 µm (#30)	< 50% of the percentage passing the #4	< 50% of the percentage passing the #4
75 µm (#200)	4.0 – 8.0	3.0 – 7.0
AC%	4.0 – 8.0	4.0 – 8.0
RAP Materials	Maximum 30% (or as shown on the plans)	Maximum 30%
#200:AC ratio	1.0 max. design	1.0 max. design

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.

Mix	Design Compactive Effort	Design Air Voids Target (%)	VMA (Voids in the Mineral Aggregate) (min.)	VFA (Voids Filled with Asphalt)
IL 9.5L	N_{DES} =30	3.0%	14.0%	70 - 80%
IL 19.0L	N_{DES} =30	4.0%	13.0%	N/A

(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 shall 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 Engineer 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 Engineer. The method of application shall be according to Article 406.12 of the Standard Specifications.

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

Required 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 (Low ESAL)

Parameter		Frequency of Tests	Test Method
Aggregate Gradation Hot bins for batch and continuous plants. Individual cold-feeds or combined belt-feed for drier drum plants. (% passing sieves: 12.5 mm (1/2 in.), 4.75 mm (No. 4), 2.36 mm (No. 8), 600 µm (No. 30), 75 µm (No. 200))		1 dry gradation per day of production (either morning or afternoon sample). and 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). 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.	Illinois Procedure (See Manual of Test Procedures for Materials).
Asphalt Content by Ignition Oven (Note 1.)		1 per half day of production	Illinois Modified AASHTO T 308
Air Voids	Bulk Specific Gravity of Gyratory Sample. Maximum Specific Gravity of Mixture	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 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 µm (#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 µm (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of 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, any mixture containing an anti-stripping additive will be tested by the Engineer 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.

Control Charts/Limits. 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 4. Density Control Limits	
Mixture	Individual Test
IL-9.5L	92.5 – 97.4%
IL-19.0L	93.0 – 97.4 %

Construction Requirements

Placing. The minimum compacted thickness of each lift shall be according to the following table:

Mixture	Minimum Compacted Lift Thickness, mm (in.)
IL-9.5L	32 (1 1/4)
IL-19.0L	57 (2 1/4)

Basis of Payment. This work will be paid for at the contract unit price per metric ton (ton) for BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE IL-9.5L (Low ESAL), or BITUMINOUS CONCRETE BINDER COURSE SUPERPAVE IL-19.0L (Low ESAL).

80039

TEMPORARY EROSION CONTROL (BDE)

Effective: November 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 hay or straw bales, 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."

80087

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.

5729I

TRAINING SPECIAL PROVISIONS (BDE) This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 2 . 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.

20338

TRANSIENT VOLTAGE SURGE SUPPRESSION (BDE)

Effective: August 1, 2003

Revise the first paragraph of Article 1074.03(a)(4) of the Standard Specifications to read:

"(4) Transient Voltage Surge Suppression. The cabinet shall be provided with transient voltage surge suppression. Transient surge suppression unit leads shall be kept as short as possible and ground shall be made directly to the cabinet wall or ground plate as near as possible to the object being grounded. All transient surge suppression units shall be tested and certified as meeting this specification by an independent testing laboratory. One copy of each of the full testing report shall be submitted to the Engineer."

Revise Article 1074.03(a)(4)a. of the Standard Specifications to read:

"a. Surge Suppressor. The suppressor protecting the solid state controller, conflict monitor, and detection equipment shall consist of two stages: stage one which shall include a controller cabinet AC power protection assembly and stage two which shall include AC circuit protection.

The design of the stage one suppressor shall be modular and it shall be installed in such a way that it may be removed and replaced with the intersection under power and in flashing operation. It shall have a permanently mounted and wired base and a removable circuit package. The stage one suppressor shall have two LED failure indicators for power 'on' and suppression 'failure' and shall meet the following properties:

Stage One Suppressor	
Properties	Criteria
"Plug-in" suppression module	12 pin connector assembly
Clamp voltage	250 V at 20,000 A typical
Response time	Less than 5 nanoseconds
Maximum continuous service current	15 A at 120 VAC 60 Hz
High frequency noise attenuation	At least 50 dB at 100,000 Hz
Operating temperature	-40 °C (-40 °F) to 85 °C (185 °F)

If the controller assembly includes a system telemetry module or remote intersection monitor, the status of the stage one suppressor shall be continuously and remotely monitored by an appropriate alarm circuit.

The stage two, high speed, solid state, transient suppressor shall protect the system from transient over voltage without affecting power at the load. It shall suppress transients of either polarity and from either direction (source or load). The suppressor shall have a visual "on" indicator lamp when the unit is operating normally. It shall also have a UL plastic enclosure, a four position terminal strip for

power connection, and it shall utilize silicon avalanche diode technology. The stage two suppressor shall meet the following properties:

Stage Two Suppressor	
Properties	Criteria
Nominal service voltage	120 V at 50/60 Hz
Maximum voltage protection level	±330 V
Minimum voltage protection level	±220 V ±5%
Minimum surge current rating	700 A
Stand by power	Less than 0.5 Watts
Hot to neutral leakage current at 120 V RMS	Less than 5μA
Maximum response time	5 nanoseconds
Operating and Storage temperature	-20 °C (-4 °F) to 50 °C (122 °F)"

80107m

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."

80123

WEIGHT CONTROL DEFICIENCY DEDUCTION (BDE)

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:

$$A = 1.0 - \left(\frac{B-C}{B}\right); \text{ Where } A \le 1.0; \left(\frac{B-C}{C}\right) > 0.50\% \text{ (0.70\% for aggregates)}$$

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.

80048

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."

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.

80097

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 170 working days.

80071

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

1. These contract provisions shall apply to all word performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2;
Section IV, paragraphs 1, 2, 3, 4 and 7;
Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

a. Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above

agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to

the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or quailifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of $10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term “segregated facilities” means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of $10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter “the wage determination”) which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the

contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or

disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not

be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:
Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of $10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding $2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period).

The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V.

This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for 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.

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Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of $25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tie participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier Covered Transactions:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, “Disclosure Form to Report Lobbying,” in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision

NOTICE

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at http://www.dot.il.gov/desenv/delett.html.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at http://www.dot.il.gov/desenv/subsc.html.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.