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.

Proposal Submitted By

Name

Address

City

Letting June 15, 2007

NOTICE TO PROSPECTIVE BIDDERS

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

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



Springfield, Illinois 62764

Contract No. 64450 WINNEBAGO County Section (4MFT)R District 2 Construction Funds Route FAP 734

PLEASE MARK THE APPROPRIATE BOX BELOW:

A <u>Bid Bond</u> is included.

A Cashier's Check or a Certified Check is included.

Prepared	by

Checked by (Printed by authority of the State of Illinois)

S

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INSTRUCTIONS

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

WHO CAN BID?: Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction. To request authorization, a potential bidder <u>must complete and submit</u> 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**, 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



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of ______

Taxpayer Identification Number (Mandatory) ______a

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

Contract No. 64450 WINNEBAGO County Section (4MFT)R Route FAP 734 District 2 Construction Funds

This project consists of reconstructing 4,530 ft of pavement with intersection improvements on IL Route 251 (Kishwaukee Street) from 15th Avenue to Harrison Avenue in Rockford.

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.

BD 353A (Rev. 12/2005)

- 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:

			Proposal				Proposal
<u>A</u>	mount	of Bid	<u>Guaranty</u>	<u>An</u>	nount c	of Bid	<u>Guaranty</u>
Up to		\$5,000	\$150	\$2,000,000	to	\$3,000,000	\$100,000
\$5,000	to	\$10,000	\$300	\$3,000,000	to	\$5,000,000	\$150,000
\$10,000	to	\$50,000	\$1,000	\$5,000,000	to	\$7,500,000	\$250,000
\$50,000	to	\$100,000	\$3,000	\$7,500,000	to	\$10,000,000	\$400,000
\$100,000	to	\$150,000	\$5,000	\$10,000,000	to	\$15,000,000	\$500,000
\$150,000	to	\$250,000	\$7,500	\$15,000,000	to	\$20,000,000	\$600,000
\$250,000	to	\$500,000	\$12,500	\$20,000,000	to	\$25,000,000	\$700,000
\$500,000	to	\$1,000,000	\$25,000	\$25,000,000	to	\$30,000,000	
\$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 C	heck 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		Combination Bid				
No.	Sections Included in Combination	Dollars	Cents			

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

C-92-041-06 State Job # -PPS NBR -2-98960-0100 County Name -WINNEBAGO- -Code -201 - -District -2 - -Section Number -(4MFT)R

Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	X	Unit Price	=	Total Price
A2000114	T-ACERX FREM AB 1-3/4	EACH	14.000				
A2006714	T-QUERCUS MACR 1-3/4	EACH	10.000				
B2000562	T-AMELAN CAN SF 4'	EACH	15.000				
B2002716	T-MALUS ADIR TF 2	EACH	15.000				
B2005214	T-MALUS SUT TF 1-3/4	EACH	15.000				
D2001772	E-PICEA ABIES 6'	EACH	15.000				
XX001135	PAVEMENT PATCHING SPL	SQ YD	4,007.000				
XX001386	SAN SEW PVC 8	FOOT	537.000				
XX001900	STORM SEW 2 8 (FTR)	FOOT	133.000				
XX003000	CLASS SI CONC STEPS	CU YD	63.000				
XX003163	EM VEH PR SYS	EACH	6.000				
XX003165	VIDEO CAMERA DET SYS	EACH	6.000				
XX003668	PRECONSTRUCT VID TAP	L SUM	1.000				
XX004353	WATERMAIN RELOCATION	L SUM	1.000				
XX004921	PED PUSH-BUTTON SPL	EACH	28.000				

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Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	х	Unit Price	=	Total Price
XX005063	CLASS B PATCHES	SQ YD	612.500				
XX006253	SAN MH 4 DIA	EACH	3.000				
X0300351	CONC STEP REMOV	EACH	6.000				
X0320239	CONC WALL REMOV	FOOT	951.000				
X0320374	PLUG EX SAN SEWERS	EACH	17.000				
X0320591	SAN MAN REMOVED	EACH	9.000				
X0321556	SANITARY MANHOLE ADJ	EACH	24.000				
X0321760	DBL HANDHOLE REM	EACH	5.000				
X0322033	STORM SEW WM REQ 12	FOOT	79.000				
X0322034	STORM SEW WM REQ 15	FOOT	89.000				
X0322035	STORM SEW WM REQ 18	FOOT	66.000				
X0322089	STORM SEW WM REQ 36	FOOT	1,991.000				
X0322127	STORM SEW WM REQ 30	FOOT	541.000				
X0322923	SEGMENT CONC BLK WALL	SQ FT	4,748.000				
X0323153	EC C GROUND 6 1C GRN	FOOT	1.693.000				

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Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	x	Unit Price	=	Total Price
X0323760	SAN SEW SER 6 PVC CMP	EACH	3.000				
X0324652	TRACER CABLE	FOOT	5,794.000				
X0324886	CON INS 1 1/4 NON-MET	FOOT	35.000				
X0324887	CON INS 2 1/2 NON-MET	FOOT	11,207.000				
X0324888	CON INS 4 NON-MET	FOOT	1,819.000				
X0324894	WM MANHOLES ADJ	EACH	20.000				
X0325055	CONC MED SURF STAMPG	SQ FT	15,886.000				
X0325405	FILL EX STORM SEWERS	CU YD	1,313.000				
X0712400	TEMP PAVEMENT	SQ YD	588.000				
X0919000	TEMP PAVT REMOVAL	SQ YD	588.000				
X4067107	POL LB MM IL4.75 N50	TON	621.000				
X5011100	FOUNDATION REM	EACH	6.000				
X6640200	TEMP CH LK FENCE	FOOT	1,067.000				
X7800600	URETHANE PM LT-SY SPL	SQ FT	530.500				
Z0007550	BLDG REMOV	EACH	18.000				

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Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	x	Unit Price	=	Total Price
Z0013300	CONC REM SPEC	SQ YD	14.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0017100	DOWEL BARS	EACH	470.000				
Z0022800	FENCE REMOVAL	FOOT	1,484.000				
Z0024476	FLEX DELINEATOR MAINT	EACH	50.000				
Z0024478	FLEX DELINEATORS	EACH	191.000				
Z0028415	GEOTECHNICAL REINF	SQ YD	16,832.000				
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0049800	RELOC EX SURV MKRS	EACH	145.000				
Z0050900	REM CONC FDN	EACH	30.000				
Z0065752	SLOT DR 12" W/6" SLOT	FOOT	232.000				
20100110	TREE REMOV 6-15	UNIT	148.500				
20100210	TREE REMOV OVER 15	UNIT	956.750				
20200100	EARTH EXCAVATION	CU YD	25,270.000				
20800150	TRENCH BACKFILL	CU YD	8.658.000				

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Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	x	Unit Price	=	Total Price
21101615	TOPSOIL F & P 4	SQ YD	13,246.000				
25000115	SEEDING CL 1B	ACRE	2.000				
25000350	SEEDING CL 7	ACRE	2.750				
25000400	NITROGEN FERT NUTR	POUND	180.000				
25000500	PHOSPHORUS FERT NUTR	POUND	180.000				
25000600	POTASSIUM FERT NUTR	POUND	180.000				
25100115	MULCH METHOD 2	ACRE	2.750				
25200110	SODDING SALT TOLERANT	SQ YD	14,505.000				
25200200	SUPPLE WATERING	UNIT	400.000				
28000400	PERIMETER EROS BAR	FOOT	1,520.000				
28000500	INLET & PIPE PROTECT	EACH	58.000				
31100910	SUB GRAN MAT A 12	SQ YD	47,880.000				
31100965	SUB GRAN MAT A 24	SQ YD	2,819.000				
35101400	AGG BASE CSE B	TON	1,880.000				
35102000	AGG BASE CSE B 8	SQ YD	4.342.000				

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Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	X	Unit Price	=	Total Price
40600200	BIT MATLS PR CT	TON	10.500				
40600300	AGG PR CT	TON	25.200				
40600990	TEMPORARY RAMP	SQ YD	494.000				
40603540	P HMA SC "D" N70	TON	935.000				
40800050	INCIDENTAL HMA SURF	TON	854.000				
42000416	PCC PVT 9 3/4 JOINTD	SQ YD	39,035.500				
42001200	PAVEMENT FABRIC	SQ YD	600.000				
42300300	PCC DRIVEWAY PAVT 7	SQ YD	3,724.000				
42400200	PC CONC SIDEWALK 5	SQ FT	59,340.000				
42400430	PC CONC SIDEWALK 5 SP	SQ FT	1,007.000				
42400800	DETECTABLE WARNINGS	SQ FT	440.000				
44000100	PAVEMENT REM	SQ YD	33,759.000				
44000158	HMA SURF REM 2 1/4	SQ YD	11,088.000				
44000200	DRIVE PAVEMENT REM	SQ YD	2,967.000				
44000500	COMB CURB GUTTER REM	FOOT	12.574.000				

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Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	x	Unit Price	=	Total Price
44000600	SIDEWALK REM	SQ FT	53,180.000				
44002805	ISLAND REMOVAL	SQ FT	901.000				
44213200	SAW CUTS	FOOT	1,576.000				
50102600	CONC REM	EACH	1.000				
50800105	REINFORCEMENT BARS	POUND	203.000				
50901760	PIPE HANDRAIL	FOOT	319.000				
542D0217	P CUL CL D 1 12	FOOT	86.000				
550A0050	STORM SEW CL A 1 12	FOOT	106.000				
550A0160	STORM SEW CL A 1 36	FOOT	740.000				
550A0190	STORM SEW CL A 1 48	FOOT	196.000				
550A0340	STORM SEW CL A 2 12	FOOT	305.000				
550A0360	STORM SEW CL A 2 15	FOOT	44.000				
550A0380	STORM SEW CL A 2 18	FOOT	621.000				
550A0410	STORM SEW CL A 2 24	FOOT	689.000				
550A0430	STORM SEW CL A 2 30	FOOT	2.278.000				

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Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	х	Unit Price	=	Total Price
550A0450	STORM SEW CL A 2 36	FOOT	719.000				
550A0480	STORM SEW CL A 2 48	FOOT	343.000				
550A0490	STORM SEW CL A 2 54	FOOT	1,247.000				
550A2340	SS RG CL A 1 18	FOOT	78.000				
550A2500	SS RG CL A 2 8	FOOT	82.000				
550A2520	SS RG CL A 2 12	FOOT	412.000				
550A2530	SS RG CL A 2 15	FOOT	95.000				
550A2560	SS RG CL A 2 24	FOOT	274.000				
550A2580	SS RG CL A 2 30	FOOT	604.000				
550A2600	SS RG CL A 2 36	FOOT	76.000				
550A2630	SS RG CL A 2 54	FOOT	87.000				
56300100	ADJ SAN SEWER 8 LESS	FOOT	864.000				
56300300	ADJ WATER SERV LINES	FOOT	1,800.000				
56400100	FIRE HYDNTS TO BE MVD	EACH	15.000				
60107600	PIPE UNDERDRAINS 4	FOOT	803.000				

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Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	X	Unit Price	=	Total Price
60218300	MAN TA 4 DIA T1F OL	EACH	2.000				
60218400	MAN TA 4 DIA T1F CL	EACH	6.000				
60219100	MAN TA 4 DIA T9F&G	EACH	6.000				
60221100	MAN TA 5 DIA T1F CL	EACH	4.000				
60221800	MAN TA 5 DIA T9F&G	EACH	3.000				
60223800	MAN TA 6 DIA T1F CL	EACH	9.000				
60224002	MAN TA 6 DIA T6F&G	EACH	1.000				
60224010	MAN TA 6 DIA T9F&G	EACH	2.000				
60224446	MAN TA 7 DIA T1F CL	EACH	7.000				
60236200	INLETS TA T8G	EACH	2.000				
60242400	INLETS SPL	EACH	7.000				
60242700	INLETS SPL N3	EACH	31.000				
60242801	INLETS SPL N5	EACH	32.000				
60242803	INLETS SPL N7	EACH	25.000				
60242804	INLETS SPL N8	EACH	16.000				

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C-92-041-06 State Job # -PPS NBR -2-98960-0100 County Name -WINNEBAGO- -Code -201 - -District -2 - -Section Number -(4MFT)R

Project Number

Route

FAP 734

Item		Unit of					
Number	Pay Item Description	Measure	Quantity	X	Unit Price	=	Total Price
60247200	JUNCTION BOX	EACH	1.000				
60255500	MAN ADJUST	EACH	3.000				
60265700	VV ADJUST	EACH	76.000				
60266500	VV REMOVED	EACH	5.000				
60500040	REMOV MANHOLES	EACH	35.000				
60500060	REMOV INLETS	EACH	41.000				
60600605	CONC CURB TB	FOOT	355.000				
60605000	COMB CC&G TB6.24	FOOT	12,364.000				
60618300	CONC MEDIAN SURF 4	SQ FT	1,171.000				
60623714	CONC MEDIAN SPL	SQ FT	17,330.000				
66700305	PERM SURV MKRS T2	EACH	2.000				
66900200	NON SPL WASTE DISPOSL	CU YD	3,380.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	10.000				
67000400	ENGR FIELD OFFICE A	CAL MO	32.000				

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C-92-041-06 State Job # -PPS NBR -2-98960-0100 County Name -WINNEBAGO- -Code -201 - -District -2 - -Section Number -(4MFT)R

Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	х	Unit Price	=	Total Price
67100100	MOBILIZATION	L SUM	1.000				
70102625	TR CONT & PROT 701606	L SUM	1.000				
70102632	TR CONT & PROT 701602	L SUM	1.000				
70102635	TR CONT & PROT 701701	L SUM	1.000				
70102640	TR CONT & PROT 701801	L SUM	1.000				
70103815	TR CONT SURVEILLANCE	CAL DA	240.000				
70106800	CHANGEABLE MESSAGE SN	CAL MO	18.000				
70300210	TEMP PVT MK LTR & SYM	SQ FT	63.000				
70300220	TEMP PVT MK LINE 4	FOOT	46,196.000				
70300250	TEMP PVT MK LINE 8	FOOT	466.000				
70300280	TEMP PVT MK LINE 24	FOOT	325.000				
70300610	TEMP PT PAVT MK L&S	SQ FT	983.000				
70300625	TEMP PT PVT M LINE 4	FOOT	8,435.000				
70300635	TEMP PT PVT M LINE 6	FOOT	1,281.000				
70300640	TEMP PT PVT M LINE 8	FOOT	1,488.000				

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C-92-041-06 State Job # -PPS NBR -2-98960-0100 County Name -WINNEBAGO- -Code -201 - -District -2 - -Section Number -(4MFT)R

Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	х	Unit Price	=	Total Price
70300645	TEMP PT PVT M LINE 12	FOOT	448.000				
70300660	TEMP PT PVT M LINE 24	FOOT	449.000				
70301000	WORK ZONE PAVT MK REM	SQ FT	10,089.000				
72000100	SIGN PANEL T1	SQ FT	49.500				
72000200	SIGN PANEL T2	SQ FT	95.800				
78008200	POLYUREA PM T1 LTR-SY	SQ FT	1,442.200				
78008210	POLYUREA PM T1 LN 4	FOOT	18,412.000				
78008230	POLYUREA PM T1 LN 6	FOOT	3,169.000				
78008240	POLYUREA PM T1 LN 8	FOOT	3,738.000				
78008250	POLYUREA PM T1 LN 12	FOOT	1,166.000				
78008270	POLYUREA PM T1 LN 24	FOOT	1,027.000				
78100100	RAISED REFL PAVT MKR	EACH	677.000				
78300100	PAVT MARKING REMOVAL	SQ FT	1,124.000				
80500100	SERV INSTALL TY A	EACH	4.000				
81400700	HANDHOLE PCC	EACH	35.000				

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C-92-041-06 State Job # -PPS NBR -2-98960-0100 County Name -WINNEBAGO- -Code -201 - -District -2 - -Section Number -(4MFT)R

Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	X	Unit Price	=	Total Price
81400720	DBL HANDHOLE PCC	EACH	4.000				
81702110	EC C XLP USE 1C 10	FOOT	4,326.000				
82103250	LUM SV HOR MT PC 250W	EACH	15.000				
82500605	LT CONTROL PC RELAY	EACH	4.000				
85700200	FAC T4 CAB	EACH	4.000				
87301215	ELCBL C SIGNAL 14 2C	FOOT	4,337.000				
87301225	ELCBL C SIGNAL 14 3C	FOOT	4,512.000				
87301245	ELCBL C SIGNAL 14 5C	FOOT	6,473.000				
87301255	ELCBL C SIGNAL 14 7C	FOOT	5,541.000				
87301815	ELCBL C SERV 6 3C	FOOT	115.000				
87502420	TS POST GALVS 8	EACH	3.000				
87502490	TS POST GALVS 15	EACH	1.000				
87502500	TS POST GALVS 16	EACH	4.000				
87702850	STL COMB MAA&P 24	EACH	1.000				
87702930	STL COMB MAA&P 40	EACH	1.000				

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C-92-041-06 State Job # -PPS NBR -2-98960-0100 County Name -WINNEBAGO- -Code -201 - -District -2 - -Section Number -(4MFT)R

Project Number

Route

FAP 734

ltem		Unit of					
Number	Pay Item Description	Measure	Quantity	x	Unit Price	=	Total Price
87702950	STL COMB MAA&P 44	EACH	1.000				
87702960	STL COMB MAA&P 46	EACH	1.000				
87702970	STL COMB MAA&P 48	EACH	4.000				
87702980	STL COMB MAA&P 50	EACH	1.000				
87702985	STL COMB MAA&P 52	EACH	2.000				
87702990	STL COMB MAA&P 54	EACH	2.000				
87703000	STL COMB MAA&P 55	EACH	2.000				
87800100	CONC FDN TY A	FOOT	18.000				
87800200	CONC FDN TY D	FOOT	12.000				
87800400	CONC FDN TY E 30D	FOOT	10.000				
87800415	CONC FDN TY E 36D	FOOT	194.000				
87900200	DRILL EX HANDHOLE	EACH	27.000				
88040070	SH P LED 1F 3S BM	EACH	2.000				
88040090	SH P LED 1F 3S MAM	EACH	30.000				
88040150	SH P LED 1F 5S BM	EACH	13.000				

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C-92-041-06 State Job # -PPS NBR -2-98960-0100 County Name -WINNEBAGO- -Code -201 - -District -2 - -Section Number -(4MFT)R

Project Number

Route

FAP 734

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
88040160	SH P LED 1F 5S MAM	EACH	13.000				
88102717	PED SH LED 1F BM CDT	EACH	28.000				
88200100	TS BACKPLATE	EACH	43.000				
89000100	TEMP TR SIG INSTALL	EACH	1.000				
89502210	MOD EX CONTR CAB	EACH	2.000				
89502375	REMOV EX TS EQUIP	EACH	4.000				
89502380	REMOV EX HANDHOLE	EACH	8.000				

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64450

THIS IS THE TOTAL BID \$

NOTES:

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

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

I. GENERAL

A. Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.

B. In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. By execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances has been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.

C. In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for termination of the contract and the suspension or debarment of the bidder.

II. ASSURANCES

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

B. Felons

1. The Illinois Procurement Code provides:

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

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

C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

(a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.

(b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

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

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

D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

(a) It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

E. Inducements

1. The Illinois Procurement Code provides:

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

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

F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

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

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

H. Confidentiality

1. The Illinois Procurement Code provides:

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

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

I. Insider Information

1. The Illinois Procurement Act provides:

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

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

III. CERTIFICATIONS

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

B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State shall contain a certification by the contractor that the contractor is not barred from being awarded a contract or subcontract under this Section. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The bidder certifies that it is not barred from being awarded a contract under Section 50.5.

C. Educational Loan

1. Section 3 of the Educational Loan Default Act provides:

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

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

D. Bid-Rigging/Bid Rotating

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

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

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

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

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit 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.

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

L. Executive Order Number 1 (2007) Regarding Lobbying on Government Procurements

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

TO BE RETURNED WITH BID

IV. DISCLOSURES

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

C. Disclosure Form Instructions

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

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may 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 <u>NOT APPLICABLE STATEMENT</u> 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____
- 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 <u>per person per bid</u> even if a specific individual would require a yes answer to more than one question.)

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

If the answer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> 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 <u>NOT</u> <u>APPLICABLE STATEMENT</u> on Form A <u>does not</u> 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:

RETURN WITH BID/OFFER

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

Contractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
L Disclosure of the information cor (30 ILCS 500). Vendors desiring and potential conflict of interest i the publicly available contract fil ended contracts. A publicly t satisfaction of the requirement	ntained in this Form is required b to enter into a contract with the s nformation as specified in this Dis e. This Form A must be comple raded company may submit a	y the Section 50-35 of the Illinois Procurement Code State of Illinois must disclose the financial information sclosure Form. This information shall become part of eted for bids in excess of \$10,000, and for all open- a 10K disclosure (or equivalent if applicable) in closure Form Instructions
satisfaction of the requirement	DISCLOSURE OF FINANCI	AL INFORMATION
1. Disclosure of Financial Inf terms of ownership or distributiv \$90,420.00 (60% of the Govern separate Disclosure Form A f	ormation. The individual named ve income share in excess of 5%, or's salary as of 7/1/01). (Make c or each individual meeting thes	below has an interest in the BIDDER (or its parent) in or an interest which has a value of more than opies of this form as necessary and attach a se requirements)
FOR INDIVIDUAL (type or pr	int information)	
NAME:		
ADDRESS		
Type of ownership/distril	outable income share:	
stock sole p % or \$ value of ownership/	proprietorship Partne distributable income share:	ership other: (explain on separate sheet):

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 ___
- 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.

RETURN WITH BID/OFFER

- 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 the 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 services in the previous 2 years.

Yes <u>No</u>

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois 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 your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% of the salary of the Governor as of 7/1/01) are you entitled to receive (i) more then 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 minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 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 States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ____No ___
- (f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes <u>No</u>

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

RETURN WITH BID/OFFER

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. 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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name		
Legal Address		
City State Zin		
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 prin	nt)
 Title of Authorized Representative (type or prin	t)
 Signature of Authorized Representative	

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

- (a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.
- (b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Section 7.2 of the Illinois Department of Human Rights' Rules and Regulations for Public Contracts adopted as amended on September 17, 1980. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.



Contract No. 64450 WINNEBAGO County Section (4MFT)R Route FAP 734 District 2 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 TABLE B

TOTAL Workforce Projection for Contract										CURRENT EMPLOYEES								
							TO BE ASSIGNED											
	r			MINORITY EMPLOYEES				TRAINEES					TO CONTRACT					
JOB	TO	TAL				*OTHER		THER	APPREN-		ON THE JOB			TOTAL			MINORITY	
CATEGORIES	EMPL	OYEES	BLA	ACK	HISPANIC MI		NOR.	TICES		TRAINEES			EMPLOYEES			EMPLO	DYEES	
	М	F	M	F	M	F	M	F	М	F	M	F		М	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	TO	TAL					*OTHER					
IN	EMPLO	DYEES	BLA	ICK	HISP	ANIC	MINOR.					
TRAINING	М	F	М	F	М	F	М	F				
APPRENTICES												
ON THE JOB TRAINEES												

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

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

Note: See instructions on the next page

FOR DEPARTMENT USE ONLY

BC 1256 - Pg 1 (Rev. 3/98) IL 494-0454
Contract No. 64450 **WINNEBAGO** County Section (4MFT)R Route FAP 734 **District 2 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

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

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

office or base of operation is located.

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

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: _____

Telephone Number _____

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

- 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.
- Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees Table B currently employed.
- Table C -Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

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Contract No. 64450 WINNEBAGO County Section (4MFT)R Route FAP 734 District 2 Construction Funds

PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)	Business Address	
		Name and Address of All Members of the Firm:
-		
-		
	Corporate Name	
	Ву	
		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
(IF A CORPORATION)	A 11 1	
(IF A JOINT VENTURE, USE THIS SECTION	Attest	Signature
FOR THE MANAGING PARTY AND THE	Business Address	-
	Dusiness Address	
	Corporate Name	
	Bv	
	Бу	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
	Attest	
		Signature
	Business Address	
If more than two parties are in the joint venture	e, please attach an ac	dditional signature sheet.



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:	By:
(Signature & Title)	(Signature of Attorney-in-Fact)
STATE OF ILLINOIS, COUNTY OF	Notary Certification for Principal and Surety
I,	, a Notary Public in and for said County, do hereby certify that
	and
(Insert name	s of individuals signing on behalf of PRINCIPAL & SURETY)
who are each personally known to me to be the PRINCIPAL and SURETY, appeared before me instrument as their free and voluntary act for the	same persons whose names are subscribed to the foregoing instrument on behalf of this day in person and acknowledged respectively, that they signed and delivered said uses and purposes therein set forth.
Given under my hand and notarial seal this	day of, A.D
My commission expires	

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#

Signature and Title

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

ame:	
ddress:	
hone 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. 64450 WINNEBAGO County Section (4MFT)R Route FAP 734 District 2 Construction Funds





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., June 15, 2007. 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. 64450 WINNEBAGO County Section (4MFT)R Route FAP 734 District 2 Construction Funds

This project consists of reconstructing 4,530 ft of pavement with intersection improvements on IL Route 251 (Kishwaukee Street) from 15th Avenue to Harrison Avenue in Rockford.

- 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

Milton R. Sees, Acting Secretary

BD 351 (Rev. 01/2003)

INDEX

FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2007

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

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

RECURRING SPECIAL PROVISIONS

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

CHE	ск з	SHEET #	PAGE NO.
1		Additional State Requirements For Federal-Aid Construction Contracts	
		(Eff. 2-1-69) (Rev. 1-1-07)	1
2		Subletting of Contracts (Federal-Aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	3
3	Х	EEO (Eff. 7-21-78) (Rev. 11-18-80)	4
4	Х	Specific Equal Employment Opportunity Responsibilities	
		Non Federal-Aid Contracts (Eff. 3-20-69) (Rev. 1-1-94)	14
5	Х	Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 1-1-07)	19
6		Reserved	24
7	Х	National Pollutant Discharge Elimination System Permit (Eff. 7-1-94) (Rev. 1-1-03)	25
8		Haul Road Stream Crossings, Other Temporary Stream Crossings, and	
		In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98)	26
9		Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-07)	27
10	Х	Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-07)	30
11		Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-07)	33
12		Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 1-1-07)	35
13		Hot-Mix Asphalt Surface Removal (Cold Milling) (Eff. 11-1-87) (Rev. 1-1-07)	39
14		Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-07)	41
15		PCC Partial Depth Hot-Mix Asphalt Patching (Eff. 1-1-98) (Rev. 1-1-07)	42
16		Patching with Hot-Mix Asphalt Overlay Removal (Eff. 10-1-95) (Rev. 1-1-07)	44
17		Polymer Concrete (Eff. 8-1-95) (Rev. 3-1-05)	45
18		PVC Pipeliner (Eff. 4-1-04) (Rev. 1-1-07)	47
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STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2007, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of FAP Route 734 (IL 251), Section (4MFT)R, Winnebago County, Contract #64450, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

IL 251 (Kishwaukee Street) from 15th Avenue to Harrison Avenue in Rockford.

DESCRIPTION OF PROJECT

Reconstruction of pavement, storm sewer, curb & gutter and sidewalks.

TRAFFIC CONTROL PLAN

Effective January 14, 1999

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

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

Standards:

701602 701606 701701 701801 702001

Details:

Staging Details District Standard 39.4

General:

Where construction activities involve sidewalks on both sides of the street, the work shall be staged so that both sidewalks are not out of service at the same time. Prior to opening a sidewalk to pedestrian traffic, topsoil shall be placed so as to eliminate any drop off adjacent to the sidewalk edges.

Signs:

No additional bracing shall be allowed on post-mounted signs.

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

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

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

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

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

Devices:

A minimum of 3 drums spaced at 1.2 meters (4 feet) shall be placed at each return when the sideroad is open.

Vertical barricades shall not be used in weaves.

Flaggers:

Flaggers shall comply with all requirements contained in the Department's "Flagger Handbook" with the following exception: The ANSII Class 2 vest will not be supplied by the Department.

In addition to the flaggers shown on applicable standards, on major sideroads listed below, flaggers shall be required on all legs of the intersection. Major sideroads for this project shall be 15th Avenue, 18th Avenue, 23rd Avenue and Harrison Avenue.

When the road is closed to through traffic and it is necessary to provide access for local traffic, all flaggers as shown on the applicable standards will be required. No reduction in the number of flaggers shall be allowed.

Pavement Marking:

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

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

Highway Standards Application.

The traffic control configuration shown on Standard 701701 for the left leg of an intersection shall also apply to right turn lanes when they are closed. A "RIGHT TURN LANE CLOSED AHEAD" (W20-1103(O)-48) sign shall be installed in place of the "LEFT TURN LANE CLOSED AHEAD" sign shown on the standard for this application.

All costs involved in conforming with this provision shall be considered a part of TRAFFIC CONTROL AND PROTECTION STANDARD 701701.

<u>Road Closure – Sideroads</u>: The road closure shall be completed using Type III barricades in compliance with Standard 702001, and signing according to Standard 701602 or 701606. Two Flashers shall be installed above each Type III barricade on the traveled lanes. The "ROAD CLOSED" (R11-2) or "ROAD CLOSED TO THRU TRAFFIC" (R11-4) signs shall be mounted as shown on Standard 702001. Flashers shall be installed above all warning signs involving a night time road closure.

The Contractor shall be required to notify the Winnebago County Highway Department and/or corresponding Township Commissioner for any sideroad closure or opening. The City of Rockford shall be notified prior to any changes in sideroad traffic control.

All cost involved in conforming with this provision shall be considered a part of TRAFFIC CONTROL AND PROTECTION STANDARD 701602 or 701606.

District Standards Application.

<u>TEMPORARY SIGNALS</u>: The Contractor will be required to have someone available at all times to receive phone calls during non-work hours and who is able to reach the job site within one hour of being called. This person will be able to repair the temporary signals or will be able to have flaggers on site within another hour to flag traffic until the signals are again in operation. Failure to have a person on site within an hour after the initial call out will result in the Contractor being charged liquidated damages by the Department of One Thousand Dollars (\$1,000). Failure to have traffic restored either with repaired signals or with flaggers within two hours after the initial call out will result in the Contractor being charged liquidated damages by the Department of One Thousand Dollars (\$1,000) per hour until traffic is restored. The Contractor may use a traffic control subcontractor for the first call, however this does not relieve the prime Contractor from having a person on call.

<u>Traffic Signal Work:</u> No traffic signal work shall begin until all of the traffic signal hardware is on the job site. The existing traffic signal system shall remain in operation during the modernization work. The work shall be scheduled so that a minimum of two signal indications for each phase remains in operation. No signal indication shall be absent for more than seven calendar days.

The Contractor will be allowed to shut down the existing signal system not to exceed 8 hours to replace the existing controller and cabinet. During this shutdown, the intersection will operate as a 4-way "Stop".

<u>Flexible Delineator Maintenance</u>: This item shall consist of all materials an labor necessary to maintain the flexible delineator required as part of Traffic Control and Protection, Standard 701606.

The re-attachment of the flexible delineator to the base shall be considered incidental to the Traffic Control and Protection used.

Any unit which needs repair because the attachment of the base to the pavement failed within 120 hours after installation shall be reattached by the Contractor at his/her expense. Any unit which breaks within 120 hours after installation shall be replaced by the Contractor at his/her expense.

The quantity listed in the contract is only an estimate of the anticipated number of units requiring repair.

This work shall be paid for at the contract unit price per Each for FLEXIBLE DELINEATOR MAINTENANCE to maintain the flexible delineator required as part of Standard 701606.

<u>Maintenance of Traffic</u>: The mainline shall be kept open to one-way traffic at all times during working hours and two-way traffic during non-working hours.

Grinding and resurfacing operations shall be completed using Traffic Control and Protection Standard 701602.

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

The Contractor shall be responsible for providing a weekly article and map to the news media (Rockford Register Star) describing work being performed and stages closed to traffic.

Not more than two sideroad legs may be closed at one time during any stage. When dead-end sideroads are closed, local access must be provided for the affected properties and emergency services at all times.

The Contractor shall submit a maintenance of local traffic plan to the Engineer at the preconstruction meeting telling how local access will be maintained at each access location. This traffic plan will need to be approved by the Engineer before the roadway is closed to traffic.

Partnering shall be required for this project.

HOT-MIX ASPHALT PATCHING AND HOT-MIX ASPHALT BINDER AND SURFACE COURSE

Effective: August 18, 1993

Revised: April 20, 2007

Article 406.07 - Compaction. This is to modify the first paragraph of the subject Article. Immediately after the Binder or Surface Course Mixtures are placed, each shall be given an

FAP 734 (IL 251) Section (4MFT)R Winnebago County Contract #64450

initial or breakdown rolling with a three wheeled or tandem roller. After the initial rolling, the Binder or Surface course shall be given an intermediate rolling with a pneumatic-tired roller. The final or finish rolling shall be done with a tandem roller or vibratory roller in the static mode only. If density can not be obtained with one three-wheeled or tandem roller, additional static rollers shall be added until density can be achieved.

COMPACTION OF POLYMERIZED HOT-MIX ASPHALT CONCRETE

Effective: January 16, 2002

This work shall consist of furnishing a pneumatic tired roller as specified in Article 406, in addition to all other rollers specified in the Standard Specifications. The spray system shall be in good working order. The tires shall be in good condition and be constructed heavy enough to withstand 90 to 110 psi inflation pressures on a continual basis. An approved water based release agent shall be utilized on the tires similar to, but not limited to, Tech Shield that effectively prevents mix adhesion. The dilution rate shall be as per manufacturer's recommendations. The mixture compaction temperature will be the maximum possible without experiencing surface damage to the mix caused by adhesion to the tires. The recommended range is from 200° to 260° Fahrenheit. This work shall be included in the cost of the polymerized Hot-Mix Asphalt concrete of the type and size specified.

CRITICAL PATH SCHEDULE

Effective: February 10, 1995

The construction of this project will be planned and recorded with a conventional Critical Path Method (CPM) as specified in Article 108.02 of the Standard Specifications and the following:

The Contractor is responsible for preparing the initial schedule in the form of an activity on arrow diagram which shall include activity description and duration, two copies shall be submitted to the Engineer at the preconstruction meeting. The construction time, as determined by the schedule shall not exceed the specified contract time. The schedule shall be updated the first of each month, when there is a delay in completion of any critical activity, or when the contract is modified causing additions, deletion or revision of activities required.

As determined by CPM analysis, only delays in activities which affect milestone dates or contract completion dates will be considered for a time extension.

If the Contractor does seek a time extension of any milestone or contract completion date, he/she shall furnish documentation as required by the Engineer to enable him to determine whether a time extension is appropriate under the terms of the contract.

ENGINEER'S FIELD OFFICE TYPE A

Effective: December 8, 2006

Revise Article 670.02 (i) of the Standard Specifications to read:

Provide a minimum of two (2) communication paths to each Field Office. The configuration would include (A) three (3) wireless CDMA based mobile phone connections, and (B) one (1) wireless data router with wireless data connection, encryption and WiFi capabilities to access the internet for the exclusive use of the Engineer(s). All wireless communication devices must have a single point of contact for support for the resident engineer and IDOT staff.

Each mobile phone must have the following capabilities:

- 1. A minimum of 500 anytime minutes per month
- 2. Voice Mail capabilities
- 3. On network free minutes
- 4. Unlimited Long Distance
- 5. Unlimited Roaming
- 6. Speaker Phone

Each Wireless Data Router must have the following capabilities:

Connection

- 1. CDMA wireless technology with authentication and identification system for security
- 2. CDMA based EV-DO(rev.A) transmission capabilities
- 3. EVDO (rev.A) must be backward compatible through both EVDO (rev0) and 1XRTT
- 4. Connection must be capable of Compression in order to optimize the connection speed.

Router

- 5. A minimum of four (4) Ethernet ports for wired connection
- 6. Be capable of 802.11b & g for wireless LAN Interface
- 7. Configurable ability to port data to fax capabilities through the router using efax or IP fax devices
- 8. Automatic receipt of IP addresses with DHCP server
- 9. Configurable OFDM (Orthogonal Frequency Division Multiplexing) technology

Security

- 10. Configurable capable of 64-bit or 128-bit WEP encryption, WPA-PSK authentication wireless security (WiFi Protected Access Pre-shared Key Mode)
- 11. Configurable LAN Security: NAT with DHCP, PPTP VPN Pass-through, MAC Filtering, IP Filtering, Filter Scheduling
- 12. Configurable firewall security at the router

Misc.

13. Capable of operating temperatures between 32° to 131°F (0° to 55°C)

The contractor will be responsible for the installation, connection and disconnection of all service. These communication costs shall be contracted at the lowest cost available for the region of service. Any deviation from the desired configurations shall be subject to the approval of the District Construction Engineer.

Should the contractor need technical advice on potential providers or other clarification, they can contact the Regional IT Manager at (815) 284-5495.

GEOTECHNICAL REINFORCEMENT

Revised September 1, 2004

Biaxial Geogrid Flat Installation

This work consists of furnishing and installing an integrally-formed polypropylene geotechnical grid reinforcement material. The grid shall have an aperture, rib and junction cross section sufficient to permit significant mechanical interlock with the material being reinforced. There shall be a high continuity of tensile strength through all ribs and junctions of the grid material to reinforce the embankment or subgrade as shown on the plans and specifications.

<u>Materials:</u> Each layer of geogrid shall conform to the property requirements listed below. Multilayer geogrid and multiple layers of lesser strength geogrids will not be accepted.

Reinforcement and Interlock

Property_		Test Method	<u>Value</u>
Te	nsile Modulus:		
•	True Tensile Modulus	ASTMD 6637	17,000 lb./ft. (Min.)
•	True Tensile Strength @ 2% Strain		280 lb./ft. (Min.)
•	True Tensile Strength @5% Strain		580 lb./ft. (Min.)
<u>Ap</u>	ertures:		
•	Aperture Stability	USACE*	2.7 in. – Ib./deg. (min.)

- Open Area
 COE Method Modified** 70% (Nom.)
 - * Resistance to in-plane rotational movement measured by applying a 20 kg-cm moment to the central junction of a 9 inch x 9 inch specimen restrained at its perimeter (U.S. Army Corps of Engineers Methodology for measurement of Torsional Rigidity).
 - ** Percent open area measured without magnification by Corps of Engineers method as specified in CW 02215 Civil Works Construction Guide, November, 1977.

Structural Integrity:

- Flexural Stiffness ASTM D-5732–95 *** 0.2 in.-lb. (Min.)
- Junction Efficiency GRI GG2-87**** 90% (Min.)
 - *** Resistance to bending force measured via ASTM D-5732-95, using specimens of width two ribs wide, with transverse ribs cut flush with exterior edges of longitudinal ribs (as a "ladder), and of length sufficiently long to enable measurement of the overhang dimension. The overall Flexural Stiffness is calculated as the square root of the product of machine-and cross-machine-direction Flexural Stiffness values.

**** Load transfer capability measured via GRI-GG2-87. Expressed as a percentage of ultimate tensile strength.

Material

Polypropylene	ASTM D 1401 Group I/Class 1/Grade 2	98% (Min.)
Carbon Black	ASTM 4218	0.5% (Min.)

The supplier should provide a certification that their product meets the above requirements.

The geotechnical reinforcement shall be placed as described herein or as shown on the cross sections.

Geogrid shall be delivered to the jobsite in such a manner as to facilitate handling and incorporation into the work without damage. Material shall be stored in such a manner as to prevent exposure to direct sunlight and damage by other construction activities.

Prior to the installation of the geogrid, the application surface shall be cleared of debris, sharp objects and trees. Tree stumps shall be cut to the level of the ground surface. If the stumps cannot be cut to the ground level, they shall be completely removed. In the case of subgrades, all wheel tracks or ruts in excess of 75 mm (3 inches) in depth shall be graded smooth or otherwise filled with soil to provide a reasonably smooth surface.

The geotechnical reinforcement shall be placed with the "roll length" parallel to the pavement. Fabric of insufficient width or length to fully cover the specified area shall be lapped a minimum of 600 mm (24 inches).

Installation:

The granular blanket shall be constructed to the width and depth required on the plans. Unless otherwise specified, the material shall be back-dumped on the Geogrid in a sequence of operations beginning at the outer edges of the treatment area with subsequent placement towards the middle.

Placement of material on the Geogrid shall be accomplished by spreading dumped material off of previously placed material with a bulldozer blade or endloader, in such a manner as to prevent tearing or shoving of the Geogrid. Dumping of material directly on the Geogrid will only be permitted to establish an initial working platform. No construction equipment shall be allowed on the Geogrid prior to placement of the granular blanket.

Unless otherwise specified in the plans or Special Provisions, the granular material, shall be placed to the full required thickness and compacted.

Geogrid which is damaged during installation or subsequent placement of granular material, due to failure of the Contractor to comply with these provisions, shall be repaired or replaced at his expense, including costs of removal and replacement of the granular material.

Torn Geogrid may be patched in-place by cutting and placing a piece of the same Geogrid over the tear. The dimensions of the patch shall be at least 600 mm (2 feet) larger than the largest dimension of the tear and it shall be weighted or otherwise secured to prevent the granular material from causing lap separation.

<u>Method of Measurement:</u> Geotechnical Reinforcement will be measured in square meters (square yards) for the surface area placed. The excavation, replacement and compaction of the granular layer shall be paid for separately. Each layer of geogrid will be paid for separately.

<u>Basis of Payment:</u> This work will be measured in place and the area computed in square yards. The work will be paid for at the contract unit price per Square Meter (Square Yard) for GEOTECHNICAL REINFORCEMENT.

PAVEMENT PATCHING SPECIAL

Effective May 14, 2003 Revised August 25, 2005

This work shall consist of placing material at the locations shown in the plans or as directed by the Engineer to temporarily patch the pavement or sidewalk where storm sewer is installed. All work shall conform to Section 442 of the Standard Specifications.

The patches shall consist of 12" of Aggregate Base Course Type A and 3" of Bituminous Mixture Complete. If hot mix asphalt (HMA) is not available due to winter plant shutdown, cold patch bituminous material shall be installed and maintained until such time that HMA becomes available. As soon as HMA is available, the cold patch material shall be removed and HMA shall be installed. This work shall not be paid separately but shall be considered included in the unit price per Square Yard for PAVEMENT PATCHING SPECIAL.

Patches shall be measured in place for payment in square yards.

This work shall be paid for at the contract unit price per Square Yard for PAVEMENT PATCHING SPECIAL.

RELOCATE EXISTING SURVEY MARKERS

Effective July 1, 1994

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

The Surveyor shall place as a minimum a 900 mm (36") x 19 mm (3/4") round iron pin for the property marker. This work will be paid for at the contract unit price Each for RELOCATE EXISTING SURVEY MARKERS.

SEGMENTAL CONCRETE BLOCK WALL

Effective: January 7, 1999

Revised: May 5, 2000

Description This work shall consist of furnishing the design computations, shop plans, materials, equipment and labor to construct a Segmental Concrete Block Retaining Wall with a maximum height of 1.5 m (5 ft) as measured from the top of block elevation to the finished grade line at the wall face.

General The wall shall consist of a leveling pad, pre-cast concrete blocks, select granular backfill and, if required by the design, soil reinforcement. The materials, fabrication, and construction of the wall components are subject to approval by the Engineer. The Engineer reserves the right to obtain random samples for material testing. The wall shall be designed and constructed according to the lines, grades, and dimensions shown on the contract plans and approved shop plans.

<u>Submittals</u> The wall supplier shall submit design computations and shop plans to the Engineer. The shop plans shall be sealed by an Illinois Licensed Professional Engineer and shall include all details, dimensions, quantities, and cross sections necessary to construct the wall and shall include, but not be limited to, the following items:

- (a) Plan, elevation, and cross section sheet(s) for each wall showing the following:
 - (1) A plan view of the wall indicating the offsets from the construction centerline to the first coarse of blocks at all changes in horizontal alignment. These shall be calculated using the offsets to the front face of the block shown on the contract plans and the suppliers proposed wall batter. The plan view shall indicate bottom (and top coarse of block when battered), the excavation and select granular backfill limits as well as any soil reinforcing required by the design. The centerline of any drainage structure or pipe behind or passing through/under the wall shall also be shown.
 - (2) An elevation view of the wall, indicating the elevation and all steps in the top coarse of blocks along the length of the wall. The top of these blocks shall be at or above the theoretical top of block line shown on the contract plans. This view shall also show the steps and proposed top of leveling pad elevations as well as the finished grade line at the wall face specified on the contract plans. These leveling pad elevations shall be located at or below the theoretical top of leveling line shown on the contract plans. The location, size, and length of any soil reinforcing connected to the blocks shall be indicated.
 - (3) Typical cross section(s) showing the limits of the select granular backfill, soil reinforcement if used in the design. The right-of-way limits shall be indicated as well as the proposed excavation, cut slopes, and the elevation relationship between existing ground conditions and proposed grades.
 - (4) All general notes required for constructing the wall.

- (b) All details for the leveling pads, including the steps, shall be shown. The theoretical top of the leveling pad shall either be below the anticipated frost depth or 450 mm (1.5 feet) below the finished grade line at the wall face, whichever is greater; unless otherwise shown on the plans. The minimum leveling pad thickness shall be 152 mm (6 in.)
- (c) Cap blocks shall be used to cover the top of the standard block units. The top coarse of blocks and cap blocks shall be stepped to satisfy the top of block line shown on the contract plans.
- (d) All details of the block and/or soil reinforcement placement around all appurtenances located behind, on top of, or passing through the wall shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular design arrangement shall also be submitted.
- (e) All details of the blocks, including color and texture shall be shown. The exterior face shall preferably be straight, textured with a "split rock face" pattern, and dark gray in color unless otherwise stated on the plans.
- (f) All block types (standard, cap, corner, and radius turning blocks) shall be detailed showing all dimensions.
- (g) All blocks shall have alignment/connection devices such as shear keys, leading/trailing lips, or pins. The details for the connection devices between adjacent blocks and the block to soil reinforcement shall be shown. The block set back or face batter shall be limited to 20 degrees from vertical, unless otherwise shown by the plans.

The initial submittal shall include 3 sets of prints of the detail shop plans and 1 set of calculations. One set of plans will be returned to the Contractor with any corrections indicated. After approval, the Contractor shall furnish the Engineer with 8 sets of corrected plan prints for distribution. No work or ordering of materials for the structure shall be done by the Contractor until the submittal has been approved in writing by the Engineer.

Materials The materials shall meet the following requirements:

(a) Pre-cast Concrete Block: The block proposed for use shall be produced according to the Department's Policy Memorandum "Quality Control/ Quality Assurance Program for Precast Concrete Products", and shall satisfy the following:

Conform to the requirements of ASTM C 1372 except as follows:

- 1. Fly ash shall be according to Article 1010.02.
- 2. Ground granulated blast-furnace slag shall be according to AASHTO M 302.
- 3. Aggregate shall be according to Articles 1003.02 and 1004.02, with the exception of gradation. Chert gravel may be used based on past in-service satisfactory performance, in the environment in which the product was used.

- 4. Water shall be according to Section 1002.
- 5. Testing for freeze-thaw durability will not be required. However, unsatisfactory field performance as determined by the Department will be cause to prohibit the use of the block on Department projects.
- (b) Select Granular Backfill: The material behind the blocks and above a 1:1 slope extending upward from either the back of the bottom block or soil reinforcement (whichever is greater) shall consist of either a coarse aggregate according to Article 1004.06(a), or a fine aggregate according to the first sentence of Article 1003.04(a). The aggregate used shall also meet the following:

CA 6 thru CA 16 (Article 1004.01(c))
FA 1, FA 2, or FA 20 (Article 1003.01(c))
Minimum Class C (Article 1004.01(b))
Minimum Class C (Article 1003.01(b))
34° minimum (AASHTO T 236)
4.5 to 9 (AASHTO T 289)

When a fine aggregate is selected, the rear of all block joints shall be covered by a nonwoven needle punch geotextile filter material according to Article 1080.05 of the Standard Specifications and shall have a minimum permeability according to ASTM D 4491 of 0.008 cm/sec. All fabric overlaps shall be 150 mm (6 inches) and non-sewn. As an alternative to the geotextile, a coarse aggregate shall be placed against the back face of the blocks to create a minimum 300 mm (12 inches) wide continuous gradation filter to prevent the select fill material from passing through the block joints.

- (c) Leveling pad: The material shall be either Class SI concrete according to Article 1020.04 or compacted coarse aggregate according to Articles 1004.04, (a) and (b). The compacted coarse aggregate gradation shall be CA 6 or CA 10.
- (d) Soil Reinforcement: If soil reinforcement is required by the approved design, the Contractor shall submit a manufacturer's certification for the soil reinforcement properties which equals or exceeds those required in the design computations. The soil reinforcement shall be manufactured from high density polyethylene (HDPE) uniaxial or polypropylene biaxial resins or high tenacity polyester fibers with a PVC coating, stored between -29 and 60° C (-20 and 140° F). The following standards shall be used in determining and demonstrating the soil reinforcement capacities:

ASTM D-638	Test Method for Tensile Properties of Plastic
ASTM D-1248	Specification for Polyethylene Plastics Molding and Extrusion Materials
ASTM D-4218	Test Method for Carbon Black Content in Polyethylene Compounds
ASTM D-5262	Test Method for Evaluating the Unconfined Tension Creep Behavior of
	Geosynthetics
GG1-Standard	Test Method for Geogrid Rib Tensile Strength
GG2-Standard	Test Method for Geogrid Junction Strength
GG4-Standard	Practice for Determination of the Long Term Design Strength of Geogrid
GG5-Standard	Practice for Evaluating Geogrid Pullout Behavior

Design Criteria The design shall be according to AASHTO Specifications and commentaries for Earth Retaining Walls or FHWA Publication No. HI-95-038, SA-96-071 and SA-96-072. The wall supplier shall be responsible for all internal stability aspects of the wall design.

Internal stability design shall insure that adequate factors of safety against overturning and sliding are present at each level of block. If required by design, soil reinforcement shall be utilized and the loading at the block/soil reinforcement connection as well as the failure surface must be indicated. The calculations to determine the allowable load of the soil reinforcement and the factor of safety against pullout shall also be included. The analysis of settlement, bearing capacity, and overall slope stability are the responsibility of the Department.

External loads such as those applied through structure foundations, from traffic or railroads, slope surcharge etc., shall be accounted for in the internal stability design. The presence of all appurtenances behind, in front of, mounted upon, or passing through the wall volume such as drainage structures, utilities, structure foundation elements, or other items shall be accounted for in the internal stability design of the wall.

<u>Construction Requirements</u> The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include all costs related to this technical assistance in the unit price bid for this item.

The foundation material for the leveling pad and select granular backfill volume shall be graded to the design elevation and compacted according to Article 205.06, except the minimum required compaction shall be 95% of the standard laboratory density. Any foundation soils found to be unsuitable shall be removed and replaced as directed by the Engineer and shall be paid for according to Article 109.04.

The select granular backfill lift placement shall closely follow the erection of each coarse of blocks. All aggregate shall be swept from the top of the block prior to placing the next block lift. If soil reinforcement is used, the select granular backfill material shall be leveled and compacted before placing and attaching the soil reinforcement to the blocks. The soil reinforcement shall be pulled taut, staked in place, and select fill placed from the rear face of the blocks outward. The lift thickness shall be the lesser of 255 mm (10 inches) loose measurement or the proposed block height.

The select granular backfill shall be compacted according to Article 205.06, except the minimum required compaction shall be 95% of the standard laboratory density. Compaction shall be achieved using a minimum of 3 passes of a lightweight mechanical tamper, roller, or vibratory system. The top 300 mm (12 inches) of backfill shall be a cohesive, impervious material capable of supporting vegetation, unless other details are specified on the plans.

The blocks shall be maintained in position as successive lifts are compacted along the rear face of the block. Vertical, horizontal, and rotational alignment tolerances shall not exceed 12 mm (1/2 inch) when measured along a 3 m (10 ft.) straight edge.

<u>Method of Measurement</u> Segmental Concrete Block Wall will be measured by the square meter (square foot) of wall face from the top of block line to the theoretical top of the leveling pad for the length of the wall in a vertical plane, as shown on the contract plans.

<u>Basis of Payment</u> This work will be paid for at the contract unit price per square meter (square foot) for SEGMENTAL CONCRETE BLOCK WALL.

STORM SEWER, RUBBER GASKET

Effective: April 5, 2005

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

Storm Sewer, Rubber Gasket is to be used at locations where the water main or water service line crosses below the storm sewer, regardless of vertical separation, or where the bottom of the water main or water service line is less than 457mm (18") above the top of the storm sewer.

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

At locations shown on the plans, the contractor shall furnish and install a reinforced concrete pipe of the size, class and type indicated with rubber gasket joints which conforms to ASTM Specification C-361.

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

This work will be measured and paid for at the contract unit price per meter (foot) for STORM SEWER, RUBBER GASKET of the type and size indicated.

STORM SEWER WATER MAIN REQUIREMENT

Effective: June 12, 1997

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

Materials:

a) Ductile iron water main Class 52

Joints for Ductile Iron pipe shall be:

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

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

CONSTRUCTION REQUIREMENTS

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

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

Method of Measurement: Storm sewer water main of the various diameters will be measured for payment in meters (feet), measured in place.

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

CONCRETE REMOVAL

Effective: March 7, 2007

This work shall consist of the removal of a reinforced concrete landscape structure located in the Southeast corner of Kishwaukee Street and 18th Avenue as shown on the plans. This work shall be completed in accordance with Section 501 of the Standard Specifications and as noted herein.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per Each for CONCRETE REMOVAL.

CONCRETE REMOVAL (SPECIAL)

Effective February 10, 2007

This work shall consist of the removal of a three foot high concrete loading dock at the location shown on the plans. This work shall be completed in accordance with Section 501 of the Standard Specifications and as noted herein.

The existing structure shall be removed to at least 1 foot below the proposed elevation of subgrade or ground surface. Portions of existing structure below this elevation that interfere with the proposed construction shall also be removed.

Any excavation made by the Contractor for the removal shall be replaced. The excavated space shall be filled with material according to Section 205 at no additional cost to the Department.

<u>Method of Measurement</u>: This work will be measured for payment in place across the top surface of loading dock and the area computed in square yards.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per Square Yard for CONCRETE REMOVAL (SPECIAL).

FENCE REMOVAL

Effective February 10, 2007

This work shall consist of the satisfactory removal of portions of existing fence and its appurtenances, at locations shown in the plans or as directed by the Engineer. This work shall be completed according to Section 201 of the Standard Specifications and as noted herein.

The Contractor will be required to transport all removed material off the project site as specified in applicable portions of Article 202.03 of the Standard Specifications.

<u>Method of Measurement</u>: This work shall be measured for payment in feet, along the base of existing fence.

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

FOUNDATION REMOVAL

Effective March 19, 2007

This work shall consist of the removal of sign/light foundations. Removal operations shall be performed in accordance with the provisions of Article 440 of the Standard Specifications and shall include removal to an elevation at least one foot BELOW (whichever depth is greater, proposed or existing) GROUND SURFACE.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per each for FOUNDATION REMOVAL.

SANITARY SEWERS, PVC, 8"

Effective April 27, 2007

This work shall include all permits, mobilization, site preparation, trench excavation and backfilling, pipe bedding, sanitary sewer installation (size and type, as required) on grade and in line according to the plans and specifications. The item shall also include trench dewatering, power tamping, sand backfill, site restoration, grading and dust control, and all property restoration; and all other materials, labor, supervision, transportation, services, and all else that is necessary for the completion of the work and not included elsewhere. Utility relocation shall be incidental to this work, unless specifically provided for elsewhere.

Sanitary sewer pipe installation that varies +0.05 feet from the proposed grade and/or +0.15 feet from the proposed line will not be accepted. This does not preclude the RRWRD from requiring closer tolerances in the field, nor does it imply an obligation on the RRWRD's part to establish the grade or line during construction. The Contractor is solely responsible for maintaining proper lines and grades for the work. The Contractor shall provide at least one laser device for setting lines and

grades for subgrade and pipe invert on all parts of the work. The device(s) shall be of acceptable design and maintained in good working condition for the duration of the project. The Contractor shall employ workers with the expertise to operate the device(s). The laser device(s) shall be considered as a convenience to the Contractor and shall be operated at no extra cost to the Department.

When directed by the RRWRD, the Contractor shall provide a blower for use in conjunction with the laser. The Contractor shall also provide, and have available on site at all times, a calibrated level and level rod.

Sanitary sewer pipe and pipe laying methods must conform to the requirements contained in the *Technical Specifications* (on file) and as otherwise stipulated or required.

All sanitary sewer mains and services shall be PVC Watermain-Quality (SDR 26) meeting the requirements of ASTM D2241, with joints in conformance with ASTM D3139.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per Foot for SANITARY SEWERS, PVC, 8".

PRECONSTRUCTION VIDEO TAPING

Effective: March 6, 2007

This work shall consist of preparing pre-construction video documentation of all features in the area affected by construction and the alternate route for this contract. All video equipment, storage media and accessories shall be DVD or high quality VHS equipment. Pre-construction video documentation shall consist of a series of high resolution color audio-video disks or tapes showing all areas proposed to be affected by this construction contract.

All pertinent exterior features within the construction's zone of influence shall be shown in sufficient detail to document its pre-construction condition. Features to be shown shall include but not be limited to pavement, curbs, driveways, sidewalks, retaining walls, buildings, landscaping, trees, shrubbery, fences, light posts, etc. View orientation shall be maintained by audio commentary on the audio track of each video to explain what is being viewed.

The pre-construction video taping shall be completed and one copy submitted to the Engineer for approval prior to commencement of mobilization and/or construction activities. The submitted copy shall be retained by the Department for documentation purposes.

<u>Basis of Payment:</u> This work shall be paid for at the contract price per Lump Sum for PRECONSTRUCTION VIDEO TAPING.

SANITARY MANHOLE, 4'-DIAMETER

Effective April 27, 2007

This work shall consist of furnishing all materials, exterior joint wraps and seals, accessories, equipment, tools, transportation, services and performance of all operations required to construct four-foot (4') inside diameter manholes as shown and detailed on the plans or as directed by the Rock River Water Reclamation District, all in accordance with Article 6:3 and 7 of the *Technical*

Specifications (on file), and the pipe manufacturers requirements. This item shall also include furnishing and placing of the manhole frame and lid as shown on the plans. Rim of frame to be set to grade as shown on plans or as specified in this section; Contractor shall field-verify all invert and rim elevations shown in plans, as they are approximate.

The top of the precast cone section shall be at an elevation to allow for adjustment of frame (12" maximum) without disturbing precast cone section. This item shall also include furnishing and installing a Neenah Model R-1670-A frame or East Jordan Model E-1117 frame with self-sealing, non-rocking lid, 24" diameter, (or approved equal), manhole steps, type and spacing per Department requirements. Manhole lids shall have the word "SANITARY" cast on the center in 2" high lettering and shall have concealed pick holes. Pipe stubs, fittings, adaptors and couplings, as well as outside drop connections at manholes shall be considered incidental to this item, unless specifically provided for elsewhere, herein.

Unless otherwise specified or shown, manhole frames shall be set at one inch (1") above finish grade in turf areas and at finish grade in paved areas. Concrete adjusting rings shall be standard reinforced concrete pipe pattern. Minimum ring thickness shall be two inches (2"). Maximum ring thickness shall be twelve inches (12"). ASTM requirements for adjusting rings: conform to ASTM C478 and ASTM C139, latest revision. Concrete for adjusting rings: Class "A" as specified in T.S. 5:3 (a). Concrete in the most current edition of the RRWRD's *General Provisions and Technical Specifications for Sanitary Sewer Construction* (on file); manufacturer to supply certified test results showing compliance with concrete strength requirements. Absorption requirements: ACI Specification P-I-C and ASTM C139, latest revision.

All adjusting ring joints shall be sealed water-tight by means of E-Z Stik, Kent-Seal, or equal (including cast iron frame to concrete adjusting ring). Minimum adjusting ring placement height: four inches (4"). Maximum adjusting ring placement height: twelve inches (12"), with only one (1) two-inch (2") ring per manhole; no more than thirty inches (30") from the top of casting to the first step. Joint between adjusting rings and casting shall be water-tight by means of a butyl material seal (E-Z Stik, Kent-Seal, or equal). No adjusting rings are required for manholes in turf areas or in roadways with curb and gutter.

In roadways only: metal or plastic shims will be required only if the casting in the roadway must be pitched to accommodate roadway pavement. Shims must be equally spaced with no more than one inch (1") of total adjustment. No butyl materials seal (E-Z Stik, Kent-Seal, or equal) will be used under the casting and the void area between the casting, and masonry shall be grouted from the outside to the inside face of the adjusting ring, with the entire void to be filled. No trench compaction shall take place until the concrete has cured and hardened to the RRWRD's satisfaction.

All manholes located at driveways shall have the cone section rotated so that the manhole casting and cone allow room for a culvert pipe at the driveway. All manholes located off the roadway and not in driveways shall have the cone section rotated so that the manhole casting is located as close to the road as possible.

The Contractor shall install external casting seals on all manholes per the Standard Detail Sheet.

All manholes shall be vacuum tested per ASTM C1244 *Standard Test Method For Concrete Sewer Manholes By The Negative Pressure (Vacuum) Test* prior to placing into service.

The Contractor shall construct a paved bench in each manhole per the Standard Detail Sheet or as directed by the RRWRD. Manhole benches shall have a minimum slope of two inches (2") per foot.

Watertight pipe connections to new manholes shall be made by using rubber-gasket type seals cast integrally in the manhole wall per ASTM F-477 or expandable gaskets per ASTM C-943. The design shall be in accordance with the manufacturer's requirements and shall receive prior approval of the RRWRD.

Manhole shop drawings must be submitted to the RRWRD for approval prior to manufacture and delivery to the site. Manhole shop drawings shall include a specified detail for each manhole showing the number and height of barrel sections, height of cone section, number and size of adjusting rings, location and spacing of steps and elevations of all pipes. A plan view shall be provided showing the orientation of pipe openings.

Flat tops will not be permitted on any manholes - eccentric cone sections shall be a component of each manhole.

This item shall include all materials, labor, transportation, core drilling existing manholes as required, reworking existing manhole inverts and/or benches as required, outside drop connections, all manholes of the sizes and types required, dewatering, pipe stubs, gasket seals, equipment, supervision and service necessary to complete the above described operation with all necessary appurtenances, site preparations and restoration work.

Basis of Payment: This work shall be paid for at the contract unit price Each for SANITARY MANHOLE, 4'-DIAMETER.

SANITARY SYSTEM WORK REQUIREMENTS

Effective April 27, 2007

This section contains detailed specifications relating to the sanitary sewer proposal items. The work to be done under each item is discussed along with units for payment and measurement for payment. However, the descriptions given do not necessarily outline all the work to be done under any item. In addition, the pipe, fittings and pipe installation shall conform to the following specifications: *Standard Specifications for Water and Sewer Main Construction in Illinois,* 5th Edition; May, 1996, Division IV, Sections 41–2.01 A through C, Protection of Water Mains, NASSCO Specifications for Sewer Collection System Rehabilitation, and Rock River Water Reclamation District *General Provisions and Technical Specifications for Sanitary Sewer Construction* (on file).

In case of apparent contradictions between the Detailed Specifications and the *Technical Specifications* (on file), these Detailed Specifications shall govern.

The Contractor shall:

• Notify the Rock River Water Reclamation District, the Illinois Department of Transportation and the City of Rockford Department of Pubic Works 48 hours prior to beginning any work to have an inspector present during all construction.

- Notify all affected property owners 48 hours minimum prior to start of construction.
- Be responsible for securing and complying with all permits and all bonds, insurance, etc., and for paying all fees required by the permits. Copies of all secured permits shall be provided to the RRWRD Engineer prior to the start of construction. Any construction performed in the absence of a RRWRD inspector will not be accepted.
- Notify J.U.L.I.E. at 1–800–892–0123, and all utilities not on the J.U.L.I.E. network, 48 hours minimum prior to construction. All underground utilities shall be located by the affected utility. The Contractor shall exercise special care when excavating near utilities to avoid any damage.
- Repair or restore any damaged pavements, driveways, bituminous surfacing, turf, trees, structures, etc., as directed by the RRWRD. Restoration in right-of-way areas shall be restored per roadway authority requirements.
- Secure all temporary or permanent access, storage or temporary easements needed for construction.
- Be responsible for all tests of materials and final installation required by the RRWRD. All deficiencies noted by the inspectors shall be promptly corrected by the Contractor at no additional cost to the Department.

All work in streets, highways, railroad rights-of-way or flood plains shall be subject to the regulations and requirements of the appropriate agencies. Should conflicts or contradictions arise between the plans, specifications and the roadway, railroad or waterway permits, the permits shall govern. The Contractor shall be responsible for the temporary maintenance of all roadways and drives over the course of this project and shall maintain access at all times. Excavated or other materials shall not be stored or cast upon pavements. The Contractor shall clean up areas from which spoil has been removed at the end of each day by sweeping, washing or other approved methods. When the work is halted by rain, the Contractor shall clean up the working areas before leaving the site. The Contractor shall provide traffic control manpower and/or equipment as required by the jurisdictional roadway agency(ies). No work shall be permitted on Sundays without prior approval by the Department and the RRWRD Engineering Manager.

Final inspection, testing and acceptance tests shall be in accordance with *Technical Specifications* (on file) and requirements of the RRWRD except as modified by the detailed specifications.

The Contractor shall maintain on-site at all times during construction, a person competent in compliance with OSHA trenching and excavation requirements. This person shall be able to identify existing and potential hazards in the work environment (unsanitary, dangerous conditions, etc.) and shall be deputized to take prompt preventative or corrective measures to avoid or eliminate hazards. The methods and means to comply with construction site safety shall be the sole responsibility of the Contractor. RRWRD staff is not responsible for the Contractor's compliance procedures.

All sanitary sewer sections in this project have been televised. TV Logs are available for viewing at the RRWRD Engineering Department during regular business hours.

Any service reconnections must be inspected by a RRWRD Inspector and the City of Rockford Plumbing Inspector.

Alignment Variations: General location of sewer is governed by existing obstructions in the field. Minor variations in location may be made after approval by RRWRD to facilitate construction operations.

Utility Locations: The Contractor shall be responsible for relocation and reconstruction of all utilities, power poles, signs, lights, signals, underground utilities, etc. conflicting with the proposed construction whether temporary or permanent, in accordance with G.R. 9.1 (on file). Not all utilities are necessarily shown on the plans, and utility locations shown are not necessarily true. The location and/or elevation of all existing utilities (e.g., gas, water, electric, field tiles, irrigation, etc.) shall be determined by the Contractor. The Contractor shall be responsible for support and protection of any and all of these items where construction passes close by. For the duration of this project, the Contractor shall be responsible for maintaining the current level of service provided by the respective utilities to all properties affected by construction.

Utility Notification: The Contractor is to notify all utility companies as well as J.U.L.I.E. (1-800-892-0123) at least 48 hours prior to any construction. The Contractor shall notify the Rock River Water Reclamation District forty-eight (48) hours before beginning work. The Contractor shall notify the governing roadway authority(ies) forty-eight (48) hours prior to beginning work within public rights-of-way.

Damage to Structures: The Contractor is responsible for any damages caused by his operations to existing structures above or below the ground as covered in G.C. 12:1 of the *General Provisions* and *Technical Specifications for Sanitary Sewer Construction in the Sanitary District of Rockford* (on file).

Access: The Contractor shall provide access to the residences and/or businesses, schools, etc. at all times (i.e., drives, roadways, ramps, etc. must remain open or must be provided) for the duration of this work. All materials, equipment, labor, etc. necessary to assure this shall be incidental to the various sanitary sewer pay items.

CONCRETE STEP REMOVAL

Effective February 10, 2007

This work shall consist of removing concrete steps from locations shown on the plans. This work shall be done according to Section 440 of the Standard Specifications and as specified here in.

The Contractor shall remove all existing steps shown at various locations on the plans including satisfactory disposal of the concrete outside of State right-of-way. The Contractor shall take extra precautions as not to cause any damage to the adjacent property or sidewalk landing not called for removal. If any such damage occurs, it shall be the Contractor's responsibility to repair or replace any affected elements at no additional cost to the Department.

<u>Method of Measurement:</u> This work will be measured for payment in units of each, at the locations specified.

Basis of Payment: This work will be paid for at the contract unit price per each for CONCRETE STEP REMOVAL.

CONCRETE WALL REMOVAL

Effective February 10, 2007

This work shall consist of complete removal and disposal of concrete retaining walls at locations shown in the plans. All work shall conform to Section 440 of the Standard Specifications and shall include removal to an elevation at least one foot below proposed elevation of subgrade or ground surface.

Removal of bricks or stones used as retaining walls or planter boxes will not be paid for separately, but will be considered as included in clearing operations per Section 201 of the Standard Specifications.

<u>Method of Measurement:</u> This work shall be measured by the foot along the centerline of the top face of the wall.

Basis of Payment: This work shall be paid for at the contract unit price per Foot for CONCRETE WALL REMOVAL.

PLUG EXISTING SANITARY SEWERS

Effective: March 6, 2007

This work shall consist of plugging the ends of existing sanitary sewer to be abandoned at the locations shown in the plans. Plugging shall consist of sealing the ends of the pipe with Class SI Concrete or brick and mortar.

Basis of Payment: This work shall be paid at the contract unit price per EACH for PLUG EXISTING SANITARY SEWERS.

SANITARY MANHOLES TO BE REMOVED

Effective April 27, 2007

This work shall consist of removing existing sanitary manholes at locations shown on the plans or as directed by the Engineer. This work shall conform to Section 605 of the Standard Specifications and as noted herein.

Basis of Payment: This work shall be paid for at the contract unit price Each for SANITARY MANHOLES TO BE REMOVED.

SANITARY MANHOLES TO BE ADJUSTED

Effective: March 8, 2007

This work shall consist of adjusting sanitary manholes at the locations shown on the plans.

Except as noted herein and on the Rock River Water Reclamation District (RRWRD) detail sheets, the manholes to be adjusted shall conform to the requirements of Section 602 of the Standard Specifications.

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Adjusting rings will be a minimum of 4 inches in thickness. The minimum thickness is waived if the manhole is in a curb and gutter. A maximum of 12 inches of adjusting rings is allowed. No more than one (1) – two inch thick adjusting ring per manhole. A maximum distance of 30" shall be allowed from the top of the casting to the first step. An external manhole (chimney) seal is to be installed. Flattop manholes are not permitted and adjustments by grouting are NOT permitted.

The Contractor shall contact the Rock River Water Reclamation District, who will provide replacement frames and grates for each adjusted manhole when the existing frame and grade are delivered to their office. Existing frames and grates shall not be reused unless approved by Rock River Water Reclamation District. The cost of dropping off and picking up Frames and Grates from the Rock River water Reclamation District shall be included in the cost of SANITARY MANHOLES TO BE ADJUSTED.

A Rock River Water Reclamation District inspector must be present to inspect any sanitary sewer manhole adjustments. A minimum of 48 hours advance notice will be required.

Basis of Payment. This work will be paid for at the contract unit price per Each for SANITARY MANHOLES TO BE ADJUSTED.

SANITARY SEWER SERVICE, 6" PVC, COMPLETE

Effective April 27, 2007

Work under this item shall include mobilization, site preparation, dewatering, trench excavation, backfilling and compaction, special pipe bedding, furnishing and installing six-inch (6") diameter PVC (WMQ/SDR 26) sanitary service pipes per ASTM D-2241, from the sewer main to the right-of-way line (or other RRWRD-approved point of termination), as shown on the plans, or as directed by the RRWRD, service risers as shown or directed, bends and air-tight stoppers in the upper end of each service.

Cleanout risers at the service termini are required.

The actual sewer service locations may vary from those shown on the plans. No additional compensation will be awarded for sewer service work at locations differing from those shown unless otherwise approved by the RRWRD.

Where the water table elevation is above the bottom of the pipe bedding, a porous granular backfill with 100 percent of the material passing a three–inch (3") sieve and a maximum of 15 percent (15%) passing a No. 4 sieve shall be substituted for the mechanically compacted granular material, extending to the limits of the bedding diagram. This work shall not be paid for separately but shall be considered included in the cost of SANITARY SEWER SERVICE, 6" PVC, COMPLETE.

Basis of Payment: This work shall be paid for at the contract unit price per each SANITARY SEWER SERVICE, 6" PVC, COMPLETE.

WATERMAIN MANHOLES TO BE ADJUSTED

Effective: March 20, 2007

This work shall consist of adjusting watermain manholes at the locations shown in the plans or as directed by the Engineer. This work shall be completed according to Section 602 of the Standard Specifications and as noted herein.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per Each for WATERMAIN MANHOLES TO BE ADJUSTED.

FILL EXISTING STORM SEWERS

Effective: March 20, 2007

This work shall consist of filling existing storm sewers with controlled low-strength material at the locations shown on the plans. This work shall conform to Section 593 of the Standard Specifications and as noted herein.

The Contractor shall remove all manholes and drainage structures to a level no more than one foot above the top of the pipe and shall check each drainage structure location to verify that the fill will not encroach into any adjacent system that is intended to maintain drainage operations. This work shall be completed prior to beginning filling operations at each location.

Method of Measurement: This work shall be measured by cubic yard of storm sewer area filled.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per Cubic Yard for FILL EXISTING STORM SEWERS.

TEMPORARY PAVEMENT AND TEMPORARY PAVEMENT REMOVAL

Effective April 27, 2004 Revised March 20, 2007

This work shall consist of placing a Hot-Mix Asphalt Base Course or Portland Cement Concrete Base Course and aggregate base to serve as a temporary runaround at the locations shown on the plans. The choice of material to be used for this item is left to the Contractor to choose from the following options:

HOT-MIX ASPHALT OPTION

This work shall consist of placing and compacting 12 inches of Sub-base Granular Material, Type A and constructing a 7 ½ inch thick Hot-Mix Asphalt Base Course to serve as a temporary runaround at the location shown on the plans. The base course shall consist of 5 ½ inches of Hot-Mix Asphalt Binder Course, IL 19.0, N70 and 2 inches of Hot-Mix Asphalt Surface Course, Mix "D", N70.. The Hot-Mix Asphalt design shall be as shown in the General Notes. This work shall be completed according to Sections 351 and 355 of the Standard Specifications.

All work and materials required to complete the work listed above shall be included in the contract unit cost per Square Yard for TEMPORARY PAVEMENT.

The base course and sub-base shall be removed after Stage 2 construction is completed. Removal shall be paid for separately at the contract unit price per Square Yard for TEMPORARY PAVEMENT REMOVAL.

PORTLAND CEMENT CONCRETE OPTION

This work shall consist of placing and compacting 12 inches of Sub-base Granular Material, Type A and constructing a 8 inch thick Portland Cement Concrete Base Course to serve as a temporary runaround at the location shown on the plans. This work shall be completed according to Sections 351 and 353 of the Standard Specifications.

Pavement fabric shall not be utilized in the base course.

The Contractor shall saw longitudinal centerline joints in the base course according to the Standard 420001, except that uncoated steel tie bars may be used instead of epoxy coated tie bars. These joints shall not be sealed.

The Contractor shall saw transverse joints in the base course at 20' centers according to the detail for Sawed Construction Joints in Standard 420001, except that dowel bars are not required. These joints shall not be sealed.

All work as listed above, including tie bars, sawed joints and all other required materials shall be included in the contract unit price per Square Yard for TEMPORARY PAVEMENT.

The base course, sub-base, and adjacent concrete curb, Type B shall be removed after Stage 4 construction is completed. Removal of these items shall be paid for separately at the contract unit price per Square Yard for TEMPORARY PAVEMENT REMOVAL.

TEMPORARY CHAIN LINK FENCE

Effective February 20, 2007

This work shall consist of furnishing, installing and removing chain link fence and chain link gates or sight screen chain link fence and sight screen chain link gates at the locations shown in the plans. This work shall be completed according to Standard 664001 and Sections 640 and 664 of the Standard Specifications and as noted herein.

Gates, if required, will be of a size and location as shown in the plans.

Sight screen will be required at the locations shown in the plans.

Section 640.04 and 664.11 of the Standard Specifications shall not be required.

Posts and concrete foundations will be completely removed. The resulting holes will be filled with a material meeting the requirements of Section 1003.04, except the top six (6) inches. The top six inches will be of a like material to the existing surface. No additional compensation will be provided for this work.
In order to assure security, the Contractor shall be responsible for monitoring any openings in the existing fence during temporary fence and gate installation activities. If it is necessary to leave a section of the existing chain link fence open overnight the Contractor shall secure chain link fence over the opening as directed by the Engineer. Additional payment will not be provided for this work. While any openings are present in the existing fence the Contractor shall concentrate his forces on the completion of the temporary fence and gate installation at that location.

Each temporary gate shall be secured with a padlock, which will be supplied by the Contractor. The Contractor shall provide two keys per padlock to the Engineer, who in turn will provide keys to property owner.

The contractor shall give the property owner 45 calendar days notice prior to removal of fence and gates.

<u>Method of Measurement</u>. Temporary chain link fence and temporary chain link fence sight screen will be measured for in feet, along the top of the fence from center to center of end posts, including the length occupied by gates.

<u>Basis of Payment.</u> Following approval of each installation, 60 percent of the bid price will be eligible for payment. The remaining 40 percent will be paid following removal of each installation. This work shall be paid for at the contract unit price per foot for TEMPORARY CHAIN LINK FENCE.

LIGHTING CONTROLLER PHOTOCELL RELAY

This work shall consist of furnishing and installing an electrical cabinet with control devices(s), distribution equipment, and wiring for control of the roadway lighting at the intersections. The lighting controller with photocell shall be mounted to the exterior of the traffic signal controller cabinet. This work shall be in accordance with Section 825 of the "Standard Specifications for Road and Bridge Construction."

The lighting shall operate on 120 volt.

The cabinet shall have an aluminum finish.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price each for LIGHTING CONTROLLER PHOTOCELL RELAY, which price shall be payment in full for furnishing the equipment described above and installing it in satisfactory condition.

FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

The controller shall conform to the specifications as stated in Section 857 of the "Standard Specifications for Road and Bridge Construction."

A separate 20-amp breaker shall be provided for a street light circuit.

The cabinet shall be equipped and ready with any equipment required for the future installation of a Fiber-Optic interconnect.

The contractor shall have a factory-trained technician from the manufacturer and/or supplier, with expertise in the controllers being installed, present during the controller installation. He will be expected to be able to program the controller timer, trouble-shoot and correct any problems with the equipment that arises and verify that the equipment is functioning according to the plans and specifications.

The traffic signal controller and cabinet assembly shall be fully tested by the equipment supplier. The supplier of the controller assembly shall provide a Certificate of Acceptance verifying that the conflict monitor has been tested, under load, for all possible combinations and functions properly.

The cabinet shall have an aluminum finish.

<u>Basis of Payment:</u> This item shall be paid for at the contract unit price each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, which price shall be payment in full for furnishing the equipment described above and installing it in satisfactory operating condition.

PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED, WITH COUNT-DOWN TIMER

This work shall consist of the furnishing and installation of the pedestrian signal LED signal head with countdown timer in accordance with Article 881 of the current "Standard Specifications for Road and Bridge Construction and the current edition of the "Manual on Uniform Traffic Control Devices."

<u>Basis of Payment:</u> This item shall be paid for at the contract unit price each for PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED, WITH COUNT-DOWN TIMER, which price shall be payment in full for furnishing the equipment described above and installing it in satisfactory operating condition.

MODIFY EXISTING CONTROLLER CABINET

This work shall consist of the furnishing and installation to modify the existing controller cabinet at intersection indicated on the plans.

The cabinet shall be equipped and ready with any equipment required for the Installation of the Video Camera Detection System, Emergency Vehicle Priority System and the future installation of a Fiber-Optic interconnect.

<u>Basis of Payment:</u> This item shall be paid for at the contract unit price per Each for MODIFY EXISTING CONTROLLER CABINET, which price shall be payment in full for furnishing the equipment described above and installing it in satisfactory operating condition.

TRACER CABLE

This pay item shall include all necessary work to install a Tracer Cable in the 2½" Conduit Installed for the future Fiber Optic interconnect as shown on these plans.

The tracer cable shall be No. 14 AWG solid copper conductor with orange XLP insulation and shall be in accordance with Section 1066 of the current: Standard Specification for Road and Bridge Construction."

<u>Basis of Payment</u>: This item shall be paid for at the contract unit price per Foot for TRACER CABLE, which price shall be payment in full for furnishing the labor and equipment as described above.

CONDUIT INSTALLED, 1 ¼ IN, 2 ½ IN, 4 IN, NON-METALLIC

This pay item shall include all necessary work to install conduit sized as indicated in the plans or as directed by the engineer whether pushed or trenched as needed as well as any backfill required. This work shall be in accordance with Section 810 and 815 of the "Standard Specifications for Road and Bridge Construction." Special attention will be required when attaching conduits at foundations such that all connection points of dissimilar materials shall be approved for use by the engineer prior to assembly.

Basis of Payment: This item shall be paid for at the contract unit price foot for CONDUIT INSTALLED, 1 ¼ IN, 2 ½ IN, 4 IN, NON-METALLIC, which price shall be payment in full for furnishing the labor and equipment as described above.

VIDEO CAMERA DETECTOR SYSTEM

The following video vehicle detection systems meet the specifications outlined in this section and are currently approved for use in District 2:

Iteris Vantage RZ4 (4 Camera System) Autoscope Solo Pro (4 Camera System)

The quantity and type of cable that will be required to complete the installation will vary depending on the equipment manufacturer.

The Contractor shall be responsible for determining the cable type and quantities of cable required for the video detection installations. All cable used shall meet current Department specifications, manufacturer's recommendations, and shall be subject to approval by the Engineer.

The system to be installed shall be the latest model. It shall include four (4) cameras plus one (1) spare, per intersection, to be delivered to the city of Rockford Traffic Engineer, the processor unit, connectors, software, and all cabling necessary back to the controller. All the equipment

shall compatible with the controller to be installed on this project. All equipment shall be installed according to manufacturer's recommendations. The video detection cameras shall be capable of being zoomed and focused from a connection in the controller cabinet.

The video vehicle detection system shall include all necessary cables, electrical junction boxes, electrical and coaxial surge suppression, hardware, software, programming, and any camera brackets that are required for installation. These items should be taken into consideration and shall be included in the bid price 4 camera system and 1 spare camera for the VIDEO CAMERA DETECTOR SYSTEM, per intersection.

If the unit requires the use of a power strip, the power strip/surge suppressor shall conform to the following minimum specifications:

- Let Through Voltage: <85 Volts
- Operating Voltage: 120VAC, 50/60H
- UL Suppressed Voltage Rating: 330V
- Energy Rating: 320J
- Peak Current NM/CM: 13k Amps NM, 13k Amps CM
- EMI/RFI Noise Filtration: >25-60dB

A total of one 12" black and white or color video monitor and trackball shall be included in the installation, to allow for the setup and monitoring of the video detection system.

All vehicle video detection systems shall be equipped with the latest software or firmware revisions.

The video vehicle system shall be configured and installed to NEMA TS1 Standards.

The Contractor shall be responsible for furnishing and installing all necessary camera brackets that are required for the camera installation. The camera mounting brackets shall be of aluminum or steel construction with a natural or white powder coated finish. The installation shall include any solid-state extension pole mountings necessary to obtain the proper sight distance. All brackets shall be submitted to the Department for approval prior to installation.

The minimum requirements for a video vehicle detection system are listed below:

1.0 General

This Specification sets forth the minimum requirements for a system that monitors vehicles on a roadway via processing of video images and provides detector outputs to a traffic controller or similar device. All video detection systems must be approved by the Department. Currently, only Iteris RZ4, RZ4C, and Econolite Autoscope Solo Pro video detection systems are approved for use within District 2.

1.1 System Hardware

The system shall consist of four video cameras, one spare camera, and an automatic control unit (ACU), per intersection. The ACU shall process all detected calls and shall be equipped with the latest firmware revisions.

1.2 System Software

The system shall be able to detect either approaching or receding vehicles in multiple traffic lanes. A minimum of 24 detection zones shall be user-definable per camera. The user shall be able to modify and delete previously defined detection zones. The software shall provide remote access operation and shall be the latest revision.

2.0 Functional Capabilities

2.1 Real-Time Detection

2.2 The ACU shall be capable of simultaneously processing information from up to four (4) video sources. The video shall be digitized and analyzed at a rate of 30 times per second.

2.3 The system shall be able to detect the presence of vehicles in a minimum of 96 detection zones within the combined field of view of the image sensors.

3.0 Vehicle Detection

3.1 Detection Zone Placement

The video detection system shall provide flexible detection zone placement anywhere and at any orientation within the combined field of view of the image sensors. In addition, detection zones shall be coordinated with the signal phases. Each detection zone shall provide a minimum of two kinds of detection (extend, delay, presence or counting) as each phase may require. The type of detection provided by the detection zone is to be determined by the active status of the zone's governing phase.

3.2 Optimal Detection

The video detection system shall reliably detect vehicle presence when the image sensor is mounted 30 feet (10 m) or higher above the roadway, when the image sensor is adjacent to the desired coverage area, and when the length of the detection area or field of view (FOV) is not greater than ten (10) times the mounting height of the image sensor. The image sensor shall not be required to be mounted directly over the roadway. A single image sensor, placed at the proper mounting height with the proper lens, shall be able to monitor six (6) to eight (8) traffic lanes simultaneously.

3.3 Detection Performance

Overall performance of the video detection system shall be comparable to inductive loops. Using standard image sensor optics and in the absence of occlusion, the system shall be able to detect vehicle presence with 98% accuracy under normal conditions, (days & night) and 96% accuracy under adverse conditions (fog, rain, snow). The ACU shall output a constant call for each enabled detector output channel if a loss of video signal occurs in any camera.

The ACU shall be capable of processing a minimum of twenty detector zones placed anywhere in the field of view of the camera.

4.0 ACU Hardware

4.1 ACU Mounting

The ACU shall be shelf or rack mountable. Nominal outside dimensions excluding connectors shall not exceed 7.25" x 19" x 10.5" (H x W x D).

4.2 ACU Environmental

The ACU shall be designed to operate reliably in the adverse environment found in the typical roadside traffic cabinet. It shall meet the environmental requirements set forth by the NEMA (National Electrical Manufacturers Association) TS1 and TS2 standards as well as the environmental requirements for Type 170 and Type 179 controllers. The minimum operating temperature range shall be from -35 to +74 degrees C at 0% to 95% relative humidity, non-condensing.

5.0 ACU Electrical

- 5.1 The ACU shall be modular in design and provide processing capability equivalent to the Intel Pentium microprocessor. The bus connections used to interconnect the modules of the ACU shall be gold-plated DIN connectors.
- 5.2 The ACU shall be powered by 89 135 VAC, 60 Hz, single phase, and draw 0.25 amps, or by 190 270 VAC, 50 Hz, single phase, and draw 0.12 amps. If a rack mountable ACU is supplied, it shall be capable of operating from 10 to 28 VDC. The power supply shall automatically adapt to the input power level. Surge ratings shall be as set forth in the NEMA TS1 and TS2 specifications.
- 5.3 Serial communications to a remote computer equipped with remote monitoring software shall be through an RS-232 serial port. A 9-pin "D" subminiature connector on the front of the ACU shall be used for serial communications.
- 5.4 The ACU shall be equipped with a NEMA TS2 RS-485 SDLC interface for communicating input and output information. Front panel LEDs shall provide status information when communications are open.
- 5.5 The ACU and/or camera hookup panel shall be equipped with four RS-170 (B&W)/NTSC (color) composite video inputs for coaxial camera connections so that signals from four image sensors can be processed in real-time.
- 5.6 The ACU shall be equipped with a port to provide communications to a computer running the remote access software.
- 5.7 The ACU and/or camera hookup panels used for a rack mountable ACU shall be equipped with a video output port.
- 5.8 The ACU shall be equipped with viewable front panel detection LED indications.

6.0 <u>Camera</u>

6.1 The video detection system shall use medium resolution, monochrome or color, image sensors as the video source for real-time vehicle detection. As a minimum, each image sensor shall provide the following capabilities:

- a. Images shall be produced with a CCD sensing element with horizontal resolution of at least 500 lines and vertical resolution of at least 350 lines.
- b. Useable video and resolvable features in the video image shall be produced when those features have luminance levels as low as 0.1 lux at night.
- c. Useable video and resolvable features in the video image shall be produced when those features have luminance levels as high as 10,000 lux during the day.
- d. Automatic gain, automatic iris, and absolute black reference controls shall be furnished.
- e. An optical filter and appropriate electronic circuitry shall be included in the image sensor to suppress "blooming" effects at night.
- 6.2 The image sensor shall be equipped with an integrated zoom lens with zoom and focus capabilities that can be changed using either configuration computer software or handheld controller. The machine vision processor (MVP) may be enclosed within the camera.
- 6.3 The image sensor and lens assembly shall be housed in an environmental enclosure that provides the following capabilities:
 - a. The enclosure shall be waterproof and dust-tight to NEMA-4 specifications.
 - b. The enclosure shall allow the image sensor to operate satisfactorily over an ambient temperature range from -34C to +74C while exposed to precipitation as well as direct sunlight.
 - c. The enclosure shall allow the image sensor horizon to be rotated in the field during installation.
 - d. The enclosure shall include a provision at the rear of the enclosure for connection of power and video signal cables fabricated at the factory. Input power to the environmental enclosure shall be either 115 VAC 60 Hertz or 24 VAC/DC 60 Hertz.
 - e. A heater shall be at the front of the enclosure to prevent the formation of ice and condensation in cold weather, as well as to assure proper operation of the lens' iris mechanism. The heater shall not interfere with the operation of the image sensor electronics, and it shall not cause interference with the video signal.
 - f. The enclosure shall be light-colored and shall include a sun shield to minimize solar heating. The front edge of the sunshield shall protrude beyond the front edge of the environmental enclosure and shall include provision to divert water flow to the sides of the sunshield. The amount of overhang of the sun shield shall be adjustable to prevent direct sunlight from entering the lens or hitting the faceplate.

- g. The total weight of the image sensor in the environmental enclosure with sunshield shall be less than 6 pounds.
- h. When operating in the environmental enclosure with power and video signal cables connected, the image sensor shall meet FCC class B requirements for electromagnetic interference emissions.
- 6.4 The video output of the image sensor shall be isolated from earth ground. All video connections from the image sensor to the video interface panel shall also be isolated from earth ground.
- 6.5 The video output, communication, and power to the image sensor shall include transient protection to prevent damage to the sensor due to transient voltages occurring on the cable leading from the image sensor to other field locations.
- 6.6 A stainless steel junction box shall be available as an option with each image sensor for installation on the structure used for image sensor mounting. The junction box shall contain a terminal block for terminating power to the image sensor and connection points for coaxial cables from the image sensor and from the ACU.
- 6.7 A video interface panel shall be included for installation inside of the traffic cabinet. The panel shall provide coaxial cable / twisted pair connection points and an Edco RMCXI-06 or approved equal transient suppressor for each image sensor. The shield side of the coaxial cable connection at the transient suppressor shall be connected to earth ground via the transient suppressor.

If the coaxial cable / twisted pair used to connect the video signal from the image sensor to the ACU are to be routed through a conduit containing unbundled AC power cables, a video isolation amplifier shall be installed in addition to the video interface panel if interference is present. There will be no additional compensation for providing the video isolation amplifier if necessitated by the presence of video interference. The isolation amplifier shall buffer the video signal and provide transient suppression. The isolation amplifier shall have a minimum common mode rejection ratio at 60 Hz of 100 dB.

- 6.8 The image sensor shall be connected to the ACU such that the video signal originating from the image sensor is not attenuated more than 3 dB when measured at the ACU. When the connection between the image sensor and the ACU is coaxial cable, the coaxial cable used shall be a low loss 75 ohm precision video cable suited for outdoor installation, such as Belden 8281, West Penn P806, or approved equal.
- 7.0 <u>Software</u>
- 7.1 The system shall include the remote access software that is used to setup and configure the video detection system. The software shall be of the latest revision.
- 7.2 All necessary cable, adapters, and other equipment shall be included with the system.
- 8.0 Installation and Training

- 8.1 The supplier of the video detection system shall supervise the installation and testing of the video and video vehicle detection equipment. A factory certified representative from the supplier shall be on-site during installation.
- 8.2 Training shall be available upon request.
- 9.0 <u>Warranty, Maintenance, and Support</u>
- 9.1 The video detection system shall be warranted by its supplier for a minimum of two (2) years from date of turn-on. This warranty shall cover all material defects and shall also provide all parts and labor as well as unlimited technical support.
- 9.2 Ongoing software support by the supplier shall include updates of the ACU and supervisor software. These updates shall be provided free of charge during the warranty period.
- 9.3 The supplier shall maintain a program for technical support and software updates following expiration of the warranty period. This program shall be made available to the contracting agency in the form of a separate agreement for continuing support.

<u>Basis of Payment:</u> The above work will be paid for at the contract unit price EACH for VIDEO CAMERA DETECTOR SYSTEM which price will be payment in full for all labor, equipment, and materials required to supply, install, configure, and test the video vehicle detection system described above, complete.

EMERGENCY VEHICLE PRIORITY SYSTEM

This work shall be performed in accordance with the manufacture's specifications and with Section 887 of the current "Standard Specifications for Road and Bridge Construction." Emergency Vehicle Priority System shall be compatible with the system in place with the system in place within the Rockford Fire Department. Chief D. William Robertson, 815/987-5645, of the Rockford Fire Department, shall be contacted to verify that the system is operating properly with the equipment in place on their emergency vehicles.

The cost of this pay item will be paid for at the contract unit price Each, per intersection, for EMERGENCY VEHICLE PRIORITY SYSTEM which price will be payment in full for all labor, equipment, and materials required to supply, install, configure, and test the Emergency Vehicle Priority System, complete.

PEDESTRIAN PUSH-BUTTON SPECIAL

This pay item shall include all necessary work to install Pedestrian Push-Button Special at location indicated the plans. This work shall be in accordance with Section 888 of the Standard Specifications for Road and Bridge Construction.

This button shall be highly vandal resistant button with essentially no moving parts. It is pressure activated, but can withstand an impact from a baseball bat or hammer. Then the switch activates, you hear a two-tone beep and the LED flashes.

Body Material: 316 Stainless Steel Piezo Driven Solid State Switch: Operating Temperature: - 30° F to 165° F (-34°C to 70°C) Operating Voltage: 15-36V DC to 12-28V AC On Resistance: 10Ω typical Operating Life: Greater than 100 million operations Operating Life: Greater than 100 million operations Operating Standby Current: 10µA typical (equivalent to 2 MΩ at 20V) LED: Operating Mode: Approx. 0.025 sec flash each time button is pressed Luminous Intensity: Greater than 1200 mcd (ultra bright red) Viewing angle: 160° Beeper: Sound simultaneously with LED flash Different tones for press and release, 2.3 kHz & 2.6 kHz

Beeper uses power form existing switch wires

This item shall be paid for at the contract unit price each for PEDESTRIAN PUSH-BUTTON SPECIAL, which price shall be payment in full for furnishing all labor, equipment, and material as described above.

REMOVE CONCRETE FOUNDATION

Effective March 20, 2007

This work shall consist of removing signal foundations at the locations shown in the plans. This work shall be completed according to Section 895 of the Standard Specifications and as noted herein.

Basis of Payment: This work shall be paid for at the contract unit price per Each for REMOVE CONCRETE FOUNDATION.

DOUBLE HANDHOLE REMOVAL

Effective March 20, 2007

This work shall consist of removing double handholes at the locations shown in the plans. This work shall be completed according to Section 895 of the Standard Specifications and as noted herein.

Basis of Payment: This work shall be paid for at the contract unit price per Each for DOUBLE HANDHOLE REMOVAL.

COMPLETION DATE

Effective March 20, 2007

The Contractor shall perform his work in such a manner that Stages 1 through 5B are complete on or prior to November 21, 2008. The project shall have all work for these stages completed except for tree planting and polyurea pavement markings in order to be considered complete. Stages 6 through 8 shall be completed on or prior to November 20, 2009. The project shall have all work for these stages completed except for tree planting in order to be considered complete.

If the Contractor fails to complete the project as described above, the Contractor shall be charged liquidated damages by the Department of SIX THOUSAND SEVEN HUNDRED DOLLARS (\$6,700) a day for each day the project is not completed beyond the completion date for that portion of the project. If in the event additional traffic control and protection is required to open the road or after the road is open to traffic, it shall be at the Contractor's expense.

The Contractor will be allowed 15 working days after the November 20, 2009 completion date to complete tree planting work.

NON-SPECIAL WASTE WORKING CONDITIONS

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

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

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

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

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

A) The Environmental Firm shall continuously monitor for worker protection and the Contractor shall manage any excavated soils **within the construction limits of this project as fill.**

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

- Station 359+89 to Station 360+90 0 to 100 feet RT (Rockford Products Corporation 612 Harrison Avenue) – non-special waste. Contaminants of concern sampling parameters: PNAs and Thallium
- Station 359+89 to Station 364+96 0 to 80 feet LT (Rockford Products Corporation 612 Harrison Avenue) – non-special waste. Contaminants of concern sampling parameters: PNAs and Thallium
- 3. Station 365+08 to Station 366+80 0 to 50 feet RT (Bourn and Koch 2500 Kishwaukee Street) non-special waste. Contaminants of concern sampling parameters: Thallium.
- 4. Station 367+54 to Station 368+28 0 to 50 feet RT (Bourn and Koch 2500 Kishwaukee Street) non-special waste. Contaminants of concern sampling parameters: Thallium.
- Station 371+81 to Station 371+96 65 to 100 feet RT (Former Gasoline Station 2326 Kishwaudee Street) – non-special waste. Contaminants of concern sampling parameters: Thallium.
- Station 372+56 to Station 373+30 0 to 55 feet RT (Former Gasoline Station 2326 Kishwaudee Street) – non-special waste. Contaminants of concern sampling parameters: Thallium.
- Station 373+30 to Station 375+01 0 to 40 feet RT (Cast Technologies Rockford 2320 Kishwaukee Street) – non-special waste. Contaminants of concern sampling parameters: Thallium.
- Station 375+83 to Station 376+39 0 to 80 feet RT (Cast Technologies Rockford 2320 Kishwaukee Street) – non-special waste. Contaminants of concern sampling parameters: Thallium.
- Station 377+68 to Station 379+23 0 to 70 meters feet LT (All Auto Parts Recycling 2235 Kishwaukee Street) – non-special waste. Contaminants of concern sampling parameters: Thallium.
- 10. Station 379+23 to Station 379+81 0 to 70 feet LT (Smitty's Pantry 2233 Kishwaukee Street) non-special waste. Contaminants of concern sampling parameters: Thallium.
- 11. Station 380+41 to Station 380+80 0 to 70 feet LT (Smitty's Pantry 2233 Kishwaukee Street) non-special waste. Contaminants of concern sampling parameters: Thallium.
- 12. Station 391+31 to Station 392+12 0 to 60 feet LT (Ablaze Welding and Fabrication 2003 Kishwaukee Street) non-special waste. Contaminants of concern sampling parameters: Thallium
- Station 392+16 to Station 392+91 0 to 60 feet LT (Roger Brothers Inc. 1925 Kishwaukee Street) – non-special waste. Contaminants of concern sampling parameters: Thallium.
- Station 393+61 to Station 395+71 0 to 60 feet LT (Goodwill Industries 1907 Kishwaukee Street) – non-special waste. Contaminants of concern sampling parameters: Thallium.

MAINTENANCE OF ROADWAYS

Effective: June 26, 2003

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

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

ISLAND REMOVAL

Effective October 10, 2006

This work shall consist of the removal and disposal of the islands as shown on the plans. This work shall be done in accordance with applicable portions of Section 440 of the Standard Specifications and shall include the removal of the concrete island surface, concrete curb & gutter, and excavation below the concrete to a depth of the bottom of the adjacent concrete pavement.

This work will be paid for at the contract unit price per Square Foot for ISLAND REMOVAL.

CONCRETE MEDIAN SURFACE, (STAMPING)

Effective April 20, 2007

This work shall consist of stamping and coloring a concrete median at the locations shown in the plans. This work shall conform to Section 606 of the Standard Specifications and as noted herein.

The median shall be textured with a stamping tool capable of producing a brick paver-like surface effect as shown in the plans. The concrete median shall be integrally colored with Davis Colors' Brick Red (product #160) or an approved equivalent. A minimum of 4% color pigment by weight shall be used.

Prior to stamping, a clear release shall be used to form a moisture barrier between the stamping tool and wet concrete to facilitate release of the tool. The median concrete shall be cured utilizing a clear curing compound or by using a paper fiber-backed curing sheet such as UltraCure by McTech Group.

Jobsite Samples: Producing architectural concrete requires skill and practice. Timing, application and texturing techniques, imprinting patterns, experience in use of the material, curing, and other factors will affect the final appearance and performance of colored, textured hardscapes. Representative jobsite samples will be produced and approved prior to installation.

Samples will be made for each color and texture and be of adequate size to be representative. The samples should be produced by the same workers who will install the colored, textured median using the contemplated job materials, construction tools, and techniques. All samples will be finished, textured or imprinted and cured as specified.

The Contractor shall take care to prevent staining the adjacent concrete surface while installing the colored median. Such preventive measures shall include, but shall not be limited to, use of polyethylene barriers to prevent staining. If staining of the adjacent concrete pavement or curb occurs, it shall be the Contractor's sole responsibility to repair such damage.

<u>Method of Measurement:</u> This work shall be measured in Square Feet of colored median surface area placed.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per Square Foot for CONCRETE MEDIAN SURFACE, (STAMPING).

CONCRETE MEDIAN (SPECIAL)

Effective April 20, 2007

This work shall consist of constructing solid concrete medians at the locations shown in the plans. This work shall be completed according to Section 606 of the Standard Specifications, Highway Standard 606301 and as noted herein.

The curb adjacent to the median will be constructed monolithically with the adjacent PCC pavement as opposed to being constructed with the median. The median will be constructed at the width shown in the plans with a depth of 11 ³/₄ inches. The median surface shall slope in a single direction as shown in the typical sections in the plans.

Coloring and brick stamping of the median shall be paid separately at the contract unit price per Square Foot for CONCRETE MEDIAN SURFACE, (STAMPING).

This work shall be paid for at the contract unit price per Square Foot for CONCRETE MEDIAN (SPECIAL).

PORTLAND CEMENT CONCRETE PAVEMENT 9 3/4" (JOINTED)

Effective April 20, 2007

This work shall consist of constructing Portland Cement Concrete Pavement at the locations shown in the plans. This work shall conform to Sections 420 and 606 of the Standard Specifications, applicable Highway Standards and as noted herein.

A Type M2 curb shall be constructed monolithically with the pavement at the edge of adjacent brick-stamped medians as shown in the plans.

A Type B final finish shall be used.

This work shall be paid for at the contract unit price per Square Yard for PORTLAND CEMENT CONCRETE PAVEMENT 9 3/4" (JOINTED).

START DATE

No work shall be started on Stages 6 through 8 until March 17, 2008.

CLASS B PATCHES

Effective April 20, 2007

This work shall be completed according to Sections 440 and 442 of the Standard Specifications, Highway Standard 442101 and as noted herein.

All patching areas shall be open to traffic at the conclusion of each day's construction activities. If the required cure time for a Class B Patch is prohibitive to opening the pavement to traffic on the same day as the patching activity, a temporary patch shall be placed. This work shall be paid for at the contract unit price per Square Yard for PAVEMENT PATCHING SPECIAL.

The temporary patch shall be removed on the following work day and replaced with a 9" thick Class B patch. High-Early Strength Concrete shall be required for the Class B patch.

This work, including removal and disposal of the temporary patch, shall be paid for at the contract unit price per Square Yard for CLASS B PATCHES.

STORM SEWERS, TYPE 2 8" (FIELD TILE REPLACEMENT)

Effective April 23, 2007

This work shall consist of connecting the ends of two lengths of existing 8" PVC pipe at the location shown in the plans. This work shall conform to Sections 550 and 611 of the Standard Specifications and as noted herein.

An 8" PVC pipe shall be utilized to connect the two existing pipe ends. Materials shall conform to the specifications for Class B Storm Sewer, Type 2.

This work shall be paid for at the contract unit price per Foot for STORM SEWERS, TYPE 2 8" (FIELD TILE REPLACEMENT).

WATERMAIN RELOCATION

Effective April 23, 2007

This work shall consist of relocating existing water mains below proposed storm sewer at the locations shown in the plans. This work shall conform to Section 561 and 563 of the Standard Specifications and as noted herein.

CONSTRUCTION REQUIREMENTS

The water main shall be relocated to eliminate conflicts with proposed storm sewer installations. Relocated water mains shall be installed according to applicable portions of Sections 561 and 563 of the Standard Specifications and the latest editions of the Illinois Standard Specifications for Water and Sewer Main Construction and the City of Rockford Water Division Specifications. In case of conflict between these three specifications, the order of precedence to govern shall be:

- 1) Standard Specifications for Water and Sewer Main Construction in Illinois
- 2) City of Rockford Water Division Specifications
- 3) Standard Specifications for Road and Bridge Construction.

All water mains shall be made from ductile iron or a City of Rockford approved equal material. All fittings including bends, tees, crosses, and plugs required for water mains that are 12" diameter and smaller will not be measured separately, but shall be included in the cost of the associated water main relocation.

Bacteriological sampling shall be done in accordance with the AWWA C651-99 regulations and Section 652.203 of the EPA Regulations. The Contractor shall provide a copy of all bacteriological laboratory reports to the City of Rockford.

Basis of Payment: This work shall be paid for at the contract unit price per Lump Sum for WATERMAIN RELOCATION.

VALVE VAULTS TO BE REMOVED

Effective April 23, 2007

This work shall consist of removing abandoned valve vaults and associated appurtenances at the locations shown in the plans. This work shall conform to Sections 561 and 605 of the Standard Specifications and as noted herein.

Any existing water lines or other appurtenances that are to remain in service shall be carefully maintained during and after removal of the abandoned vault. If the Contractor damages any such water lines, they shall be repaired at no additional cost to the Department.

The Contractor shall backfill around water lines that are to remain in service according to Section 561 of the Standard Specifications. This work shall not be paid separately but shall be included in the cost of VALVE VAULTS TO BE REMOVED.

This work shall be paid for at the contract unit price per Each for VALVE VAULTS TO BE REMOVED.

URETHANE PAVEMENT MARKING

Effective March 25, 2005

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

Materials: All materials shall meet the following specifications:

- (a) Modified Urethane Marking: The modified urethane pavement marking material shall consist of a homogeneous blend of modified urethane resins and pigments designed to provide a simple volumetric mixing ratio of two components (must be two volumes of Part A to one volume of Part B). No volatile solvent or fillers will be allowed.
- (b) Pigmentation: The pigment content by weight of Component A shall be determined by low temperature ashing according to ASTM D 3723. The pigment content shall not vary more then <u>+</u> two percent from the pigment content of the original qualified paint.

White Pigment shall be Titanium Dioxide meeting ASTM D 476 Type II, Utile. Yellow Pigment shall be Organic Yellow and contain no heavy metals.

- (c) Environmental: Upon heating to application temperature, the material shall not exude fumes, which are toxic or injurious to persons or property when handled according to manufacturer specifications. The modified urethane pavement marking material compositions shall not contain free isocyanate functionality.
- (d) Daylight Reflectance: The daylight directional reflectance of the cured modified urethane material (without reflective media) shall be a minimum of 80 percent (white) and 50 percent (yellow) relative to magnesium oxide when tested using a color spectrophotometer with a 45 degree circumferential / zero degrees geometry, illuminant C, and two degrees observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm. In addition, the color of the yellow modified urethane shall visually match Color Number 33538 of Federal Standard 595a with chromaticity limits as follows:

х	0.490	0.475	0.485	0.539
у	0.470	0.438	0.425	0.456

(e) Weathering Resistance: The modified urethane, when mixed in the proper ratio and applied at 0.35 to 0.41 mm (14 to 16 mils) wet film thickness to an aluminum alloy panel (Federal Test Std. No. 141, Method 2013) and allowed to cure for 72 hours at room temperature, shall be subjected to accelerated weathering for 75 hours. The accelerated weathering shall be completed by using the light and water exposure apparatus (fluorescent UV – condensation type) and tested according to ASTM G 53.

The cycle shall consist of four hours UV exposure at 50 $^{\circ}$ C (122 $^{\circ}$ F) and four hours of condensation at 40 $^{\circ}$ C (104 $^{\circ}$ F). UVB 313 bulbs shall be used. At the end of the exposure period, the material shall show no substantial change in color or gloss.

(f) Drying Time: The modified urethane material, when mixed in the proper ratio and applied at 0.35 to 0.41 mm (14 to 16 mils) wet film thickness and with the proper saturation of glass spheres, shall exhibit a no-tracking time of three minutes or less when tested according to ASTM D 711.

(g) Adhesion: The catalyzed modified urethane pavement marking materials when applied to a 100 x 100 x 50 mm (4 x 4 x2 in) concrete block shall have a degree of adhesion which results in a 100 percent concrete failure in the performance of this test.

The concrete block shall be brushed on one side and have a minimum strength of 24,100 kPa (3,500 psi). A 50 mm (2 in) square film of the mixed modified urethane shall be applied to the brushed surface and allowed to cure for 72 hours at room temperature. A 50 mm (2 in) square cube shall be affixed to the surface of the modified urethane by means of an epoxy glue. After the glue has cured for 24 hours, the modified urethane specimen shall be placed on a dynamic testing machine in such a fashion so that the specimen block is in a fixed position and the 50 mm (2 in) cube (glued to the modified urethane surface) is attached to the dynamometer head. Direct upward pressure shall be slowly applied until the modified urethane system fails. The location of the break and the amount of concrete failure shall be recorded.

- (h) Hardness: The modified urethane marking materials, when tested according to ASTM D-2240, shall have a Shore D Hardness greater than 75. Films shall be cast on a rigid substrate at 0.35 to 0.41 mm (14 to 16 mils) in thickness and allowed to cure at room temperature for 72 hours before testing.
- (i) Abrasion: The abrasion resistance shall be evaluated on a Taber Abrader with a 1,000 gram load and CS-17 wheels. The duration of test shall be 1,000 cycles. The wear index shall be calculated based on ASTM test method D-4060 and the wear index for the catalyzed material shall not be more than 80. The tests shall be run on cured samples of modified urethane material which have been applied at a film thickness of 0.35 to 0.41 (14 to 16 mils) to code S-16 stainless steel plates. The films shall be allowed to cure at room temperature for at least 72 hours and not more than 96 hours before testing.
- (j) Tensile: When tested according to ASTM D-638, the modified urethane pavement marking materials shall have an average tensile strength of not less than 6,000 pounds per square inch. The Type IV Specimens shall be pulled at a rate of ¼" per minute by a suitable dynamic testing machine. The samples shall be allowed to cure at 75 °F± 2°F for a minimum of 24 hours and a maximum of 72 hours prior to performing the indicated tests.
- (k) Compressive Strength: When tested according to ASTM D-695, the catalyzed modified urethane pavement marking materials shall have a compressive strength of not less than 12,000 pounds per square inch. The cast sample shall be conditioned at 75°F± 2°F for a minimum of 72 hours before performing the indicated tests. The rate of compression of these samples shall be no more than ¼"per minute.
- (I) Glass Spheres: The glass spheres shall meet the requirements of Article 1095.04(m) and Article 1095.07 of the Standard Specifications for first drop and second drop glass beads.
- (m) The material shall be shipped to the job site in substantial containers and shall be plainly marked with the manufacturer's name and address, the name and color of the material, date of manufacture and batch number.
- (n) Prior to approval and use of the modified urethane pavement marking materials, the manufacturer shall submit a notarized certification of an independent laboratory, together with the results of all tests, stating these materials meet the requirements as set forth

herein. The certification test report shall state the lot tested, manufacturer's name, brand name of modified urethane and date of manufacture. The certification shall be accompanied by one half-liter (one-pint) samples each of Part A and Part B. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B.

After approval by the Department, certification by the modified urethane manufacturer shall be submitted for each batch used. New independent laboratory certified test results and samples for testing by the Department shall be submitted any time the manufacturing process or paint formulation is changed. All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer.

- (o) Acceptance samples shall consist of one half-liter (one-pint) samples of Part A and Part B, of each lot of paint. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B. The samples shall be submitted to the Department for testing, together with a manufacturer's certification. The certification shall state the formulation for the lot represented is essentially identical to that used for qualification testing. All, acceptance samples shall be taken by a representative of the Illinois Department of Transportation. The modified urethane pavement marking materials shall not be used until tests are completed and they have met the requirements as set forth herein.
- (p) The manufacturer shall retain the test sample for a minimum of 18 months.

APPLICATION EQUIPMENT

The modified urethane pavement marking compounds shall be applied through equipment specifically designed to precisely meter the two components in the ratio of 2:1 and approved by the manufacturer of the material. This equipment shall produce the required amount of heat at the mixing head and gun tip and maintain those temperatures within the tolerances specified. This equipment shall also have as an integral part of the gun carriage, a high pressure air spray capable of cleaning the pavement immediately prior to the marking application.

The equipment shall be capable of spraying both yellow and white urethane, according to the manufacturer's recommended proportions and be mounted on a truck of sufficient size and stability with an adequate power source to produce lines of uniform dimensions and prevent application failure. The truck shall have at least two urethane tanks each of 415 L (110 gal) minimum capacity and shall be equipped with hydraulic systems. It shall be capable of placing stripes on the left and right sides and placing two lines on a three-line system simultaneously with either line in a solid or intermittent pattern, in yellow or white, and applying glass beads by the double drop pressurized bead system. The system shall apply both the first drop glass beads and the second drop glass beads at a rate of 1.2 kg per L (10 lb/gal). The equipment shall be equipped with pressure gauges for each proportioning pump. All guns shall be in full view of operators at all times. The equipment shall have a metering device to register the accumulated installed quantities for each gun, each day. Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and urethane application techniques. Certification of equipment shall be provided at the preconstruction conference.

APPLICATION

The pavement shall be cleaned by a method approved by the Engineer to remove all dirt, grease, glaze or any other material that would reduce the adhesion of the markings with

minimum or no damage to the pavement. New PCC pavements shall be blast-cleaned to remove all curing compounds.

Markings shall be applied to the cleaned surfaces on the same calendar day. If this cannot be accomplished, the surface shall be re-cleaned prior to applying the markings. Existing pavement markings shall be at least 90 percent removed. No markings shall be applied until the Engineer approves the cleaning.

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

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

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

The pavement markings shall be applied to the cleaned road surface, during conditions of dry weather and subsequently dry pavement surfaces at a minimum uniform wet thickness of 20 mils in accordance with the manufacturer's installation instructions and at the widths and patterns shown on the contract plans. The application and combination of reflective media (glass beads and/or reflective elements) shall be applied at a rate specified by the manufacturer. At the time of installation the pavement surface temperature shall be 40 ° F and rising and the ambient temperature shall be 35° F and rising. The pavement surface temperature and the ambient temperatures shall be determined and documented before the start of each of marking operation. The pavement markings shall not be applied if the pavement shows any visible signs of moisture or it is anticipated that damage causing moisture, such as rain showers, may occur during the installation and curing periods. The Engineer shall determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

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

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

The Contractor shall provide an accurate temperature-measuring device(s) that shall be capable of measuring the pavement temperature prior to application of the material, the material temperature at the gun tip and the material temperature prior to mixing.

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

<u>Method of Measurement:</u> Symbols shall conform to the size and dimensions specified in the Manual on Uniform Traffic Control Devices and Standard 780001 and will be measured based on total areas indicated in table 1 or as specified in the plans.

<u>Basis of Payment:</u> This work will be paid for at the contract unit prices per square Foot for URETHANE PAVEMENT MARKING – LETTERS AND SYMBOLS, SPECIAL measured as specified herein.

BEDDING, BACKFILL & COMPACTION FOR SANITARY SYSTEMS

Effective April 27, 2007

Pipe Bedding: Pipe bedding for PVC pipe shall be Class IA per ASTM Standard D2321-89. The trench bottom shall be bedded with six inches (6") (minimum) crushed stone foundation. Crushed stone shall be placed to a minimum of twelve inches (12") above the top of the pipe, per the Bedding Detail on the RRWRD's *Standard Detail Sheet*.

Pipe bedding for ductile iron sanitary sewer pipe shall be per AWWA C-151, Type 4 Laying Conditions, with Class B bedding and granular foundation.

Bedding gradation shall be such that migration of trench wall material into the bedding is inhibited; the RRWRD shall approve this bedding material after the characteristics of the trench are determined. Where the RRWRD determines that a trench bottom is unstable, the Contractor shall undercut the trench as required and furnish foundation material (all costs incidental). The foundation material shall be a coarse aggregate of a gradation that will inhibit the migration of the bedding materials, trench bottoms and walls.

In the event the water table is above the bottom of the pipe bedding, or the trench bottom is unstable or unsuitable, a porous granular foundation meeting IDOT specifications of CA-5, CA-3 or "A" stone shall be installed as necessary below the granular bedding material, extending to the limits of the bedding diagram at no extra cost to the owner. Should boulders, frozen material, etc., which could damage the pipe be present in the native backfill material, the Contractor shall bring the bedding material to a point twenty-four inches (24") above the crown of the pipe (cost incidental). The foundation material shall inhibit the migration of the bedding material into the foundation.

If a base foundation is required, the Contractor shall provide same at no additional cost to the owner. Bedding and foundation material shall be placed such that it precludes the migration of the trench wall material into the bedding or foundation material.

Backfill & Compaction: The Contractor shall use approved Select Trench Backfill to the level of the base under all roads, shoulders, sidewalks, driveways, parking lots or pavements of any kind and beyond such pavements as set forth in the RRWRD's *Technical Specifications* T.S. 2:4–c (on file). Select Trench Backfill under said structures shall be mechanically compacted

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FA-6, placed in six-inch (6") to eighteen-inch (18") loose lifts to the subgrade elevation of the road shoulder, sidewalk, driveway, parking lot or pavement. The materials and compaction shall be in accordance with the Illinois Department of Transportation (IDOT) *Standard Specifications for Road and Bridge Construction,* current edition, including Section 208 and 550.07, Method 1. All Select Trench Backfill shall be compacted to ninety-five percent (95%) of Proctor density; all other backfill shall be compacted to ninety percent (90%) (minimum) of Proctor density. The Contractor shall repair any settlement, which occurs within the three-(3) year guarantee period.

The Contractor shall properly dispose of all spoil (all costs incidental) and shall exercise caution during backfilling and compaction operations to avoid damaging existing utilities.

The Contractor shall furnish a backhoe and operator during the testing of the backfill placed during construction. All compaction tests will be performed at the Contractor's expense by an approved, independent geotechnical-testing firm. If the tests do not meet the compaction requirement specified above, the area shall be both re-compacted and re-tested at the Contractor's expense until the test requirements are met.

Use of vibratory rollers will not be permitted for this project.

For granular backfill (FA-6), a vibratory plate, or other approved equipment-mounted compaction equipment must be used by the Contractor to compact the backfill in lifts not to exceed eighteen inches (18") unless the Contractor submits a letter to the Project Engineer from the compactor manufacturer before the start of construction, recommending the lifts to be used and specifying the type, model and the maximum lift for the piece of equipment proposed to be used. Upon review, the RRWRD will advise the Contractor of the depth of lifts to be used in backfilling.

Water-jetting, ponding or flooding will not be permitted as a means of trench compaction on this project except around manholes where jetting may be used.

If initial tests indicate compaction requirements are being met, no further lift testing will be required unless method, equipment or material changes. The final lift forming the sub-grade must be tested.

The Contractor shall use reasonable care while backfilling over the sewer. No materials such as rocks or boulders, which could damage the pipe, shall be allowed to be dropped directly on the sewer pipe. If these materials are present in the backfill, the Contractor shall bring bedding material to a point 24" above the crown of the pipe. The cost of this additional granular material shall be incidental to the various sanitary sewer pay items.

In trenches not requiring Select Trench Backfill, no excavated material larger than eight inches (8") in any dimension shall be used in the backfill.

The Contractor shall guarantee against settlement throughout this project for a period of three (3) years after completion of the project.

<u>Basis of Payment:</u> The cost of Bedding, Backfill and Compaction, complete, shall be included in the cost of the various sanitary sewer pay items.

BYPASS PUMPING

Effective April 27, 2007

The Contractor shall provide bypass pumping as required and shall be totally responsible for providing all pumps, conduits, plugs and other equipment to divert the flow of sewage as required to construct the proposed sanitary sewer.

The Contractor shall furnish the necessary labor and supervision to set up and operate the pumping system. The Contractor shall only pump into sanitary sewer manholes approved by the RRWRD. The pumping system shall have sufficient capacity to handle the existing flow plus any additional flow that may occur during a rainstorm or peak flow periods. The Contractor shall provide sufficient inspection personnel to ensure that surcharging and backups do not occur on public or private property. If pumping is required on a 24–hour basis, the equipment supplied shall be equipped to minimize noise to a level of ninety decibels (90 dB) or less. The Contractor shall be responsible for providing the current level of service to all properties and liable for any damage caused by sewer back-ups resulting from this project.

All plugs or blocking shall be restrained to ensure that they cannot be washed downstream. The Contractor shall submit specifications for all pumping equipment, including backup pumping equipment, to the RRWRD for approval.

The Contractor shall be responsible for maintaining continual sanitary sewer service to each resident for the duration of construction, and for all clean up, repair, restoration of damaged property and any costs and claims resulting from sewage backups.

<u>Basis of Payment:</u> The cost of all Bypass Pumping shall be included in the cost of the various sanitary sewer pay items.

DEWATERING

Effective April 27, 2007

The Contractor shall use all means at his disposal to maintain a dry trench to the satisfaction of the RRWRD.

Groundwater will not be allowed to be pumped on existing ground surfaces or pavements where it may cause a traffic nuisance, or into existing sanitary sewers; it shall be discharged to a point acceptable to the RRWRD, with all erosion control specifications taken into account.

Dewatering well points shall require permits issued by the Winnebago County Department of Public Health. The installation, operation and removal of well points shall conform to the Health Department requirements. The Health Department shall be notified prior to installing dewatering wells and prior to abandonment of well points so that they may be present if they desire.

Any permits required to perform dewatering work on this project shall be secured by the Contractor; it shall be his responsibility to provide any bonds, insurance's, guarantees, etc. as required by said permit. Abandonment of dewatering facilities shall be performed in accordance with pertinent State and County requirements.

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If generators are required to run on a twenty-four (24) hour basis, the device(s) shall be equipped with an adequate muffler and properly maintained to prevent excessive noise. The equipment supplied shall be equipped to minimize noise to a level of ninety decibels (90 dB) or less.

<u>Basis of Payment:</u> Payment for Dewatering shall be included in the cost of the various sanitary sewer pay items.

PERMIT REQUIREMENTS

Effective April 27, 2007

The Contractor shall obtain and comply with the requirements of all permits required for this project, including but not limited to, I.D.O.T., the City of Rockford and the Winnebago County Department of Public Health. The Contractor shall provide all insurance, bonds, etc. as required by the necessary permits. The Contractor shall be responsible for a \$25,000 IDOT Individual Utility Permit Bond for the project as well as any additional permit bonds as required.

<u>Basis of Payment:</u> Payment for Permit Requirements, complete, (permit procurement and compliance) shall be included in the cost of the various sanitary sewer pay items.

QUALITY CONTROLS, TESTS & CERTIFICATION

Effective April 27, 2007

All costs for testing, installing, reinstalling, backfilling, compaction, and retesting shall be borne by the Contractor. All pipe shall be tested in accordance with ASTM Standards. The manufacturer shall furnish certified test reports with each shipment of pipe, run or unit of pipe extrusion; this applies to all types of pipe proposed for this project.

The final tests for Sanitary Sewer shall be as follows:

Low Pressure Air Test

Low pressure air testing will not be required for the point repair portion of the sanitary sewer work, but will be required for the new sanitary sewer extension at Kishwaukee and Harrison.

Internal Television Inspection

All sanitary sewer point repairs on this project shall be inspected by the Rock River Water Reclamation District with Internal Television Inspection for final acceptance.

Televising shall be completed prior to starting roadway replacement after final installation, backfilling and compaction have been completed.

Any defects identified by the RRWRD which may affect the maintenance, integrity or strength of the pipe, including offsets at the pipe transition or sags in the pipe, in the opinion of the RRWRD Engineer shall be repaired or replaced by the Contractor at the Contractor's expense.

The Contractor shall provide the RRWRD a minimum of 48 hours advance notice when requesting that a sewer segment be televised.

<u>Basis of Payment:</u> Payment for Quality Controls, Tests and Certification, complete, shall be included in the cost of the various sanitary sewer pay items.

CEMENT (BDE)

Effective: January 1, 2007

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

1001.01 Cement Types. Cement shall be according to the following.

(a) Portland Cement. Acceptance of portland cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland cement shall be according to ASTM C 150, and shall meet the standard physical and chemical requirements. Type I or Type II may be used for cast-in-place, precast, and precast prestressed concrete. Type III may be used according to Article 1020.04, or when approved by the Engineer. All other cements referenced in ASTM C 150 may be used when approved by the Engineer.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement and the total of all inorganic processing additions shall be a maximum of 4.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids that improve the flowability of cement, reduce pack set, and improve grinding efficiency. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302 and Class C fly ash according to the chemical requirements of AASHTO M 295.

(b) Portland-Pozzolan Cement. Acceptance of portland-pozzolan cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland-pozzolan cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IP or I(PM) may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The pozzolan constituent for Type IP shall be a maximum of 21 percent of the weight (mass) of the portland-pozzolan cement. All other cements referenced in ASTM C 595 may be used when approved by the Engineer.

For cast-in-place construction, portland-pozzolan cements shall only be used from April 1 to October 15.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall not be used.

(c) Portland Blast-Furnace Slag Cement. Acceptance of portland blast-furnace slag cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland blast-furnace slag cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type I(SM) slag-modified portland cement may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. All other cements referenced in ASTM C 595 may be used when approved by the Engineer.

For cast-in-place construction, portland blast-furnace slag cements shall only be used from April 1 to October 15.

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall not be used.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
 - (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.
 - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.
 - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.
 - (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.
 - (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to Illinois Modified AASHTO T 161, Procedure B. At 100 cycles, the specimens are measured and weighed at 73 °F (23 °C).
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used when specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The

chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al₂O₃), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO₃), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.

1001.02 Uniformity of Color. Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.

1001.03 Mixing Brands and Types. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.

1001.04 Storage. Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

DIGITAL TERRAIN MODELING FOR EARTHWORK CALCULATIONS (BDE)

Effective: April 1, 2007

Revise the first and second paragraphs of Article 202.07(b) of the Standard Specifications to read:

"(b) Measured Quantities. Earth and rock excavation will be measured in cubic yards (cubic meters) in their original positions. The volumes will be computed by the method of average end areas using before and after cross sections; or by the method of digital terrain modeling using before and after total station surveys. The volume of any unstable or unsuitable material removed will be measured for payment in cubic yards (cubic meters).

In rock excavation, the Contractor shall strip ledge rock of overburden so that necessary survey shots for measurement may be taken. Vertical measurements shall extend from the surface of the rock to an elevation not more than 6 in. (150 mm) below the subgrade of the proposed pavement structure, as shown on the plans, or to the bottom of the rock where that point is above the subgrade of the proposed pavement structure. Horizontal measurements shall extend not more than 6 in. (150 mm) beyond the slope lines fixed by the Engineer for the work. Boulders and rocks 1/2 cu vd (0.5 cu m) or more in volume will be measured individually and the volume computed from average dimensions taken in three directions."

Revise the first paragraph of Article 204.07 of the Standard Specifications to read.

"204.07 Method of Measurement. Borrow excavation will be measured in cubic yards (cubic meters) in its original position. The volume will be computed by the method of average end areas using before and after cross sections; or by the method of digital terrain modeling using before and after total station surveys."

Revise the embankment definition of Article 204.07(b) of the Standard Specifications to read:

"Embankment = the volume of fill in its final position computed by the method of average end areas or digital terrain modeling. Both methods will be based upon the existing ground line as shown on the plans, except as noted in (1) and (2) below;"

Revise Article 207.04 of the Standard Specifications to read:

"**207.04 Method of Measurement.** This work will be measured for payment in tons (metric tons) according to Article 311.08(b), or in cubic yards (cubic meters) compacted in place and the volume computed by the method of average end areas or digital terrain modeling by total station measurement."

Revise the second sentence of the second paragraph of Article 211.07(b) of the Standard Specifications to read:

"The volume will be computed by the method of average end areas or digital terrain modeling by total station measurement."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: January 1, 2007

<u>FEDERAL OBLIGATION</u>. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR part 26 and listed in the DBE Directory or most recent addendum.

<u>STATE OBLIGATION</u>. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

<u>CONTRACTOR ASSURANCE</u>. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that the Contractor signs with a subcontractor:

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of contracts

funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

<u>OVERALL GOAL SET FOR THE DEPARTMENT</u>. As a requirement of compliance with 49 CFR part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE firms performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. 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 8.0% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

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

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

(a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven working days after the date of letting. To meet the seven day requirement, the bidder may send the Plan by certified mail or delivery service within the seven working day

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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 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 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 working day period in order to cure the deficiency.

<u>CALCULATING DBE PARTICIPATION</u>. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR part 26.55(c) on questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE firm does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contact. Credit will be given for the 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 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.

- (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
- (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

<u>GOOD FAITH EFFORT PROCEDURES</u>. 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 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.

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(c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five 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 The request will be forwarded to the Department's extend the time for award. 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 working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

<u>CONTRACT COMPLIANCE</u>. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the 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

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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 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 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.

DOWEL BARS (BDE)

Effective: April 1, 2007

Revise the fifth sentence of Article 1006.11(b) of the Standard Specifications to read:

"The bars shall be epoxy coated according to AASHTO M 284, except the thickness of the epoxy shall be 7 to 12 mils (0.18 to 0.30 mm)."

ELECTRICAL SERVICE INSTALLATION - TRAFFIC SIGNALS (BDE)

Effective: January 1, 2007

Add the following to Article 805.02 of the Standard Specifications:

Add the following to Article 805.03 of the Standard Specifications:

"When a service pole is necessary, it shall be installed according to Article 830.03(c)."

EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007

Revise Article 105.03(a) of the Standard Specifications to read:

"(a) Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) 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 1 week based on the urgency of the situation and the nature of the deficiency. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for Construction Site Activities. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or 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 \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day."
ERRATA FOR THE 2007 STANDARD SPECIFICATIONS (BDE)

Effective: January 1, 2007

Revised: April 1, 2007

- Page 60 Article 109.07(a). In the second line of the first paragraph change "amount" to "quantity".
- Page 207 Article 406.14. In the second line of the second paragraph change "MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS, of the mixture composition specified;" to "MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS;".
- Page 345 Article 505.08(I). In the third line of the first paragraph change "1/8 mm" to "1/8 in.".
- Page 345 Article 505.08(I). In the nineteenth line of the first paragraph change "is" to "in".
- Page 383 Article 516.04(b)(1). In the fifth line of the first paragraph change "drillingpouring" to "pouring".
- Page 390 Article 520.02(h). Change "1027.021" to "1027.01".
- Page 398 Article 540.07(b). Add the following two paragraphs after the third paragraph:

"Excavation in rock will be measured for payment according to Article 502.12.

Removal and disposal of unstable and/or unsuitable material below plan bedding grade will be measured for payment according to Article 202.07."

Page 398 Article 540.08. Add the following two paragraphs after the fifth paragraph:

"Excavation in rock will be paid for according to Article 502.13.

Removal and disposal of unstable and/or unsuitable material below plan bedding grade will be paid for according to Article 202.08."

- Page 435 Article 542.04(b). Delete the last sentence of the last paragraph.
- Page 465 Article 551.06. In the second line of the first paragraph change "or" to "and/or".
- Page 585 Article 701.19(a). Add "701400" to the second line of the first paragraph.
- Page 586 Article 701.19(c). Delete "701400" from the second line of the first paragraph.
- Page 586 Article 701.19. Add the following subparagraph to this Article:
 - "(f) Removal of existing pavement markings and raised reflective pavement markers will be measured for payment according to Article 783.05."
- Page 587 Article 701.20(b). Delete "TRAFFIC CONTROL AND PROTECTION 701400;" from the first paragraph.

- Page 588 Article 701.20. Add the following subparagraph to this Article.
 - "(j) Removal of existing pavement markings and raised reflective pavement markers will be paid for according to Article 783.06."
- Page 762 Article 1020.04. In Table 1 Classes of Portland Cement Concrete and Mix Design Criteria, add to the minimum cement factor for Class PC Concrete "5.65 (TY III)", and add to the maximum cement factor for Class PC Concrete "7.05 (TY III)".
- Page 765 Article 1020.04. In Table 1 Classes of Portland Cement Concrete and Mix Design Criteria (metric), add to the minimum cement factor for Class PC Concrete "335 (TY III)", and add to the maximum cement factor for Class PC Concrete "418 (TY III)".
- Page 800 Article 1030.05(a)(12). Revise "Dust Collection Factor" to "Dust Correction Factor".
- Page 800 Article 1030.05(a)(14). Revise the first occurrence of Article 1030.05(a)(14) to Article 1030.05(a)(13).
- Page 809 Article 1030.05. Revise the subparagraph "(a) Quality Assurance by the Engineer." to read "(e) Quality Assurance by the Engineer.".
- Page 946 Article 1080.03(a)(1). In the third line of the first paragraph revise " $(300 \ \mu m)$ " to " $(600 \ \mu m)$ ".
- Page 963 Article 1083.02(b). In the second line of the first paragraph revise "ASTM D 4894" to "ASTM D 4895".
- Page 1076 In the Index of Pay Items delete the pay item "BITUMINOUS SURFACE REMOVAL BUTT JOINT".

HOT-MIX ASPHALT EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE) Effective: January 1, 2005 Revised: January 1, 2007

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."

HOT-MIX ASPHALT MIXTURE IL-4.75 (BDE)

Effective: November 1, 2004

Revised: April 1, 2007

<u>Description</u>. This work shall consist of constructing hot-mix asphalt (HMA) surface course or leveling binder with an IL-4.75 mixture. Work shall be according to Sections 406 and 1030 of the Standard Specifications, except as modified herein.

Materials.

Revise the first paragraph of Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for High ESAL, Low ESAL, and All Other HMA shall be FA 1, FA 2, FA 20, or FA 21; except FA 21 will not be permitted for mixture IL-4.75."

Revise the third sentence of Note 2 of Article 1030.02 of the Standard Specifications to read:

"The maximum percentage of RAP in any mixtures containing a polymer modified asphalt binder shall be ten percent."

Revise the second sentence of Note 3 of Article 1030.02 of the Standard Specifications to read:

"For mixtures with an Ndesign \geq 90 and for mixture IL-4.75, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag meeting the FA/FM 20 gradation."

Add the following note after Table 1 and after Table 2 of Article 1032.05(b) of the Standard Specifications:

"Note. When SBS/SBR PG76-22 or SBS/SBR PG76-28 are specified for mixture IL-4.75, the elastic recovery shall be a minimum of 80."

Equipment.

Add the following paragraph after the second paragraph of Article 1102.01(a)(6) of the Standard Specifications:

"IL-4.75 mixtures which contain aggregate having absorptions greater than or equal to 2.5 percent, or which contain steel slag sand, shall have a minimum silo storage plus haul time of 1.5 hours."

Add the following to Article 1102.01(a) of the Standard Specifications:

- "(13) For mixture IL-4.75, mineral filler and collected dust (baghouse) shall be proportioned according to the following.
 - a. Mineral filler shall not be stored in the same silo as collected dust (baghouse).

- b. Additional minus 200 material needed to meet the JMF may be entirely manufactured mineral filler.
- c. Collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following.
 - 1. Sufficient collected dust (baghouse) is available for production of the IL-4.75 mixture for the entire project.
 - 2. A mix design was prepared based on collected dust (baghouse).
- d. A combination of collected dust (baghouse) and manufactured mineral filler may be used according to the following,
 - 1. The amount (proportion) of each shall be established and not varied.
 - 2. A mix design was prepared based on the established proportions."

Mixture Design.

Add the following to the list of Illinois Modified AASHTO references in Article 1030.04 of the Standard Specifications:

"AASHTO T 305 Standard Method of Test for Determination of Draindown Characteristics in Uncompacted Asphalt Mixtures"

Add the following to Article 1030.04(a) of the Standard Specifications:

"(4) IL-4.75 Mixture. The Job Mix Formula (JMF) shall fall within the following limits.

IL-4.75, MIXTURE COMPOSITION		
Sieve	Percent Passing	
1/2 in. (12.5 mm)	100	
3/8 in. (9.5 mm)	100	
No. 4 (4.75 mm)	90-100	
No. 8 (2.36 mm)	70-90	
No. 16 (1.18 mm)	50-65	
No. 30 (600 μm)	35-55	
No. 50 (300 μm)	15-30	
No. 100 (150 μm)	10-18	
No. 200 (75 μm)	7-9	
AB Content	7% to 9%"	

Add the following to Article 1030.04(b) of the Standard Specifications:

"(4) IL-4.75 Mixture.

VOLUMETRIC REQUIREMENTS IL-4.75		
Volumetric Parameter Requirement		
Design Air Voids	4.0 % at Ndesign 50	
Voids in the Mineral Aggregate (VMA)	18.5 % minimum	
Voids Filled with Asphalt (VFA)	82-92 %	
Dust/AC Ratio	1.0	
Maximum Draindown	0.3%"	

Control Limits.

Add the following to the tables in Article 1030.05(d)(4) of the Standard Specifications:

"CONTROL LIMITS	S	
Parameter	IL-4.75	IL-4.75
	Individual Test	Moving Ave. of 4
% Passing: ^{1/}		
1/2 in. (12.5 mm)		
No. 4 (4.75 mm)		
No. 8 (2.36 mm)		
No. 16 (1.18 mm)	±4%	±3%
No. 30 (600 μm)		
Total Dust Content No. 200 (75 μm)	± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %
Voids	± 1.2 %	± 1.0 %

DENSITY CONTROL LIMITS		
Mixture Composition Parameter Individual Test		
IL-4.75	Ndesign = 50	93.0% - 97.4% ^{2/}

2/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge."

CONSTRUCTION REQUIREMENTS

Leveling.

Revise the table and the second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder		
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition	
≤ 1 1/4 (32)	IL-4.75, IL-9.5, or IL-9.5L	
> 1 1/4 to 2 (32 to 50)	IL-9.5, IL-12.5, or IL-9.5L	

The density requirements of Article 406.07(c) shall apply for leveling binder, machine method, when the nominal compacted thickness is: 3/4 in. (19 mm) or greater for IL-4.75 mixtures; 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures; and 1 1/2 in. (38 mm) or greater for IL-12.5 mixtures."

Placing.

Revise Article 406.06(b) of the Standard Specifications to read:

- "(b) Placement Conditions. Placement of HMA shall be under the following conditions.
 - (1) General Conditions. HMA shall be placed on a clean, dry base and when weather conditions are suitable. The leveling binder and binder courses shall be placed only when the temperature in the shade is at least 40 °F (5 °C) and the forecast is for rising temperatures. The surface course shall be placed only when the air temperature in the shade is at least 45 °F (8 °C) and the forecast is for rising temperatures.

The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C).

Intermingling of different mixture compositions at any one paver will not be permitted.

- (2) Special Conditions for mixture IL-4.75.
 - a. The surface shall be dry for at least 24 hours, and clean, prior to placement of the mixture.
 - b. Work shall not begin when local conditions indicate rain is imminent.
 - c. The mixture shall be placed only when the temperature in the shade is at least 50 °F (10 °C) and the forecast is for rising temperatures.
 - d. The mixture temperature shall be 310 to 350 °F (155 to 175 °C) and shall be measured in the truck just prior to placement.
 - e. When used as leveling binder, the mixture shall be overlaid within five days of being placed."

Add the following paragraph to the end of Article 406.06(d) of the Standard Specifications:

"The minimum and maximum compacted lift thickness for mixture IL-4.75 shall be 3/4 in. (19 mm) and 1 1/4 in. (32 mm) respectively."

Compaction.

Revise Table 1 of Article 406.07 of the Standard Specifications to read:

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Level Binder: (When the density requirements of Article 406.05(c) do not apply.)	P ^{3/}		V _S , P, T _B , T _F , 3W	To the satisfaction of the Engineer.
Binder and Surface ^{1/} Level Binder ^{1/} : (When the density requirements of Article 406.05(c) apply.)	V _D , P, T _B , 3W	P ^{3/}	V _S , T _B , T _F	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
Bridge Decks ^{2/}	Тв		T _F	As specified in Articles: 582.05 and 582.06.

- 1/ If the average delivery at the job site is 85 ton/hr (75 metric ton/hr) or less, any roller combination may be used provided it includes a steel wheeled roller and the required density and smoothness is obtained.
- 2/ One T_B roller may be used for both breakdown and final rolling on bridge decks 300 ft (90 m) or less in length, except when the air temperature is less than 60 °F (15 °C).
- 3/ A V_D roller may be used in lieu of the P roller on mixtures containing polymer modified asphalt binder.
- 4/ For mixture IL-4.75, a minimum of two T_B rollers and one T_F roller shall be provided. P and V rollers will not be permitted."

Basis of Payment.

Add the following paragraph after the third paragraph of Article 406.14 of the Standard Specifications:

"Mixture IL-4.75 will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-4.75, N50; and POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-4.75, N50."

MULTILANE PAVEMENT PATCHING (BDE)

Effective: November 1, 2002

Pavement broken and holes opened for patching shall be completed prior to weekend or holiday periods. Should delays of any type or for any reason prevent the completion of the work, temporary patches shall be constructed. Material able to support the average daily traffic and

meeting the approval of the Engineer shall be used for the temporary patches. The cost of furnishing, placing, maintaining, removing and disposing of the temporary work, including traffic control, shall be the responsibility of the Contractor.

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000

Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

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

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day

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requirement except for reasonable cause shown after notice and hearing pursuant to Section 7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

PLANTING WOODY PLANTS (BDE)

Effective: January 1, 2006

Revise the first and second paragraphs of Article 253.14 of the Standard Specifications to read:

"253.14 Period of Establishment. Prior to being accepted, the plants shall endure a period of establishment. This period shall begin in June and end in September of the same year. To qualify for inspection, plants shall have been in place, in a live healthy condition, on or before June 1 of the year of inspection. To be acceptable, plants shall be in a live healthy condition, representative of their species, at the time of inspection in the month of September.

When the planting work is performed by a subcontractor, this delay in inspection and acceptance of plants shall not delay acceptance of the entire project and final payment due if the Contractor requires and receives from the subcontractor a third party performance bond naming the Department as obligee in the full amount of the planting quantities listed in the contract, multiplied by their contract unit prices. The bond shall be executed prior to acceptance and final payment of the non-planting items and shall be in full force and effect until final inspection and acceptance of all plants including replacements. Execution of the third party bond shall be the option of the prime Contractor."

Revise Article 253.16 of the Standard Specifications to read:

"**253.16** Method of Measurement. This work will be measured for final payment, in place, after the period of establishment. Trees, shrubs, and vines will be measured as each individual plant. Seedlings will be measured in units of 100 plants."

Revise Article 253.17 of the Standard Specifications to read:

"253.17 Basis of Payment. This work will be paid for at the contract unit price per each for TREES, SHRUBS, and VINES, of the species, root type, and plant size specified; and per unit for SEEDLINGS. Payment will be made according to the following schedule.

- (a) Initial Payment. Upon planting, 75 percent of the pay item(s) will be paid.
- (b) Final Payment. Upon inspection and acceptance of the plant material, or upon execution of a third party bond, the remaining 25 percent of the pay item(s) will be paid."

POLYUREA PAVEMENT MARKING (BDE)

Effective: April 1, 2004

Revised: January 1, 2007

Description. This work shall consist of furnishing and applying pavement marking lines.

The type of polyurea pavement marking applied will be determined by the type of reflective media used. Polyurea Pavement Marking Type I shall use glass beads as a reflective media. Polyurea Pavement Marking Type II shall use a combination of composite reflective elements and glass beads as a reflective media.

Polyurea-based liquid pavement markings shall only be applied by Contractors on the list of Approved Polyurea Contractors maintained by the Engineer of Operations and in effect on the date of advertisement for bids.

Materials. Materials shall meet the following requirements:

- (a) Polyurea Pavement Marking. The polyurea pavement marking material shall consist of 100 percent solid two part system formulated and designed to provide a simple volumetric mixing ratio of two components (must be two or three volumes of Part A to one volume of Part B). No volatile or polluting solvents or fillers will be allowed.
- (b) Pigmentation. The pigment content by weight (mass) of component A shall be determined by low temperature ashing according to ASTM D 3723. The pigment content shall not vary more than ± two percent from the pigment content of the original qualified paint.

White Pigment shall be Titanium Dioxide meeting ASTM D 476 Type II, Rutile.

Yellow Pigment shall be an Organic Yellow and contain no heavy metals.

- (c) Environmental. Upon heating to application temperature, the material shall not exude fumes which are toxic or injurious to persons or property.
- (d) Daylight Reflectance. The daylight directional reflectance of the cured polyurea material (without reflective media) shall be a minimum of 80 percent (white) and 50 percent (yellow) relative to magnesium oxide when tested using a color spectrophotometer with a 45 degrees circumferential /zero degrees geometry, illuminant C, and two degrees observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm. In addition, the color of the yellow polyurea shall visually match Color Number 33538 of Federal Standard 595a with chromaticity limits as follows:

Х	0.490	0.475	0.485	0.539
Y	0.470	0.438	0.425	0.456

(e) Weathering Resistance. The polyurea marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness to an aluminum alloy panel (Federal Test Std. No. 141, Method 2013) and allowed to cure for 72 hours at room temperature, shall be subjected to accelerated weathering for 75 hours. The accelerated weathering shall be completed by using the light and water exposure apparatus (fluorescent UV - condensation type) and tested according to ASTM G 53. The cycle shall consist of four hours UV exposure at 122 °F (50 °C) and four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the material shall show no substantial change in color or gloss.

- (f) Dry Time. The polyurea pavement marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness and with the proper saturation of reflective media, shall exhibit a no-tracking time of ten minutes or less when tested according to ASTM D 711.
- (g) Adhesion. The catalyzed polyurea pavement marking materials when applied to a 4 x 4 x 2 in. (100 x 100 x 50 mm) concrete block, shall have a degree of adhesion which results in a 100 percent concrete failure in the performance of this test.

The concrete block shall be brushed on one side and have a minimum strength of 3500 psi (24,100 kPa). A 2 in. (50 mm) square film of the mixed polyurea shall be applied to the brushed surface and allowed to cure for 72 hours at room temperature. A 2 in. (50 mm) square cube shall be affixed to the surface of the polyurea by means of an epoxy glue. After the glue has cured for 24 hours, the polyurea specimen shall be placed on a dynamic testing machine in such a fashion so that the specimen block is in a fixed position and the 2 in. (50 mm) cube (glued to the polyurea surface) is attached to the dynamometer head. Direct upward pressure shall be slowly applied until the polyurea system fails. The location of the break and the amount of concrete failure shall be recorded.

- (h) Hardness. The polyurea pavement marking materials when tested according to ASTM D 2240, shall have a shore D hardness of between 70 and 100. Films shall be cast on a rigid substrate at 14 to 16 mils (0.35 to 0.41 mm) in thickness and allowed to cure at room temperature for 72 hours before testing.
- (i) Abrasion. The abrasion resistance shall be evaluated according to ASTM D 4060 using a Taber Abrader with a 1,000 gram load and CS 17 wheels. The duration of the test shall be 1,000 cycles. The loss shall be calculated by difference and be less than 120 mgs. The tests shall be run on cured samples of polyurea material which have been applied at a film thickness of 14 to 16 mils (0.35 to 0.41 mm) to code S-16 stainless steel plates. The films shall be allowed to cure at room temperature for at least 72 hours and not more than 96 hours before testing.
- (j) Reflective Media. The reflective media shall meet the following requirements:
 - (1) Type I The glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications and the following requirements:
 - a. First Drop Glass Beads. The first drop glass beads shall be tested by the standard visual method of large glass spheres adopted by the Department. The beads shall have a silane coating and meet the following sieve requirements:

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

- b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B.
- (2) Type II The combination of microcrystalline ceramic elements and glass beads shall meet the following requirements:
- a. First Drop Glass Beads. The first drop glass beads shall meet the following requirements:
 - 1. Composition. The elements shall be composed of a titania opacified ceramic core having clear and or yellow tinted microcrystalline ceramic beads embedded to the outer surface.
 - 2. Index of Refraction. All microcrystalline reflective elements embedded to the outer surface shall have an index of refraction of 1.8 when tested by the immersion method.
 - 3. Acid Resistance. A sample of microcrystalline ceramic beads supplied by the manufacturer, shall show resistance to corrosion of their surface after exposure to a one percent solution (by weight (mass)) of sulfuric acid. Adding 0.2 oz (5.7 ml) of concentrated acid into the water shall make the one percent acid solution. This test shall be performed by taking a 1 x 2 in. (25 x 50 mm) sample and adhering it to the bottom of a glass tray and placing just enough acid solution to completely immerse the sample. The tray shall be covered with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. The acid solution shall be decanted (do not rinse, touch, or otherwise disturb the bead surfaces) and the sample dried while adhered to the glass tray in a 150 °F (66 °C) oven for approximately 15 minutes. Microscope examination (20X) shall show no white (corroded) layer on the entire surface.
 - b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B or the following manufacturer's specification:

U.S. Standard	Sieve	% Passing
Sieve Number	Size	By Weight (mass)
20	850 μm	100
30	600 μm	75-95
50	300 μm	15-35
100	150 μm	0-5

1. Sieve Analysis. The glass beads shall meet the following sieve requirements:

The manufacturer of the glass beads shall certify that the treatment of the glass beads meets the requirements of the polyurea manufacturer.

2. Imperfections. The surface of the glass beads shall be free of pits and scratches. The glass beads shall be spherical in shape and shall contain a

maximum of 20 percent by weight (mass) of irregular shapes when tested by the standard method using a vibratile inclined glass plate as adopted by the Department.

- 3. Index of Refraction. The index of refraction of the glass beads shall be a minimum of 1.50 when tested by the immersion method at 77 °F (25 °C).
- (k) Packaging. Microcrystalline ceramic reflective elements and glass beads shall be delivered in approved moisture proof bags or weather resistant bulk boxes. Each carton shall be legibly marked with the manufacturer, specifications and type, lot number, and the month and year the microcrystalline ceramic reflective elements and/or glass beads were packaged. The letters and numbers used in the stencils shall be a minimum of 1/2 in. (12.7 mm) in height.
 - (1) Moisture Proof Bags. Moisture proof bags shall consist of at least five ply paper construction unless otherwise specified. Each bag shall contain 50 lb (22.7 kg) net.
 - (2) Bulk Weather Resistance Boxes. Bulk weather resistance boxes shall conform to Federal Specification PPP-8-640D Class II or latest revision. Boxes are to be weather resistant, triple wall, fluted, corrugated-fiber board. Cartons shall be strapped with two metal straps. Straps shall surround the outside perimeter of the carton. The first strap shall be located approximately 2 in. (50 mm) from the bottom of the carton and the second strap shall be placed approximately in the middle of the carton. All cartons shall be shrink wrapped for protection from moisture. Cartons shall be lined with a minimum 4 mil polyester bag and meet Interstate Commerce Commission requirements. Cartons shall be approximately 38 x 38 in. (1 x 1 m), contain 2000 lb (910 kg) of microcrystalline ceramic reflective elements and/or glass beads and be supported on a wooden pallet with fiber straps.
- (I) Packaging. The material shall be shipped to the job site in substantial containers and shall be plainly marked with the manufacturer's name and address, the name and color of the material, date of manufacture, and batch number.
- (m) Verification. Prior to approval and use of the polyurea pavement marking materials, the manufacturer shall submit a notarized certification of an independent laboratory, together with the results of all tests, stating these materials meet the requirements as set forth herein. The certification test report shall state the lot tested, manufacturer's name, brand name of polyurea and date of manufacture. The certification shall be accompanied by one 1 pt (1/2 L) samples each of Part A and Part B. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B.

After approval by the Department, certification by the polyurea manufacturer shall be submitted for each batch used. New independent laboratory certified test results and samples for testing by the Department shall be submitted any time the manufacturing process or paint formulation is changed. All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer.

(n) Acceptance samples. Acceptance samples shall consist of one 1 pt (1/2 L) samples of Part A and Part B, of each lot of paint. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B. The samples shall be submitted to the Department for testing, together with a manufacturer's certification. The certification shall state the formulation for the lot represented is essentially identical to that used for qualification testing. All, acceptance samples will be taken by a representative of the Department. The polyurea pavement marking materials shall not be used until tests are completed and they have met the requirements as set forth herein.

(o) Material Retainage. The manufacturer shall retain the test sample for a minimum of 18 months.

Equipment. The polyurea pavement marking compounds shall be applied through equipment specifically designed to apply two component liquid materials, glass beads and/or reflective elements in a continuous and skip-line pattern. The two-component liquid materials shall be applied after being accurately metered and then mixed with a static mix tube or airless impingement mixing guns. The static mixing tube or impingement mixing guns shall accommodate plural component material systems that have a volumetric ratio of 2 to 1 or 3 to 1. This equipment shall produce the required amount of heat at the mixing head and gun tip and maintain those temperatures within the tolerances specified. The guns shall have the capacity to deliver materials from approximately 1.5 to 3 gal/min (5.7 to 11.4 L/min) to compensate for a typical range of application speeds of 6 to 8 mph (10 to 13 km/h). The accessories such as spray tip, mix chamber, and rod diameter shall be selected according to the manufacturer's specifications to achieve proper mixing and an acceptable spray pattern. The application equipment shall be maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc. This equipment shall also have as an integral part of the gun carriage, a high pressure air spray capable of cleaning the pavement immediately prior to making application.

The equipment shall be capable of spraying both yellow and white polyurea, according to the manufacturer's recommended proportions and be mounted on a truck of sufficient size and stability with an adequate power source to produce lines of uniform dimensions and prevent application failure. The truck shall have at least two polyurea tanks each of 110 gal (415 L) minimum capacity and be equipped with hydraulic systems and agitators. It shall be capable of placing stripes on the left and right sides and placing two lines on a three-line system simultaneously with either line in a solid or intermittent pattern, in yellow or white, and applying the appropriate reflective media according to manufacturer's recommendations. All guns shall be in full view of operations at all times. The equipment shall have a metering device to register the accumulated installed quantities for each gun, each day. Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and polyurea application techniques. Certification of equipment shall be provided at the pre-construction conference.

The mobile applicator shall include the following features:

- (a) Material Reservoirs. The applicator shall provide individual material reservoirs, or space for the storage of Part A and Part B of the resin composition.
- (b) Heating Equipment. The applicator shall be equipped with heating equipment of sufficient capacity to maintain the individual resin components at the manufacturer's recommended temperature of ±5 °F (±2.8 °C) for spray application.
- (c) Dispensing Equipment. The applicator shall be equipped with glass bead and/or reflective element dispensing equipment. The applicator shall be capable of applying the glass beads and/or reflective elements at a rate and combination indicated by the manufacturer.

- (d) Volumetric Usage. The applicator shall be equipped with metering devices or pressure gauges on the proportioning pumps as well as stroke counters to monitor volumetric usage. Metering devices or pressure gauges and stroke counters shall be visible to the Engineer.
- (e) Pavement Marking Placement. The applicator shall be equipped with all the necessary spray equipment, mixers, compressors and other appurtenances to allow for the placement of reflectorized pavement markings in a simultaneous sequence of operations.

The Contractor shall provide an accurate temperature-measuring device(s) that shall be capable of measuring the pavement temperature prior to application of the material, the material temperature at the gun tip and the material temperature prior to mixing.

CONSTRUCTION REQUIREMENTS

<u>General</u>. The pavement shall be cleaned by a method approved by the Engineer to remove all dirt, grease, glaze, or any other material that would reduce the adhesion of the markings with minimum or no damage to the pavement surface. New portland cement concrete pavements shall be air-blast-cleaned to remove all latents.

Widths, lengths, and shapes of the cleaned surface shall be of sufficient size to include the full area of the specified pavement marking to be placed.

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

Markings shall be applied to the cleaned surfaces on the same calendar day. If this cannot be accomplished, the surface shall be re-cleaned prior to applying the markings. No markings shall be applied until the Engineer approves the cleaning.

The pavement markings shall be applied to the cleaned road surface, during conditions of dry weather and subsequently dry pavement surfaces at a minimum uniform wet thickness of 15 mils (0.4 mm) according to the manufacturer's installation instructions. On new hot-mix asphalt (HMA) surfaces the pavement markings shall be applied at a minimum uniform wet thickness of 20 mils (0.5 mm). The application of and combination of reflective media (glass beads and/or reflective elements) shall be applied at a rate specified by the manufacturer. At the time of installation the pavement surface temperature and the ambient temperature shall be above 40 °F (4 °C) and rising. The pavement markings shall not be applied if the pavement shows any visible signs of moisture or it is anticipated that damage causing moisture, such as rain showers, may occur during the installation and set periods. The Engineer will determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

Using the application equipment, the pavement markings shall be applied in the following manner, as a simultaneous operation:

- (a) The surface shall be air-blasted to remove any dirt and residue.
- (b) The resin shall be mixed and heated according to manufacturer's recommendations and sprayed onto the pavement surface.

The edge of the center line or lane line shall be offset a minimum distance of 2 in. (50 mm) from a longitudinal crack or joint. Edge lines shall be approximately 2 in. (50 mm) from the edge of pavement. The finished center and lane lines shall be straight, with the lateral deviation of any 10 ft (3 m) line not to exceed 1 in. (25 mm).

<u>Notification</u>. The Contractor shall notify the Engineer 72 hours prior to the placement of the markings in order that he/she can be present during the operation. At the time of notification, the Contractor shall provide the Engineer the manufacturer and lot numbers of polyurea and reflective media that will be used.

<u>Inspection</u>. The polyurea pavement markings will be inspected following installation according to Article 780.10 of the Standard Specifications, except, no later than December 15, and inspected following a winter performance period that extends 180 days from December 15.

<u>Method of Measurement</u>. This work will be measured for payment in place, in feet (meters). Double yellow lines will be measured as two separate lines.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for POLYUREA PAVEMENT MARKING TYPE I – LINE of the line width specified or for POLYUREA PAVEMENT MARKING TYPE II – LINE of the line width specified.

PRECAST CONCRETE HANDLING HOLES (BDE)

Effective: January 1, 2007

Add the following to Article 540.02 of the Standard Specifications:

"(g) Handling Hole Plugs......1042.16"

Add the following paragraph after the sixth paragraph of Article 540.06 of the Standard Specifications:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Article 542.02 of the Standard Specifications:

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

"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 550.02 of the Standard Specifications:

"(o) Handling Hole Plugs......1042.16"

Replace the fourth sentence of the fifth paragraph of Article 550.06 of the Standard Specifications with the following:

"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 602.02 of the Standard Specifications:

"(p) Handling Hole Plugs...... 1042.16(a)"

Replace the fifth sentence of the first paragraph of Article 602.07 of the Standard Specifications with the following:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Section 1042 of the Standard Specifications:

"**1042.16 Handling Hole Plugs.** Plugs for handling holes in precast concrete products shall be as follows.

- (a) Precast Concrete Plug. The precast concrete plug shall have a tapered shape and shall have a minimum compressive strength of 3000 psi (20,700 kPa) at 28 days.
- (b) Polyethylene Plug. The polyethylene plug shall have a "mushroom" shape with a flat round top and a stem with three different size ribs. The plug shall fit snuggly and cover the handling hole.

The plug shall be according to the following.

Mechanical Properties	Test Method	Value (min.)
Flexural Modulus	ASTM D 790	3300 psi (22,750 kPa)
Tensile Strength (Break)	ASTM D 638	1600 psi (11,030 kPa)
Tensile Strength (Yield)	ASTM D 638	1200 psi (8270 kPa)

Thermal Properties	Test Method	Value (min.)
Brittle Temperature	ASTM D 746	-49 °F (-45 °C)
Vicat Softening Point	ASTM D 1525	194 °F (90 °C)"

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

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

Effective: January 1, 2006

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

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
Chicago Central & Pacific Railroad 17641 South Ashland Avenue Homewood, Illinois 60430	0	6 per day at 25 MPH
John Henriksen, Manager of Public Work	(S	

DOT/AAR No.: 290 029V RR Mile Post: 85.50

For Freight/Passenger Information Contact: Mike DiGvonni, Roadmaster Phone: 815-218-0958 For Insurance Information Contact: Jacqueline Moder Phone: 715-345-2501

COMMENTS:

Railroad Flaggers are required if working within 25 feet of the tracks. Contact Mike DiGvonni.

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

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

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

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

RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007

Revised: April 1, 2007

In Article 1030.02(g), delete the last sentence of the first paragraph in (Note 2).

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

1031.01 Description. Reclaimed asphalt pavement (RAP) is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

1031.02 Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

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

- (a) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent:
 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag);
 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (b) Conglomerate 5/8. Conglomerate 5/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 5/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate 5/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (c) Conglomerate 3/8. Conglomerate 3/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least B quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 3/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 3/8 in. (9.5 mm) or smaller screen. Conglomerate 3/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

- (d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low ESAL), or equivalent mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

1031.03 Testing. When used in HMA, the RAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (a) Testing Conglomerate 3/8. In addition to the requirements above, conglomerate 3/8 RAP shall be tested for maximum theoretical specific gravity (G_{mm}) at a frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
- (b) Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm}. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	Homogeneous / Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %
1/2 in. (12.5 mm)	±8%	± 15 %
No. 4 (4.75 mm)	±6%	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 μm)	± 5 %	
No. 200 (75 μm)	± 2.0 %	\pm 4.0 %
Asphalt Binder	± 0.4 % ^{1/}	± 0.5 %
G _{mm}	± 0.02 ^{2/}	

- 1/ The tolerance for conglomerate 3/8 shall be \pm 0.3 %.
- 2/ Applies only to conglomerate 3/8. When variation of the G_{mm} exceeds the \pm 0.02 % tolerance, a new conglomerate 3/8 stockpile shall be created which will also require an additional mix design.

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

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

1031.04 Quality Designation of Aggregate in RAP. The quality of the RAP shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

- (a) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) surface mixtures are designated as containing Class B quality coarse aggregate.
- (b) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder and IL-9.5L surface mixtures are designated as Class D quality coarse aggregate.
- (c) RAP from Class I, Superpave (High ESAL), or HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
- (d) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

1031.05 Use of RAP in HMA. The use of RAP in HMA shall be as follows.

- (a) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (b) Steel Slag Stockpiles. RAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) surface mixtures only.
- (c) Use in HMA Surface Mixtures (High and Low ESAL). RAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be either homogeneous or conglomerate 3/8, in which the coarse aggregate is Class B quality or better.
- (d) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be homogeneous, conglomerate 5/8, or conglomerate 3/8, in which the coarse aggregate is Class C quality or better.
- (e) Use in Shoulders and Subbase. RAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be homogeneous, conglomerate 5/8, conglomerate 3/8, or conglomerate DQ.
- (f) The use of RAP shall be a contractor's option when constructing HMA in all contracts. When the contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table for a given N Design.

HMA MIXTURES ^{1/, 3/}	MAXIMUM % RAP					
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified			
30	30	30	10			
50	25	15	10			
70	15 / 25 ^{2/}	10 / 15 ^{2/}	10			
90	10	10	10			
105	10	10	10			

Max RAP Percentage

- 1/ For HMA Shoulder and Stabilized Sub-Base (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.
- 2/ Value of Max % RAP if 3/8 RAP is utilized.
- 3/ When RAP exceeds 20%, the high & low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25% RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

1031.06 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP material meeting the above detailed requirements.

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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 HMA mix 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.

1031.07 HMA Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

To remove or reduce agglomerated material, a scalping screen, 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. When producing mixtures containing conglomerate 3/8 RAP, a positive dust control system shall be utilized.

HMA plants utilizing RAP shall be capable of automatically recording and printing the following information.

- (a) Dryer Drum Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (4) Accumulated dry weight of RAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - (5) Accumualted mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
 - (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
 - (7) Residual asphalt binder in the RAP material as a percent of the total mix to the nearest 0.1 percent.
 - (8) Aggregate and RAP moisture compensators in percent as set on the control panel. (Requied when accumulated or individual aggregate and RAP are printed in wet condition.)

- (b) Batch Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - (4) Mineral filler weight to the nearest pound (kilogram).
 - (5) RAP weight to the nearest pound (kilogram).
 - (6) Virgin asphalt binder weight to the nearest pound (kilogram).
 - (7) Residual asphalt binder in the RAP material as a percent of the total mix to the nearest 0.1 percent.

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

1031.08 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Other". The testing requirements of Article 1031.03 shall not apply.
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007

Revise the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

"At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange.

Initial Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material								
Observation Entrance Angle Fluorescent								
Angle (deg.)	White	Orange	Orange					
0.2	-4	365	160	150				
0.2	+30	175	80	70				
0.5	-4	245	100	95				
0.5	+30	100	50	40"				

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

"Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

"The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

REINFORCEMENT BARS (BDE)

Effective: November 1, 2005

Revised: January 1, 2007

Revise Article 1006.10(a) of the Standard Specifications to read:

- "(a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reinforcement Bar and Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.
 - (1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706 (A 706M), Grade 60 (420) for deformed bars and the following.
 - a. Chemical Composition. The chemical composition of the bars shall be according to the following table.

CHEMICAL COMPOSITION						
Element ^{1/}	Heat Analysis (% maximum)	Product Analysis (% maximum)				
Carbon	0.30	0.33				
Manganese	1.50	1.56				
Phosphorus	0.035	0.045				
Sulfur	0.045	0.055				
Silicon	0.50	0.55				
Nickel	2/	2/				
Chromium	2/	2/				
Molybdenum	2/	2/				
Copper	2/	2/				
Titanium	2/	2/				
Vanadium	2/	2/				
Columbium	2/	2/				
Aluminum	2/, 3/	2/, 3/				
Tin ^{4/}	0.040	0.044				

Note 1/. The bars shall not contain any traces of radioactive elements.

Note 2/. There is no composition limit but the element must be reported.

Note 3/. If aluminum is not an intentional addition to the steel for deoxidation or killing purposes, residual aluminum content need not be reported.

Note 4/. If producer bar testing indicates an elongation of 15 percent or more and passing of the bend test, the tin composition requirement may be waived.

- b. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
- c. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706 (A 706M). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
- d. Spiral Reinforcment. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.
- (2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284 (M 284M) and the following.

- a. Certification. The epoxy coating applicator shall be certified under the Concrete Reinforcing Steel Institute's (CRSI) Epoxy Plant Certification Program.
- b. Coating Thickness. The thickness of the epoxy coating shall be 7 to 12 mils (0.18 to 0.30 mm). When spiral reinforcment is coated after fabrication, the thickness of the epoxy coating shall be 7 to 20 mils (0.18 to 0.50 mm).
- c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 0.5 in. (13 mm) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES (BDE)

Effective: August 1, 2006

Revised: January 1, 2007

Revise Article 669.01 of the Standard Specifications to read:

"669.01 **Description.** This work shall consist of the excavation, removal, and proper disposal of contaminated soil, water, and underground storage tanks (UST), their content and associated underground piping to the point where the piping is above the ground, including determining the content types and estimated quantities."

Revise the first paragraph of Article 669.15 of the Standard Specifications to read:

"669.15 Method of Measurement. Non-special waste, special waste, and hazardous waste soil will be measured for payment according to Article 202.07(b) when performing earth excavation, Article 502.12(b) when excavating for structures, or by computing the volume of the trench using the maximum trench width permitted and the actual depth of the trench."

Revise the second paragraph of Article 669.16 of the Standard Specifications to read:

"The excavation, transportation, and disposal of soil and other materials from an excavation determined to be contaminated will be paid for at the contract unit price per cubic yard (cubic meter) for NON-SPECIAL WASTE DISPOSAL, SPECIAL WASTE DISPOSAL, or HAZARDOUS WASTE DISPOSAL."

RETROREFLECTIVE SHEETING, NONREFLECTIVE SHEETING, AND TRANSLUCENT OVERLAY FILM FOR HIGHWAY SIGNS (BDE) Effective: April 1, 2007

Effective: April 1, 2007

<u>General</u>. This special provision covers retroreflective sheeting and translucent overlay films intended for application on new or refurbished aluminum. The sheeting serves as the reflectorized background for sign messages and as cutout legends and symbols applied to the reflectorized background. Messages may be applied in opaque black or transparent colors.

This special provision also covers nonreflective sheeting for application on new or refurbished aluminum, and as material for cutout legends and symbols applied to the reflectorized background.

All material furnished under this specification shall have been manufactured within 18 months of the delivery date. All material shall be supplied by the same manufacturer.

<u>Retroreflective Sheeting Properties</u>. Retroreflective sheeting shall consist of a flexible, colored, prismatic, or glass lens elements adhered to a synthetic resin, encapsulated by a flexible, transparent plastic having a smooth outer surface and shall meet the following requirements.

Only suppliers whose products have been tested and approved in the Department's periodic Sheeting Study will be eligible to supply material. All individual batches and or lots of material shall be tested and approved by the Department. The Department reserves the right to sample and test delivered materials according to Federal Specification LS-300.

- (a) Adhesive. The sheeting shall have a Class 1, pre-coated, pressure sensitive adhesive according to ASTM D 4956. The adhesive shall have a protective liner that is easily removed when tested according to ASTM D 4956. The adhesive shall be capable of being applied to new or refurbished aluminum and reflectorized backgrounds without additional adhesive.
- (b) Color. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration and to the daytime and nighttime color requirements of ASTM D 4956. Sheeting used for side by side overlay applications shall have a Hunter Lab Delta E of less than 3.
- (c) Coefficient of Retroreflection. When tested according to ASTM E 810, without averaging, the sheeting shall have a minimum coefficient of retroreflection as shown in the following tables. The brightness of the sheeting when totally wet shall be a minimum of 90 percent of the values shown when tested according to the standard rainfall test specified in Section 7.10.1 of AASHTO M 268-84.

Туре А								
Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Orange	Red	Green	Blue	Brown
0.2	-4	250	170	100	45	45	20	12
0.2	+30	150	100	60	25	25	12	8.5
0.5	-4	95	65	30	15	15	8	5
0.5	+30	75	50	25	10	10	5	3.5

Type A Sheeting Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AA Sheeting Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material

		JF					-
Observation	Entrance						
Angle (deg.)	Angle (deg.)	White	Yellow	Red	Green	Blue	FO
0.2	-4	800	660	215	80	43	200
0.2	+30	400	340	100	35	20	120
0.5	-4	200	160	45	20	9.8	80
0.5	+30	100	85	26	10	5.0	50

Type AA (0 and 90 degree rotation)

Type AA (45 degree rotation)

Observation	Entrance		
Angle (deg.)	Angle (deg.)	Yellow	FO
0.2	-4	550	165
0.2	+30	130	45
0.5	-4	145	70
0.5	+30	70	40

Type AP Sheeting Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material

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Observation	Entrance							
Angle (deg.)	Angle (deg.)	White	Yellow	Red	Green	Blue	Brown	FO
0.2	-4	550	425	100	75	50	30	275
0.2	+30	200	150	40	35	25	15	90
0.5	-4	300	250	60	35	25	20	150
0.5	+30	100	70	20	20	10	5	50

Type AZ Sheeting

Minimum Coefficient of Retroreflection candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AZ (0	degree rotation)
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Observation	Entrance							
Angle (deg.)	Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	430	350	110	45	20	325	240
0.2	+30	235	140	60	24	11	200	150
0.5	-4	250	200	60	25	10	235	165
0.5	+30	170	135	40	19	7	105	75
1.0	-4	70	45	10	10	4	70	30
1.0	+30	30	20	7	5	2.5	45	15

Observation	Entrance							
Angle (deg.)	Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	320	250	100	45	20	300	220
0.2	+30	235	140	40	24	11	200	150
0.5	-4	240	200	60	25	10	235	165
0.5	+30	100	85	20	10	7	80	75
1.0	-4	30	30	7	5	4	65	20
1.0	+30	15	15	5	2	2	30	10

Type AZ (90 degree rotation)

- (d) Gloss. The sheeting surface shall exhibit a minimum 85 degree gloss-meter rating of 50 when tested according to ASTM D 523.
- (e) Durability. When processed and applied, the sheeting shall be weather resistant.

Accelerated weathering testing will be performed for 1000 hours (300 hours for orange/FO) according to ASTM G 151. The testing cycle will consist of 8 hours of light at 140 °F (60 °C), followed by 4 hours of condensation at 104 °F (40 °C). Following accelerated weathering, the sheeting shall exhibit a minimum of 80 percent of its initial minimum coefficient of retroreflection as listed in the previous tables.

Outdoor weathering will entail an annual evaluation of material placed in an outdoor rack with a 45 degree angle and a southern sun exposure. The sheeting will be evaluated for five years. Following weathering, the test specimens will be cleaned by immersing them in a five percent hydrochloric acid solution for 45 seconds, then rinsed with water and blotted dry with a soft clean cloth. Following cleaning, the applied sheeting shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change. The sheeting shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

- (f) Shrinkage. When tested according to ASTM D 4956, the sheeting shall not shrink in any dimension more than 1/32 in. (0.8 mm) in ten minutes and not more than 1/8 in. (3 mm) in 24 hours.
- (g) Workability. The sheeting shall show no cracking, scaling, pitting, blistering, edge lifting, inter-film splitting, curling, or discoloration when processed and applied using mutually acceptable processing and application procedures.
- (h) Splices. A single roll of sheeting shall contain a maximum of four splices per 50 yd (45 m) length. The sheeting shall be overlapped a minimum of 3/16 in. (5 mm) at each splice.
- (i) Adhesive Bond. The sheeting shall form a durable bond to smooth, corrosion and weather-resistant surfaces and adhere securely when tested according to ASTM D 4956.
- (j) Positionability. Sheeting, with ASTM D 4956 Class 3 adhesive, used for manufacturing cutout legends and borders shall provide sufficient positionability during the fabrication process to permit removal and reapplication without damage to either the legend or sign

background and shall have a plastic liner suitable for use on bed cutting machines. Thereafter, all other adhesive and bond requirements contained in the specification shall apply.

Positionablility shall be verified by cutting 4 in. (100 mm) letters E, I, K, M, S, W, and Y out of the positionable material. The letters shall then be applied to a sheeted aluminum blank using a single pass of a two pound roller. The letters shall sit for five minutes and then a putty knife shall be used to lift a corner. The thumb and fore finger shall be used to slowly pull the lifted corner to lift letters away from the sheeted aluminum. The letters shall not tear or distort when removed.

- (k) Thickness. The thickness of the sheeting without the protective liner shall be less than or equal to 0.015 in. (0.4 mm), or 0.025 in. (0.6 mm) for prismatic material.
- (I) Processing. The sheeting shall permit cutting and color processing according to the sheeting manufacturer's specifications at temperatures of 60 to 100 °F (15 to 38 °C) and within a relative humidity range of 20 to 80 percent. The sheeting shall be heat resistant and permit forced curing without staining the applied or unapplied sheeting at temperatures recommended by the manufacturer. The sheeting shall be solvent resistant and capable of being cleaned with VM&P naptha, mineral spirits, and turpentine.

Transparent color and opaque black inks shall be single component and low odor. The inks shall dry within eight hours and not require clear coating. After color processing on white sheeting, the sheeting shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change when tested for durability (e). The ink on the weathered, prepared panel shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

Transparent color electronic cutting films shall be acrylic. After application to white sheeting, the films shall show no appreciable discoloration, cracking, streaking, crazing, blistering, or dimensional change when tested for durability (e). The films on the weathered, prepared panel shall exhibit a Hunter Lab Delta E of 5 or less when compared to the original.

Transparent colors screened, or transparent acrylic electronic cutting films, on white sheeting, shall have a minimum initial coefficient of retroreflection values of 50 percent for yellow and red, and a minimum 70 percent for green, blue, and brown of the 0.2 degree observation angle/-4.0 degree entrance angle values as listed in the previous tables for the color being applied. After durability testing, the colors shall retain a minimum 80 percent of the initial coefficient of retroreflection.

(m) Identification. The sheeting shall have a distinctive overall pattern in the sheeting unique to the manufacturer. If material orientation is required for optimum retroreflectivity, permanent orientation marks shall be incorporated into the face of the sheeting. Neither the overall pattern nor the orientation marks shall interfere with the reflectivity of the sheeting. (n) Packaging. Both ends of each box shall be clearly labeled with the sheeting type, color, adhesive type, manufacturer's lot number, date of manufacture, and supplier's name. Material Safety Data Sheets and technical bulletins for all materials shall be furnished to the Department with each shipment.

<u>Nonreflective Sheeting Properties</u>. Nonreflective sheeting shall consist of a flexible, pigmented cast vinyl film having a smooth, flat outer surface and shall meet the following requirements.

The Department reserves the right to sample and test delivered materials according to Federal Specification LS-300.

- (a) Adhesive. The sheeting shall have a Class 1, pre-coated, pressure sensitive adhesive according to ASTM D 4956. The adhesive shall have a protective liner that is easily removed when tested according to ASTM D 4956. The adhesive shall be capable of being applied to new or refurbished aluminum and reflectorized backgrounds without additional adhesive.
- (b) Color. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll.
- (c) Gloss. The sheeting shall exhibit a minimum 85 degree gloss-meter rating of 40 when tested according to ASTM D 523.
- (d) Durability. Applied sheeting that has been vertically exposed to the elements for seven years shall show no appreciable discoloration, cracking, crazing, blistering, delamination, or loss of adhesion. A slight amount of chalking is permitted but the sheeting shall not support fungus growth.
- (e) Testing. Test panels shall be prepared by applying the sheeting to 6 1/2 x 6 1/2 in. (165 x 165 mm) pieces of aluminum according to the manufacturer's specifications. The edges of the panel shall be trimmed evenly and aged 48 hours at 70 to 90 °F (21 to 32 °C). Shrinkage and immersion testing shall be as follows.
 - (1) Shrinkage. The sheeting shall not shrink more then 1/64 in. (0.4 mm) from any panel edge when subjected to a temperature of 150 °F (66 °C) for 48 hours and shall be sufficiently heat resistant to retain adhesion after one week at 150 °F (66 °C).
 - (2) Immersion Testing. The sheeting shall show no appreciable decrease in adhesion, color, or general appearance when examined one hour after being immersed to a depth of 2 or 3 in. (50 or 75 mm) in the following solutions at 70 to 90 °F (21 to 32 °C) for specified times.

Solution	Immersion Time (hours)
Reference Fuel (M I L-F-8799A) (15 parts xylol and 85 parts mineral spirits by weight)	1
Distilled Water	24
SAE No. 20 Motor Oil	24
Antifreeze (1/2 ethylene glycol, 1/2 distilled water)	24

- (f) Adhesive Bond: The sheeting shall form a durable bond to smooth, corrosion and weather-resistant surfaces and adhere securely when tested according to ASTM D 4956.
- (g) Thickness. The thickness of the sheeting without the protective liner shall be a maximum of 0.005 in. (0.13 mm).
- (h) Cutting. Material used on bed cutting machines shall have a smooth plastic liner.
- (i) Identification. The sheeting shall have a distinctive overall pattern in the sheeting unique to the manufacturer. If material orientation is required for optimum retroreflectivity, permanent orientation marks shall be incorporated into the face of the sheeting. Neither the overall pattern nor the orientation marks shall interfere with the reflectivity of the sheeting.
- (j) Packaging. Both ends of each box shall be clearly labeled with the sheeting type, color, adhesive type, manufacturer's lot number, date of manufacture, and supplier's name. Material Safety Data Sheets and technical bulletins for all materials shall be furnished to the Department with each shipment.

SEEDING (BDE)

Effective: July 1, 2004

Revised: January 1, 2007

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

"Table 1 - SEEDING MIXTURES						
	Class – Type	Seeds	lb/acre (kg/hectare)			
2	Roadside Mixture 7/	Inferno Tall Fescue, Tarheel II Tall Fescue, or Quest Tall Fescue Perennial Ryegrass Creeping Red Fescue Red Top	100 (110) 50 (55) 40 (50) 10 (10)			

2A	Salt Tolerant Roadside Mixture 7/	Inferno Tall Fescue, Tarheel II Tall Fescue, or	
		Quest Tall Fescue	60 (70)
		Perennial Ryegrass	20 (20)
		Audubon Red Fescue	30 (20)
		Rescue 911 Hard Fescue	30 (20)
		Fults Salt Grass 1/	60 (70)"

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

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

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

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

SELF-CONSOLIDATING CONCRETE FOR CAST-IN-PLACE CONSTRUCTION (BDE)

Effective: November 1, 2005

Revised: January 1, 2007

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

<u>Usage</u>. Self-consolidating concrete may be used for cast-in-place concrete construction items involving Class MS, DS, and SI concrete.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

<u>Mix Design Criteria</u>. Article 1020.04 of the Standard Specifications shall apply, except as follows:

- (a) The cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m). The cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used.
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ±2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>Test Methods</u>. Illinois Test Procedures SCC-1, SCC-2, SCC-3, SCC-4, SCC-5, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

<u>Mix Design Submittal</u>. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

A J-ring value shall be submitted if a lower mix design maximum will apply. An L-box blocking ratio shall be submitted if a higher mix design minimum will apply. The Contractor shall also indicate applicable construction items for the mix design.

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Trial mixture information will be required by the Engineer. A trial mixture is a batch of concrete tested by the Contractor to verify the Contractor's mix design will meet specification requirements. Trial mixture information shall include test results as specified in the "Portland Cement Concrete Level III Technician" course manual. Test results shall also include slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index. For the trial mixture, the slump flow shall be near the midpoint of the proposed slump flow target range.

<u>Trial Batch</u>. A minimum 2 cu yd (1.5 cu m) trial batch shall be produced, and the selfconsolidating concrete admixture dosage proposed by the Contractor shall be used. The slump flow shall be within 1.0 in. (25 mm) of the maximum slump flow range specified by the Contractor, and the air content shall be within the top half of the allowable specification range.

The trial batch shall be scheduled a minimum of 21 calendar days prior to anticipated use and shall be performed in the presence of the Engineer.

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value, L-box blocking ratio, column segregation index, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

A new trial batch will be required whenever there is a change in the source of any component material, proportions beyond normal field adjustments, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

<u>Mixing Portland Cement Concrete</u>. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

<u>Falsework and Forms</u>. In addition to Articles 503.05 and 503.06 of the Standard Specifications, the Contractor shall consider the fluid nature of the concrete for designing the falsework and forms. Forms shall be tight to prevent leakage of fluid concrete.
<u>Placing and Consolidating</u>. Concrete placement and consolidation shall be according to Article 503.07 of the Standard Specifications, except as follows:

Revise the third paragraph of Article 503.07 of the Standard Specifications to read:

"Open troughs and chutes shall extend as nearly as practicable to the point of deposit. The drop distance of concrete shall not exceed 5 ft (1.5 m). If necessary, a tremie shall be used to meet this requirement. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer. For drilled shafts, free fall placement will not be permitted."

Delete the seventh, eighth, ninth, and tenth paragraphs of Article 503.07 of the Standard Specifications.

Add to the end of the eleventh paragraph of Article 503.07 of the Standard Specifications the following:

"Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer."

<u>Quality Control by Contractor at Plant</u>. The specified test frequencies for aggregate gradation, aggregate moisture, air content, unit weight/yield, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and hardened visual stability index test will not be required to be performed at the plant.

<u>Quality Control by Contractor at Jobsite</u>. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 50 cu yd (40 cu m) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite. The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 300 cu yd (230 cu m) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

If mix foaming or other potential detrimental material is observed during placement or at the completion of the pour, the material shall be removed while the concrete is still plastic.

<u>Quality Assurance by Engineer at Plant</u>. For air content and aggregate gradation, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

<u>Quality Assurance by Engineer at Jobsite</u>. For air content and strength, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract plans.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 1.5 in. (40 mm) for slump flow and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 1.5 in. (40 mm) for the J-ring value and ten percent for the L-box blocking ratio.

For each hardened visual stability index test performed by the Contractor, the cut cylinders shall be presented to the Engineer for determination of the rating. The Engineer reserves the right to conduct quality assurance split sample testing. A limit of precision will not apply to the hardened visual stability index.

SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004

Revised: January 1, 2007

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

<u>Usage</u>. Self-consolidating concrete may be used for precast concrete products.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. The mix design criteria shall be as follows:

(a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m).

- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements of Article 1020.04 of the Standard Specifications shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ±2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

<u>Placing and Consolidating</u>. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer.

Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

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

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002

Revised: January 1, 2007

Revise the second sentence of the first paragraph of Article 280.04(a) of the Standard Specifications to read:

"Temporary ditch checks shall be constructed with rolled excelsior, products from the Department's approved list, or with aggregate when specified."

Revise Article 1081.15(f) of the Standard Specifications to read:

"(f) Rolled Excelsior. Rolled excelsior shall consist of an excelsior fiber filling totally encased inside netting and sealed with metal clips or knotted at the ends. Each roll shall be a minimum of 20 in. (500 mm) in diameter and a minimum of 10 ft (3 m) in length. Each 10 ft (3 m) roll shall have a minimum weight (mass) of 30 lbs (13.6 kg). The excelsior fiber filling shall be weed free. At least 80 percent of the fibers shall be a minimum of 6 in. (150 mm) in length. The fiber density shall be a minimum of 1.38 lb/cu ft (22 kg/cu m). The netting shall be composed of a polyester or polypropylene material which retains 70 percent of its strength after 500 hours of exposure to sunlight. The maximum opening of the net shall be 1 x 1 in. (25 x 25 mm)."

TRAFFIC SIGNAL GROUNDING (BDE)

Effective: April 1, 2006

Revised: January 1, 2007

Revise Article 873.02 of the Standard Specifications to read:

***873.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Electric Cable – Signal, Lead-in, Communication, Service,	
and Equipment Grounding Conductor	
(b) Electrical Raceway Materials	

Revise Article 873.04 of the Standard Specifications to read:

"873.04 Grounding System. All traffic signal circuits shall include an equipment grounding conductor according to Article 801.04. The equipment grounding conductor shall consist of a continuous, green, insulated conductor Type XLP, No. 6 AWG, stranded copper installed in raceways and bonded to each metal enclosure (handhole, post, mast arm pole, signal cabinet, etc.). All clamps shall be bronze or copper, UL approved.

A grounding cable with connectors shall be installed between each handhole cover and frame. The grounding cable shall be looped over cable hooks installed in the handholes and 5 ft (1.5 m) of extra cable shall be provided between the frame and cover.

All equipment grounding conductors shall terminate at the ground bus in the controller cabinet. The neutral conductor and the equipment grounding conductor shall be connected in the service installation. At no other point in the traffic signal system shall the neutral and equipment grounding conductors be connected."

Revise Article 873.05 of the Standard Specifications to read:

"873.05 Method of Measurement. Electric cable will be measured for payment in feet (meters) in place. The length of measurement shall be the distance horizontally and vertically measured between the changes in direction, including cables in mast arms, mast arm poles, signal posts, and extra cable length as specified in Article 873.03. The vertical cable length shall be measured according to the following schedule.

Location	Cable Length
Foundation (signal post, mast arm pole, controller cabinet)	3 ft (1 m)
Mast Arm Pole (mast arm mounted signal head)	20 ft (6 m)
Mast Arm Pole	
(bracket mounted signal head attached to mast arm pole)	13 ft (4 m)
Signal Post (bracket or post mounted signal head)	13 ft (4 m)
Pedestrian Push Button	6 ft (2 m)"

Add the following Article to Section 873 of the Standard Specifications:

***873.06 Basis of Payment.** This work will be paid for at the contract unit price per foot (meter) for ELECTRIC CABLE, of the method of installation (IN TRENCH, IN CONDUIT, or AERIAL SUSPENDED), of the type, size, and number of conductors specified.

The type specified will indicate the method of installation and whether the electric cable is Service, Signal, Lead-in, Communication, or Equipment Grounding Conductor."

Revise the heading of Article 1076.04 of the Standard Specifications to read:

"1076.04 Electric Cable – Signal, Lead-in, Communication, Service, and Equipment Grounding Conductor."

Add the following paragraph to the end of Article 1076.04 of the Standard Specifications:

"(e) Equipment Grounding Conductor. The cross linked polyethylene (XLP) insulated conductor shall be according to Articles 1066.02 and 1066.03. The stranded copper conductor shall be No. 6 AWG and the insulation color shall be green."

VARIABLY SPACED TINING (BDE)

Effective: August 1, 2005

Revised: January 1, 2007

Revise the first sentence of the third paragraph of Article 420.09(e)(1) of the Standard Specifications to read:

"The metal comb shall consist of a single line of tempered spring steel tines variably spaced as shown in the table below and securely mounted in a suitable head."

Revise the fifth sentence of the third paragraph of Article 420.09(e)(1) of the Standard Specifications to read:

"The tining device shall be operated so as to a produce a pattern of grooves, 1/8 to 3/16 in. (3 to 5 mm) deep and 1/10 to 1/8 in. (2.5 to 3.2 mm) wide across the pavement. The tining device shall be operated at a 1:6 skew across the pavement for facilities with a posted speed limit of 55 mph or greater. The tining pattern shall not overlap or leave gaps between successive passes."

Add the following table after the third paragraph of Article 420.09(e)(1) of the Standard Specifications:

"Center to Center Spacings of Metal Comb Tines											
in. (mm) (read spacings left to right)											
1 5/16 (34)	1 5/16 (34) 1 7/16 (36) 1 7/8 (47) 2 1/8 (54)										
1 11/16 (43)	1 1/4 (32)	1 1/4 (31)	1 1/16 (27)	1 7/16 (36)							
1 1/8 (29)	1 13/16 (46)	13/16 (21)	1 11/16 (43)	7/8 (23)							
1 5/8 (42)	2 1/16 (52)	15/16 (24)	11/16 (18)	1 1/8 (28)							
1 9/16 (40)	1 5/16 (34)	1 1/16 (27)	1 (26)	1 (25)							
1 1/16 (27)	13/16 (20)	1 7/16 (37)	1 1/2 (38)	2 1/16 (52)							
2 (51)	1 3/4 (45)	1 7/16 (37)	1 11/16 (43)	2 1/16 (53)							
1 1/16 (27)	1 7/16 (37)	1 5/8 (42)	1 5/8 (41)	1 1/8 (29)							
1 11/16 (43)	1 3/4 (45)	1 3/4 (44)	1 3/16 (30)	1 7/16 (37)							
1 5/16 (33)	1 9/16 (40)	1 1/8 (28)	1 1/4 (31)	1 15/16 (50)							
1 5/16 (34)	1 3/4 (45)	13/16 (20)	1 3/4 (45)	1 15/16 (50)							
2 1/16 (53)	2 (51)	1 1/8 (29)	1 (25)	11/16 (18)							
2 1/16 (53)	11/16 (18)	1 1/2 (38)	2 (51)	1 9/16 (40)							
11/16 (17)	1 15/16 (49)	1 15/16 (50)	1 9/16 (39)	2 (51)							
1 7/16 (36)	1 7/16 (36)	1 1/2 (38)	1 13/16 (46)	1 1/8 (29)							
1 1/2 (38)	1 15/16 (50)	15/16 (24)	1 5/16 (33)"								

WATER BLASTER WITH VACUUM RECOVERY (BDE)

Effective: April 1, 2006

Revised: January 1, 2007

Add the following to Article 783.02 of the Standard Specifications.

"(c) Water Blaster with Vacuum Recovery1101.12"

Revise Article 1101.12 of the Standard Specifications to read.

"**1101.12 Water Blaster with Vacuum Recovery.** The water blaster shall remove the stripe from the pavement using a high pressurized water spray with a vacuum recovery system to provide a clean, almost dry surface, without the use of a secondary cleanup process. The removal shall be to the satisfaction of the Engineer. The equipment shall contain a storage system that allows for the storage of the wastewater while retaining the debris. The operator shall be in immediate control of the blast head."

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006

Revised: January 2, 2007

<u>Description</u>. For projects with at least 1200 tons (1100 metric tons) of work involving applicable bituminous materials, cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and pavement preservation type surface treatments. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

 $CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$

- Where: CA = Cost Adjustment, \$.
 - BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).
 - BPI_{L} = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).
 - %AC_V = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.
 - Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = A x D x (G_{mb} x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x (G_{mb} x 24.99) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_V.

For bituminous materials measured in gallons: For bituminous materials measured in liters:

Q,	tons = V x 8.33 lb/gal x SG / 2000
Q,	metric tons = V x 1.0 kg/L x SG / 1000

Where:	А	= Area of the HMA mixture, sq yd (sq m).
	D	= Depth of the HMA mixture, in. (mm).
	G_{mb}	= Average bulk specific gravity of the mixture, from the approved mix design.
	V	 Volume of the bituminous material, gal (L).
	SG	= Specific Gravity of bituminous material as shown on the bill of lading.

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

Percent Difference = { $(BPI_L - BPI_P) \div BPI_L$ } × 100

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

Return With Bid

ILLINOIS DEPARTMENTOPTION FOROF TRANSPORTATIONBITUMINOUS MATERIALS COST ADJUSTMENTS

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.: _______
Company Name: ______
Contractor's Option:
Is your company opting to include this special provision as part of the contract?
Yes D No D
Signature: ______ Date: ______

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

Effective: April 2, 2004

Revised: April 1, 2007

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of steel cost adjustments.

<u>Types of Steel Products</u>. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), frames and grates, and other miscellaneous items will be subject to a steel cost adjustment when the pay item they are used in has a contract value of \$10,000 or greater.

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) Evidence that increased or decreased steel costs have been passed on to the Contractor.
- (b) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (c) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

- SCA = Q X D
- Where: SCA = steel cost adjustment, in dollars Q = quantity of steel incorporated into the work, in lb (kg) D = price factor, in dollars per lb (kg)

 $D = CBP_M - CBP_L$

Where: $CBP_M =$ The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the American Metal Market (AMM) for the day the steel is shipped from the mill. The indices will be converted from dollars per ton to dollars per lb (kg). CBP_L = The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the AMM for the day the contract is let. The indices will be converted from dollars per ton to dollars per lb (kg).

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

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

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

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

Percent Difference = { $(CBP_L - CBP_M) \div CBP_L$ } × 100

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

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Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 – 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

Return With Bid

ILLINOIS DEPARTMENT OF TRANSPORTATION

OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of steel cost adjustments. After award, this form, when submitted shall become part of the contract.

Contract No.: ______
Company Name: ______
Contractor's Option:
Is your company opting to include this special provision as part of the contract plans?
Yes No
Signature: ______ Date: _____

STORM WATER POLLUTION PREVENTION PLAN



Storm Water Pollution Prevention Plan

Route	FAP 734	Marked ILLINOIS ROUTE 251
Section	(4MFT)R	Project No. P-92-168-90
County	WINNEBAGO	

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.

egi-nal Engineer

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):

The project consists of 1100 feet of Resurfacing and 4530 feet of pavement replacement, widening, intersection realignment and drainage improvements.

4/27/07 Date

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): This project will be constructed in eight main stages as shown in the "staging plans".
 During each stage, the sequence of events are as follows: excavation and embankment, grading and paving.

c. The total area of the construction site is estimated to be 20.25 acres. Temporary Easement to Temporary Easement.

BDE 2342

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities is <u>18.2</u> 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.

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):

Perimeter erosion control shall be placed prior to beginning earthwork. As earth excavation and embankment are being completed, the Contractor shall place inlet and pipe protection and seeding as stages of the project are completed. Perimeter erosion barrier will be installed at additional locations as the project progresses. The Contractor will seed disturbed areas with temporary or permanent seeding as shown on the Erosion Control Plans or as directed by the Engineer. 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):

The Contractor shall place perimeter erosion barrier in areas designated on the Erosion Control Plans prior to commencing construction activities. Inlet protection and seeding shall be placed at the end of earth-disturbing activities.

Implementation of additional structural practices shall be at the direction of the Resident Engineer.

(ii)

FAP 734 (IL 251) Section (4MFT)R Winnebago County Contract #64450

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):

Stone riprap shall be placed at culvert and storm sewer outlets as shown on the plan sheets or as directed by the Engineer.

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 storm water management 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:

N/A

FAP 734 (IL 251) Section (4MFT)R Winnebago County Contract #64450

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 inspect weekly, or after any rainfall event, all erosion control measures in place. If any of the erosion control measures are found to be deficient, the Contractor will immediately repair said measures to applicable State Standards as shown on the Erosion Control Plan or 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).

N/A

FAP 734 (IL 251) Section (4MFT)R Winnebago County Contract #64450



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 I	nformation:		
Route	FAP 734	Marked ILLINOIS ROUTE 251	,
Section	(4MFT)R	Project No. P-92-168-90	
County	WINNEBAGO	· ·	

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		
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	Title		-					
£	Name of Firm		-		, '			
	Street Address	~	-					
City		State	-		÷			
Zip Code	*** ** ** (*) * - 1 ₋₁₉₂ ***		-					
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ILLINOIS DEPARTMENT OF LABOR

PREVAILING WAGES FOR WINNEBAGO COUNTY EFFECTIVE MAY 2007

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at http://www.state.il.us/agency/idol/ or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.

Winnebago County Prevailing Wage for May 2007

Trade Name	RG	TYP	С	Base	FRMAN	*M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng
	==	===	=	=====	======	=====	===	===	=====	=====	=====	=====
ASBESTOS ABT-GEN		BLD		24.120	25.120	1.5	1.5	2.0	5.850	8.330	0.000	0.600
ASBESTOS ABT-MEC		BLD		18.950	0.000	1.5	1.5	2.0	2.700	3.350	0.000	0.000
BOILERMAKER		BLD		38,540	42.000	2.0	2.0	2.0	6.720	7.440	0.000	0.300
BRICK MASON		BLD		30 000	32 500	15	1 5	2 0	5 500	8 680	0 000	0 420
CARPENTER		BLD		30 230	33 560	1 5	1 5	2.0	5 500	7 450	0 000	0 600
CARDENTER		HWV		28 010	29 760	1 5	1 5	2.0	5 500	8 000	0.000	0.000
CEMENT MACON				20.010	22.700	15	1 5	2.0	5.500	7 550	0.000	0.310
CEDAMIC TIL ENGUED		חזם		24 860	0 000	15	1 5	2.0	5.500	1 000	0.000	0.100
CERAMIC IILE FINSHER		עם זם ס זם		24.000	20.000	1 5	1 5	2.0	0 200		0.000	0.500
COMMUNICATION TECH		лтт ВГП		28.700	30.700	1.5	1.5	2.0	8.200	8.340	0.000	0.570
ELECTRIC PWR EQMI OP		АЦЦ		27.920	35.880	1.5	1.5	2.0	4.750	7.820	0.000	0.210
ELECTRIC PWR GRNDMAN		АЦЦ		21.640	35.880	1.5	1.5	2.0	4.750	6.060	0.000	0.160
ELECTRIC PWR LINEMAN		ALL		33.220	35.880	1.5	1.5	2.0	4.750	9.310	0.000	0.250
ELECTRIC PWR TRK DRV		ALL		22.340	35.880	1.5	1.5	2.0	4.750	6.260	0.000	0.170
ELECTRICIAN		BLD		33.570	36.930	1.5	1.5	2.0	8.200	11.15	0.000	0.670
ELEVATOR CONSTRUCTOR		BLD		38.620	43.450	2.0	2.0	2.0	8.275	6.060	2.320	0.000
GLAZIER		BLD		27.680	28.680	1.5	1.5	2.0	6.400	6.500	0.000	0.500
HT/FROST INSULATOR		BLD		29.630	31.850	1.5	1.5	2.0	6.000	8.720	0.000	0.000
IRON WORKER		ALL		30.760	32.300	2.0	2.0	2.0	6.950	16.62	0.000	0.550
LABORER		BLD		24.120	25.120	1.5	1.5	2.0	5.850	8.330	0.000	0.600
LABORER		HWY		23.270	24.020	1.5	1.5	2.0	5.850	8.330	0.000	0.600
LABORER, SKILLED		HWY		24.670	25.420	1.5	1.5	2.0	5.850	8.330	0.000	0.600
LATHER		BLD		30.230	33.560	1.5	1.5	2.0	5.500	7.450	0.000	0.600
MACHINIST		BLD		36.890	38.890	2.0	2.0	2.0	4.380	5.650	2.550	0.000
MARBLE FINISHERS		BLD		24.860	0.000	1.5	1.5	2.0	5.500	4.000	0.000	0.360
MARBLE MASON		BLD		28.140	28.390	1.5	1.5	2.0	5.500	5.220	0.000	0.380
MATERIAL TESTER 1		ALL		21.550	0.000	1.5	1.5	2.0	7.460	4.840	0.000	0.170
MATERIALS TESTER II		ALL		26.550	0.000	1.5	1.5	2.0	7.460	4.840	0.000	0.170
MILLWRIGHT		BLD		32 150	35 370	15	1 5	2 0	5 150	9 450	0 000	0 560
OPERATING ENGINEER		BLD	1	37 050	41 050	2 0	2 0	2.0	6 850	6 150	1 900	0 700
OPERATING ENGINEER		BLD	2	36 350	41 050	2.0	2.0	2.0	6 850	6 150	1 900	0 700
OPERATING ENGINEER		BLD	3	33 900	41 050	2.0	2.0	2.0	6 850	6 150	1 900	0 700
OPERATING ENGINEER		BLD	4	31 900	41 050	2.0	2.0	2.0	6 850	6 150	1 900	0 700
OPERATING ENGINEER		UWV	1	36 900	40 900	1 5	1 5	2.0	6 850	6 150	1 900	0.700
OPERATING ENGINEER			2	36 350	10.000	15	1 5	2.0	6 850	6 150	1 000	0.700
OPERATING ENGINEER			2	35 050	10.000	15	1 5	2.0	6 850	6 150	1 000	0.700
OPERATING ENGINEER			1	33.600	10.900	15	1 5	2.0	6 950	6 150	1 000	0.700
OPERATING ENGINEER			т Б	22 150	10.900	15	1 5	2.0	6 950	6 150	1 000	0.700
DAINTED		лит	5	20 150	21 150	1 5	1 5	2.U 1 E	6 400	6 500	1.900	0.700
PAINIER		АЦЦ		30.130	31.150	1.5	1.5	1.5	6.400 E E 00		0.000	0.500
PILEDRIVER		впл		31.230	34.070	1.5	1.5	2.0	5.500	7.450	0.000	0.000
PILEDRIVER		HWI		28.UIU	29.760	1.5	1.5	2.0	5.500	8.000	0.000	0.310
PIPEFILLER		вгр		33.700	30.000	1.5	1.5	2.0	6.430	7.130	0.000	0.630
PLASIERER		RTD		29.540	32.490	1.5	1.5	2.0	5.500	7.350	0.000	0.100
PLUMBER		RTD		33.700	36.060	1.5	1.5	2.0	6.430	7.130	0.000	0.630
ROOFER		RTD		33.650	35.650	1.5	1.5	2.0	6.460	3.310	0.000	0.330
SHEETMETAL WORKER		RTD		31.690	33.620	1.5	1.5	2.0	4.850	10.29	0.520	0.290
SPRINKLER FITTER		BLD		31.240	33.240	1.5	1.5	2.0	6.500	5.350	0.000	0.250
STONE MASON		BLD		30.000	32.500	1.5	1.5	2.0	5.500	8.680	0.000	0.420
TERRAZZO FINISHER		BLD		24.860	0.000	1.5	1.5	2.0	5.500	4.000	0.000	0.360
TERRAZZO MASON		BLD		28.140	28.390	1.5	1.5	2.0	5.500	5.220	0.000	0.380
TILE LAYER		BLD		30.230	33.560	1.5	1.5	2.0	5.500	7.450	0.000	0.600
TILE MASON		BLD		28.140	28.390	1.5	1.5	2.0	5.500	5.220	0.000	0.380
TRUCK DRIVER		ALL	1	25.880	26.430	1.5	1.5	2.0	5.150	6.500	0.000	0.000
TRUCK DRIVER		ALL	2	26.030	26.430	1.5	1.5	2.0	5.150	6.500	0.000	0.000
TRUCK DRIVER		ALL	3	26.230	26.430	1.5	1.5	2.0	5.150	6.500	0.000	0.000
TRUCK DRIVER		ALL	4	26.430	26.430	1.5	1.5	2.0	5.150	6.500	0.000	0.000
TUCKPOINTER		BLD		30.000	32.500	1.5	1.5	2.0	5.500	8.680	0.000	0.420

Legend:

M-F>8 (Overtime is required for any hour greater than 8 worked each day, Monday through Friday.

OSA (Overtime is required for every hour worked on Saturday)

OSH (Overtime is required for every hour worked on Sunday and Holidays)

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

Explanations

WINNEBAGO COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial/Decoration Day, Fourth of July, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration such as the day after Thanksgiving for Veterans Day. If in doubt, please check with IDOL.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date. ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

COMMUNICATIONS TECHNICIAN

Installing, manufacturing, assembling and maintaining sound and intercom, protection alarm (security), fire alarm, master antenna television, closed circuit television, low voltage control for computers and/or door monitoring, school communications systems, telephones and servicing of nurse and emergency calls, and the installation and maintenance of transmit and receive antennas, transmitters, receivers, and associated apparatus which operates in conjunction with above systems. All work associated with these system installations will be included EXCEPT the installation of protective metallic conduit in new construction projects (excluding less than ten-foot, runs strictly for protection of cable) and 120 volt AC (or higher) power wiring and associated hardware.

LABORER, SKILLED - HIGHWAY

Individuals engaged in the following types of work, irrespective of the site of the work: asbestos abatement worker, handling of any materials with any foreign matter harmful to skin or clothing, track laborer, cement handlers, chloride handlers, the unloading and loading with steel workers and re-bars, concrete workers wet, tunnel helpers in free air, batch dumpers, mason tenders, kettle and tar men, tank cleaners, plastic installers, scaffold workers, motorized buggies or motorized unit used for wet concrete or handling of building materials, laborers with de-watering systems, sewer workers plus depth, rod and chainmen with technical engineers, rod and chainmen with land surveyors, rod and chainmen with surveyors, vibrator operators, cement silica, clay, fly ash, lime and plasters, handlers (bulk or bag), cofferdam workers plus depth, on concrete paving, placing, cutting and tying of reinforcing, deck hand, dredge hand, and shore laborers, bankmen on floating plant, grade checker, power tools, front end man on chip spreaders, cassion workers plus depth, gunnite nozzle men, lead man on sewer work, welders, cutters, burners and torchmen, chainsaw operators, jackhammer and drill operators, layout man and/or drainage tile layer, steel form setter - street and highway, air tamping hammermen, signal man on crane, concrete saw operator, screedman on asphalt pavers, laborers tending masons with hot material or where foreign materials are used, mortar mixer operators, multiple concrete duct - leadsman, lumen, asphalt raker, curb asphalt machine operator, ready mix scalemen (permanent, portable or temporary plant), laborers handling masterplate or similar materials, laser beam operator, con-crete burning machine operator, coring machine operator, plaster ten-der, underpinning and shoring of buildings, pump men, manhole and catch basin, dirt and stone tamper, hose men on concrete pumps, haz-ardous waste worker, lead base paint abatement worker, lining of pipe, refusing machine, assisting on direct boring machine, the work of lay-ing watermain, fire hydrants, all mechanical joints to watermain work, sewer worker, and tapping water service and forced lift station mechanical worker.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; TTeamsters Unskilled dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yeards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnatrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

OPERATING ENGINEERS - BUILDING

Class 1. Assistant Craft Foreman; Craft Foreman; Mechanic; Asphalt Plant; Asphalt Spreader; Autograde; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver; Concrete Placer; Concrete Pump (Truck Mounted); Concrete Tower, Cranes, All, Cranes, Hammerhead, Creter Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, one, two and three Drum; Hoists, Two tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Locomotives, All; Motor Patrol; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes; Squeeze Cretes-screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Rock Drill; Roto Mill Grinder; Scoops -Tractor Drawn; Slip-form Paver; Straddle Buggies; Tie Back Machine; Tractor with Book and Side Boom; Trenching Machines.

Class 2. Bobcat (over 3/4 cu. yd.); Boilers Brick Forklift; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Greaser Engineer; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Asphalt Spreader; Combination - Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators - (Rheostat Manual Controlled); Hydraulic Power Units (Pile Driving and Extracting); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 small Electric Drill Winches; Bobcat (up to and including 3/4 cu. yd.).

Class 4. Hoists, Inside Elevators, Push Button with Automatic Doors; Oilers; Brick Forklift.

OPERATING ENGINEERS - HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Craft Foreman; Asphalt Plant, Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Silo Tender; Asphalt Spreader; Autograder; ABG Paver; Backhoes with Caisson attachment; Ballast Regulator, Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Backhoe w/shear attachments; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted): Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Hammerhead, Linden, Peco & Machines of a like nature; Crete Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Directional Boring Machine over 12"; Dredges; Field Mechanic-Welder; Formless Curb and Gutter Machine; Gradall and Machines of a like nature; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Mounted; Hoists, One, Two and Three Drum; Hydraulic Backhoes; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; GCI Crane; Hydraulic Telescoping form (Tunnel); Tie Back Machine; Tractor Drawn Belt Loader; Tractor with Boom; Tractor-aire with Attachments; Traffic Barrier conveyor machine; Raised or Blind Hole; Trenching Machine; Truck Mounted Concrete Pump with Boom; Truck Mounted Concrete Conveyor; Underground Boring and/or Mining Machines; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Conveyor Muck Cars (Haglund or Similar Type); Drills, all; Finishing Machine - Concrete; Greaser Engineer; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro Blaster; Laser Screed; All Locomotives, Dinky; Pump Cretes; Squeeze Cretes-Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotory Snow Plows; Rototiller, Seaman, etc., self-propelled; Scoops -Tractor Drawn; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper; Scraper - Prime Mover in Tandem (Regardless of Size); Tank Car Heater; Tractors, Push, Pulling Sheeps Foot, Disc, Compactor, etc. Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Fireman on Boilers; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers, Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper - Form-Motor Driven. Class 4. Air Compressor - Small and Large; Asphalt Spreader, Backend Man; Bobcat (Skid Steer) all; Combination - Small Equipment Operator; Directional Boring Machine up to 12"; Generators - Small 50kw and Under; Generators - Large over 50kw; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Hydro-Blaster; Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Tract-aire; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. Oilers and Directional Boring Machine Locator. Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 618/993-7271 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.