

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 than 4:30 p.m. prevailing time twenty-one days prior to the letting of interest. This pre-qualification requirement applies to first time contractors, contractors renewing expired ratings, contractors maintaining continuous pre-qualification or contractors requesting revised ratings. To be eligible to bid, existing pre-qualification ratings must be effective through the date of letting.

REQUESTS FOR AUTHORIZATION TO BID

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

WHO CAN BID ?

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

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

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

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

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

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at <http://www.dot.il.gov/desenv/delett.html> before submitting final bid information.

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

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

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

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

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

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

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

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

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

RETURN WITH BID

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Proposal Submitted By
Name
Address
City

Letting April 29, 2011

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

NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction. This does not apply to Small Business Set-Asides.

(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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



**Illinois Department
of Transportation**

Springfield, Illinois 62764

Contract No. 85529
WINNEBAGO County
Section 99-00493-00-BR (Rockford)
Route FAU 5077 (Morgan Street)
Project BRM-5099(065)
District 2 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

- A Bid Bond is included.
- A Cashier's Check or a Certified Check is included

Prepared by	
Checked by	F

(Printed by authority of the State of Illinois)

INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond. In addition, this proposal contains new statutory requirements applicable to the use of subcontractors and, in particular, includes the State Required Ethical Standards Governing Subcontractors to be signed and incorporated into all subcontracts.

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

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

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

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

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

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Preparation and submittal of bids	217/782-7806

RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

Taxpayer Identification Number (Mandatory) _____

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

**Contract No. 85529
WINNEBAGO County
Section 99-00493-00-BR (Rockford)
Project BRM-5099(065)
Route FAU 5077 (Morgan Street)
District 2 Construction Funds**

Remove the existing eight-span open spandrel reinforced concrete arch bridge with precast concrete deck beams on the approaches and construct a three-span composite welded plate girder end spans and a steel tied arch middle span supported on concrete abutments and piers,503'-3/8" in length over the Rock River and the total reconstruction of Morgan Street between IL Route 2 and IL Route 251 in the city of 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.

RETURN WITH BID

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

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

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

Schedule of Combination Bids

Combination No.	Sections Included in Combination	Combination Bid	
		Dollars	Cents

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

8. **AUTHORITY TO DO BUSINESS IN ILLINOIS.** Section 20-43 of the Illinois Procurement Code (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to do business in the State of Illinois prior to submitting the bid.

9. **The services of a subcontractor will or may be used.**

Check box Yes
 Check box No

For known subcontractors with subcontracts with an annual value of more than \$25,000, the contract shall include their name, address, and the dollar allocation for each subcontractor.

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

COUNTY NAME WINNEBAGO	CODE 201	DIST 02	SECTION NUMBER 99-00493-00-BR (ROCKFORD)	PROJECT NUMBER BRM-5099/065/000	ROUTE FAU 5077
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
A2006516	T-QUERCUS BICOL 2	EACH	4.000 X	=			
A2006816	T-QUERCUS MEUH 2	EACH	4.000 X	=			
A2007916	T-TILIA AMER RD 2	EACH	4.000 X	=			
A2008468	T-ULMUS AMER PRINC 2	EACH	4.000 X	=			
A2008722	T-ULMUS PTRT ELM 2	EACH	4.000 X	=			
XX003525	D I WAT MNF 8X4 RED	EACH	3.000 X	=			
XX005003	D I WAT MNF 10X6 TEE	EACH	3.000 X	=			
XX005488	ST CASING B & J 48	FOOT	60.000 X	=			
XX005786	D I WM FIT TEE 8X4	EACH	1.000 X	=			
XX005787	D I WM FIT TEE 8X6	EACH	2.000 X	=			
XX006241	GATE VALVE & BOX 8	EACH	19.000 X	=			
XX006243	WATER SERV INS 1 COMP	EACH	25.000 X	=			
XX006244	WATER SERV INS 2 COMP	EACH	4.000 X	=			
XX006652	STAMP CLRD PCC MED 4	SQ FT	2,893.000 X	=			
XX007263	GATE VALVE & BOX 4	EACH	1.000 X	=			

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
XX007758	ADJ WATER VALVE BOXES	EACH	2.000 X	=	=	=	=
XX008156	LINE STOP 10	EACH	2.000 X	=	=	=	=
XX008455	INLET BOX SPL	EACH	3.000 X	=	=	=	=
XX008521	JUNCTION CHAMBER SPL	EACH	1.000 X	=	=	=	=
XX008522	MOD JUNCTION CHAMBER	EACH	1.000 X	=	=	=	=
XX008523	CON INSTALL 1 1/2 PVC	FOOT	182.000 X	=	=	=	=
XX008524	STL PARPT WALL INSERT	EACH	1.000 X	=	=	=	=
X0321865	ANTI-GRAFFIT PROT SYS	SQ FT	10,921.000 X	=	=	=	=
X0322924	RETAINING WALL REMOV	SQ FT	450.000 X	=	=	=	=
X0322936	REMOV EX FLAR END SEC	EACH	1.000 X	=	=	=	=
X0323172	DI WM BEND 45 8"	EACH	29.000 X	=	=	=	=
X0323182	DI WAT MN RED, 8 X 6	EACH	3.000 X	=	=	=	=
X0323760	SAN SEW SER 6 PVC CMP	EACH	1.000 X	=	=	=	=
X0323820	DI WAT MN TEE, 8 X 8	EACH	11.000 X	=	=	=	=
X0323821	DI WAT MN RED, 10 X 8	EACH	3.000 X	=	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X0324445	D I WT MNF 8 22.5 BND	EACH	5.000 X	=	=	=	=
X0324449	DI WT MNF MJ 8X6 HTEE	EACH	10.000 X	=	=	=	=
X0324554	CONC FLAT SLAB TOP	EACH	1.000 X	=	=	=	=
X0324741	HDP PIPE 8"	FOOT	100.000 X	=	=	=	=
X0325340	FIRE HYD W/6 V & VB	EACH	10.000 X	=	=	=	=
X0326414	STAMP CLRD PCC MED 8	SQ FT	2,626.000 X	=	=	=	=
X0326891	TEMP ACCESS RD SP	SQ YD	2,222.000 X	=	=	=	=
X0327139	AGG COLUMN GRND IMPRV	L SUM	1.000 X	=	=	=	=
X0839900	SAN SEW REMOV 6	FOOT	100.000 X	=	=	=	=
X0840000	SAN SEW REMOV 8	FOOT	1,098.000 X	=	=	=	=
X2010510	CLEARING & GRUBBING	L SUM	1.000 X	=	=	=	=
X2070304	POROUS GRAN EMB SPEC	CU YD	7,243.000 X	=	=	=	=
X2800500	INLET PROTECTION SPL	EACH	70.000 X	=	=	=	=
X4403800	MEDIAN SURF REMOVAL	SQ FT	2,847.000 X	=	=	=	=
X5011100	FOUNDATION REM	EACH	1.000 X	=	=	=	=

FAU 5077
 99-00493-00-BR (ROCKFORD)
 WINNEBAGO

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 85529

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 RUN DATE - 03/24/11
 RUN TIME - 183106

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X5091725	BICYCLE RAILING SPL	FOOT	1,253.000 X	=	=	=	=
X5091755	PARAPET RAILING SPL	FOOT	1,281.000 X	=	=	=	=
X5150110	NAME PLATES SPL	EACH	4.000 X	=	=	=	=
X5200216	FINGER PLT EXP JT 6.5	FOOT	72.000 X	=	=	=	=
X5210280	HLMR BRG GUID EX 2800	EACH	2.000 X	=	=	=	=
X5210450	HLMR BRNG FIXED 2750K	EACH	2.000 X	=	=	=	=
X5539700	SS CLEANED	FOOT	90.000 X	=	=	=	=
X5630004	CUT & CAP EX 4 WM	EACH	6.000 X	=	=	=	=
X5630006	CUT & CAP EX 6 WM	EACH	11.000 X	=	=	=	=
X5630008	CUT & CAP EX 8 WM	EACH	2.000 X	=	=	=	=
X5630010	CUT & CAP EX 10 WM	EACH	6.000 X	=	=	=	=
X5630704	CONN TO EX W MAIN 4	EACH	4.000 X	=	=	=	=
X5630706	CONN TO EX W MAIN 6	EACH	4.000 X	=	=	=	=
X5630708	CONN TO EX W MAIN 8	EACH	4.000 X	=	=	=	=
X5630710	CONN TO EX W MAIN 10	EACH	6.000 X	=	=	=	=

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X6024242	INLETS SPL N1	EACH	18.000	X	=		
X6024244	INLETS SPL N2	EACH	32.000	X	=		
X6026050	SANITARY MANHOLE ADJ	EACH	11.000	X	=		
X6026051	SAN MAN RECONST	EACH	5.000	X	=		
X6026054	SAN MAN REMOVED	EACH	12.000	X	=		
X6026622	VV REMOVED	EACH	20.000	X	=		
X6026632	VALVE BOX REMOVED	EACH	18.000	X	=		
X6062700	CONC GUTTER TA SPL	FOOT	954.000	X	=		
X6640300	CH LK FENCE REMOV	FOOT	98.000	X	=		
X6660445	ROW/PROPERTY CORNERS	EACH	17.000	X	=		
X6700410	ENGR FLD OFF A SPL	CAL MO	32.000	X	=		
X7010216	TRAF CONT & PROT SPL	L SUM	1.000	X	=		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000	X	=		
Z0018004	DRAINAGE SCUPPR DS-12	EACH	12.000	X	=		
Z0034210	MECH ST EARTH RET WL	SQ FT	5,163.000	X	=		

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
Z0046304	P UNDR FOR STRUCT 4	FOOT	80.000 X	=			
Z0048665	RR PROT LIABILITY INS	L SUM	2.000 X	=			
Z0051398	REM EX SIGN POST	EACH	27.000 X	=			
Z0062456	TEMP PAVEMENT	SQ YD	40.000 X	=			
Z0076600	TRAINEES	HOUR	1,000.000 X	=	0.80		800.00
Z0077002	WATER MAIN REMOVAL	FOOT	200.000 X	=			
20100110	TREE REMOV 6-15	UNIT	34.000 X	=			
20100210	TREE REMOV OVER 15	UNIT	1,330.000 X	=			
20101000	TEMPORARY FENCE	FOOT	1,150.000 X	=			
20101100	TREE TRUNK PROTECTION	EACH	18.000 X	=			
20200100	EARTH EXCAVATION	CU YD	47,477.000 X	=			
20800150	TRENCH BACKFILL	CU YD	3,692.000 X	=			
21001000	GEOTECH FAB F/GR STAB	SQ YD	20,993.000 X	=			
21101615	TOPSOIL F & P 4	SQ YD	52,138.000 X	=			
21301052	EXPLOR TRENCH 52	FOOT	200.000 X	=			

FAU 5077
 99-00493-00-BR (ROCKFORD)
 WINNEBAGO

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT NUMBER - 85529

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 RUN DATE - 03/24/11
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
25000210	SEEDING CL 2A	ACRE	9.750 X	=			
25000400	NITROGEN FERT NUTR	POUND	875.000 X	=			
25000500	PHOSPHORUS FERT NUTR	POUND	875.000 X	=			
25000600	POTASSIUM FERT NUTR	POUND	875.000 X	=			
25100630	EROSION CONTR BLANKET	SQ YD	47,055.000 X	=			
25200110	SODDING SALT TOLERANT	SQ YD	5,083.000 X	=			
25200200	SUPPLE WATERING	UNIT	5.000 X	=			
28000250	TEMP EROS CONTR SEED	POUND	2,917.000 X	=			
28000305	TEMP DITCH CHECKS	FOOT	126.000 X	=			
28000400	PERIMETER EROS BAR	FOOT	8,858.000 X	=			
28100105	STONE RIPRAP CL A3	SQ YD	21.000 X	=			
28100107	STONE RIPRAP CL A4	SQ YD	51.000 X	=			
28100109	STONE RIPRAP CL A5	SQ YD	1,961.000 X	=			
28200200	FILTER FABRIC	SQ YD	2,122.000 X	=			
28400100	GABIONS	CU YD	1,450.000 X	=			

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
31101810	SUB GRAN MAT B 12	SQ YD	21,823.000 X	=			
35101400	AGG BASE CSE B	TON	200.000 X	=			
35101600	AGG BASE CSE B 4	SQ YD	3,100.000 X	=			
35101800	AGG BASE CSE B 6	SQ YD	2,094.000 X	=			
40201000	AGGREGATE-TEMP ACCESS	TON	224.000 X	=			
40600100	BIT MATLS PR CT	GALLON	73.000 X	=			
40600982	HMA SURF REM BUTT JT	SQ YD	453.000 X	=			
40600990	TEMPORARY RAMP	SQ YD	330.000 X	=			
40603080	HMA BC IL-19.0 N50	TON	34.000 X	=			
40603310	HMA SC "C" N50	TON	52.000 X	=			
42000301	PCC PVT 8 JOINTED	SQ YD	16,479.000 X	=			
42100100	CONT REINF PCC PVT 8	SQ YD	1,067.000 X	=			
42100615	PAVT REINFORCEMENT	SQ YD	1,067.000 X	=			
42300200	PCC DRIVEWAY PAVT 6	SQ YD	283.000 X	=			
42300400	PCC DRIVEWAY PAVT 8	SQ YD	1,595.000 X	=			

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ILLINOIS DEPARTMENT OF TRANSPORTATION
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 RUN DATE - 03/24/11
 RUN TIME - 183106

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
42400100	PC CONC SIDEWALK 4	SQ FT	21,821.000 X	=	=	=	=
42400200	PC CONC SIDEWALK 5	SQ FT	22,440.000 X	=	=	=	=
42400800	DETECTABLE WARNINGS	SQ FT	712.000 X	=	=	=	=
44000100	PAVEMENT REM	SQ YD	16,397.000 X	=	=	=	=
44000200	DRIVE PAVEMENT REM	SQ YD	422.000 X	=	=	=	=
44000500	COMB CURB GUTTER REM	FOOT	6,520.000 X	=	=	=	=
44000600	SIDEWALK REM	SQ FT	29,237.000 X	=	=	=	=
44003100	MEDIAN REMOVAL	SQ FT	1,675.000 X	=	=	=	=
44004000	PAVED DITCH REMOVAL	FOOT	50.000 X	=	=	=	=
44201335	CL C PATCH T4 8	SQ YD	9.000 X	=	=	=	=
50100100	REM EXIST STRUCT	EACH	1.000 X	=	=	=	=
50200100	STRUCTURE EXCAVATION	CU YD	2,995.000 X	=	=	=	=
50200300	COFFERDAM EXCAVATION	CU YD	1,130.000 X	=	=	=	=
50202901	COFFERDAM LOCATION 1	EACH	2.000 X	=	=	=	=
50300225	CONC STRUCT	CU YD	1,305.000 X	=	=	=	=

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ILLINOIS DEPARTMENT OF TRANSPORTATION
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				DOLLARS	CENTS	DOLLARS	CTS
50300255	CONC SUP-STR	CU YD	1,289.000 X	=			
50300260	BR DECK GROOVING	SQ YD	3,088.000 X	=			
50300265	SEAL COAT CONC	CU YD	229.000 X	=			
50300280	CONCRETE ENCASEMENT	CU YD	6.000 X	=			
50300285	FORM LINER TEX SURF	SQ FT	1,627.000 X	=			
50300300	PROTECTIVE COAT	SQ YD	10,298.000 X	=			
50500105	F & E STRUCT STEEL	L SUM	1.000 X	=			
50500505	STUD SHEAR CONNECTORS	EACH	25,881.000 X	=			
50800105	REINFORCEMENT BARS	POUND	1,510.000 X	=			
50800205	REINF BARS, EPOXY CTD	POUND	524,970.000 X	=			
50800515	BAR SPLICERS	EACH	148.000 X	=			
51100100	SLOPE WALL 4	SQ YD	296.000 X	=			
51201600	FUR STL PILE HP12X53	FOOT	20,196.000 X	=			
51202305	DRIVING PILES	FOOT	20,196.000 X	=			
51203600	TEST PILE ST HP12X53	EACH	4.000 X	=			

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
51204650	PILE SHOES	EACH	229.000 X	=			
51500100	NAME PLATES	EACH	1.000 X	=			
52000110	PREF JT STRIP SEAL	FOOT	74.000 X	=			
52100010	ELAST BEARING ASSY T1	EACH	9.000 X	=			
52100030	ELAST BEARING ASSY T3	EACH	9.000 X	=			
52100520	ANCHOR BOLTS 1	EACH	36.000 X	=			
52100540	ANCHOR BOLTS 1 1/2	EACH	16.000 X	=			
52100560	ANCHOR BOLTS 2	EACH	16.000 X	=			
54213669	PRC FLAR END SEC 24	EACH	1.000 X	=			
54213687	PRC FLAR END SEC 42	EACH	1.000 X	=			
54247130	GRATING-C FL END S 24	EACH	1.000 X	=			
54247180	GRATING-C FL END S 42	EACH	1.000 X	=			
550A0050	STORM SEW CL A 1 12	FOOT	439.000 X	=			
550A0070	STORM SEW CL A 1 15	FOOT	44.000 X	=			
550A0340	STORM SEW CL A 2 12	FOOT	1,265.000 X	=			

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
550A0380	STORM SEW CL A 2 18	FOOT	137.000 X	=			
550A0410	STORM SEW CL A 2 24	FOOT	937.000 X	=			
550A0430	STORM SEW CL A 2 30	FOOT	194.000 X	=			
550A0450	STORM SEW CL A 2 36	FOOT	290.000 X	=			
550A0470	STORM SEW CL A 2 42	FOOT	165.000 X	=			
550A2320	SS RG CL A 1 12	FOOT	248.000 X	=			
550A2330	SS RG CL A 1 15	FOOT	116.000 X	=			
550A2520	SS RG CL A 2 12	FOOT	358.000 X	=			
550A2560	SS RG CL A 2 24	FOOT	110.000 X	=			
550A2600	SS RG CL A 2 36	FOOT	229.000 X	=			
55100300	STORM SEWER REM 8	FOOT	125.000 X	=			
55100500	STORM SEWER REM 12	FOOT	1,098.000 X	=			
55100700	STORM SEWER REM 15	FOOT	1,335.000 X	=			
55100900	STORM SEWER REM 18	FOOT	626.000 X	=			
55101200	STORM SEWER REM 24	FOOT	337.000 X	=			

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
55101600	STORM SEWER REM 36	FOOT	60.000 X	=			
56103000	D I WATER MAIN 6	FOOT	46.000 X	=			
56103100	D I WATER MAIN 8	FOOT	4,126.000 X	=			
56400500	FIRE HYDNPTS TO BE REM	EACH	10.000 X	=			
58700300	CONCRETE SEALER	SQ FT	1,778.000 X	=			
59100100	GEOCOMPOSITE WALL DR	SQ YD	78.000 X	=			
59300100	CONTR LOW-STRENG MATL	CU YD	100.000 X	=			
60107600	PIPE UNDERDRAINS 4	FOOT	405.000 X	=			
60218400	MAN TA 4 DIA T1F CL	EACH	5.000 X	=			
60218500	MAN TA 4 DIA T3F&G	EACH	2.000 X	=			
60219000	MAN TA 4 DIA T8G	EACH	2.000 X	=			
60221000	MAN TA 5 DIA T1F OL	EACH	1.000 X	=			
60221100	MAN TA 5 DIA T1F CL	EACH	2.000 X	=			
60223800	MAN TA 6 DIA T1F CL	EACH	1.000 X	=			
60236200	INLETS TA T8G	EACH	1.000 X	=			

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
60255500	MAN ADJUST	EACH	1.000 X	=	=	=	=
60500040	REMOV MANHOLES	EACH	20.000 X	=	=	=	=
60500050	REMOV CATCH BAS	EACH	7.000 X	=	=	=	=
60500060	REMOV INLETS	EACH	34.000 X	=	=	=	=
60604400	COMB CC&G TB6.18	FOOT	7,702.000 X	=	=	=	=
60608300	COMB CC&G TM2.12	FOOT	277.000 X	=	=	=	=
60624610	CORRUGATED MED DOW	SQ FT	1,657.000 X	=	=	=	=
63200310	GUARDRAIL REMOV	FOOT	9.000 X	=	=	=	=
66700305	PERM SURV MKRS T2	EACH	7.000 X	=	=	=	=
66900200	NON SPL WASTE DISPOSL	CU YD	5,050.000 X	=	=	=	=
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000 X	=	=	=	=
66900530	SOIL DISPOSAL ANALY	EACH	4.000 X	=	=	=	=
67100100	MOBILIZATION	L SUM	1.000 X	=	=	=	=
70300220	TEMP PVT MK LINE 4	FOOT	2,390.000 X	=	=	=	=
70301000	WORK ZONE PAVT MK REM	SQ FT	796.000 X	=	=	=	=

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
72000100	SIGN PANEL T1	SQ FT	408.000 X	=			
72000200	SIGN PANEL T2	SQ FT	138.000 X	=			
72000300	SIGN PANEL T3	SQ FT	60.000 X	=			
72400310	REMOV SIGN PANEL T1	SQ FT	180.000 X	=			
72400320	REMOV SIGN PANEL T2	SQ FT	15.000 X	=			
72400330	REMOV SIGN PANEL T3	SQ FT	96.000 X	=			
72800100	TELES STL SIN SUPPORT	FOOT	304.000 X	=			
78005100	EPOXY PVT MK LTR-SYM	SQ FT	758.000 X	=			
78005110	EPOXY PVT MK LINE 4	FOOT	10,300.000 X	=			
78005130	EPOXY PVT MK LINE 6	FOOT	132.000 X	=			
78005140	EPOXY PVT MK LINE 8	FOOT	146.000 X	=			
78005150	EPOXY PVT MK LINE 12	FOOT	644.000 X	=			
78005180	EPOXY PVT MK LINE 24	FOOT	267.000 X	=			
78100100	RAISED REFL PAVT MKR	EACH	78.000 X	=			
78300100	PAVT MARKING REMOVAL	SQ FT	530.000 X	=			

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
80400100	ELECT SERV INSTALL	EACH	2.000 X				
81000600	CON T 2 GALVS	FOOT	140.000 X				
81000800	CON T 3 GALVS	FOOT	840.000 X				
81012500	CON T 1 1/2 PVC	FOOT	8,503.000 X				
81200230	CON EMB STR 2 PVC	FOOT	1,985.000 X				
81301370	JUN BX SS ES 18X12X8	EACH	5.000 X				
81400100	HANDHOLE	EACH	14.000 X				
81702120	EC C XLP USE 1C 8	FOOT	8,225.000 X				
81702130	EC C XLP USE 1C 6	FOOT	16,620.000 X				
81702150	EC C XLP USE 1C 2	FOOT	510.000 X				
81900200	TR & BKFIL F ELECT WK	FOOT	6,163.000 X				
82103600	LUM SV VM 250W	EACH	9.000 X				
82103700	LUM SV VM 400W	EACH	42.000 X				
82500360	LT CONT BASEM 480V100	EACH	2.000 X				
83006200	LT P A 30MH 6MA	EACH	9.000 X				

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
83008200	LT P A 40MH 6MA	EACH	42.000 X				
83600200	LIGHT POLE FDN 24D	FOOT	559.000 X				
83800505	BKWY DEV COU AL SKIRT	EACH	43.000 X				
89502375	REMOV EX TS EQUIP	EACH	7.000 X				
89502380	REMOV EX HANDHOLE	EACH	2.000 X				

TOTAL \$

- NOTE:
1. EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.
 2. THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS A DISCREPANCY BETWEEN THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY.
 3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
 4. A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

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

I. GENERAL

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

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

C. In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the chief procurement officer to void the contract, or subcontract, and may result in the suspension or debarment of the bidder or subcontractor.

II. ASSURANCES

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

A. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

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

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

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

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

The current salary of the Governor is \$177,412.00. Sixty percent of the salary is \$106,447.20.

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

B. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

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

C. Inducements

1. The Illinois Procurement Code provides:

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

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

D. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

E. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

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

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

F. Confidentiality

1. The Illinois Procurement Code provides:

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

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

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G. Insider Information

1. The Illinois Procurement Act provides:

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

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

III. CERTIFICATIONS

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

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

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

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

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

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

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

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

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

- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

B. Felons

1. The Illinois Procurement Code provides:

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

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

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C. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

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

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

E. Section 42 of the Environmental Protection Act

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

F. Educational Loan

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

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

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

G. Bid-Rigging/Bid Rotating

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

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

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

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

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

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

H. International Anti-Boycott

1. Section 5 of the International Anti-Boycott Certification Act provides:

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

2. The bidder makes the certification set forth in Section 5 of the Act.

I. Drug Free Workplace

1. The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.

(c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.

(d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.

(e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.

(f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

RETURN WITH BID

J. Disclosure of Business Operations in Iran

Section 50-36 of the Illinois Procurement Code, 30ILCS 500/50-36 provides that each bid, offer, or proposal submitted for a State contract shall include a disclosure of whether or not the Company acting as the bidder, offeror, or proposing entity, or any of its corporate parents or subsidiaries, within the 24 months before submission of the bid, offer, or proposal had business operations that involved contracts with or provision of supplies or services to the Government of Iran, companies in which the Government of Iran has any direct or indirect equity share, consortiums or projects commissioned by the Government of Iran, or companies involved in consortiums or projects commissioned by the Government of Iran and either of the following conditions apply:

- (1) More than 10% of the Company's revenues produced in or assets located in Iran involve oil-related activities or mineral-extraction activities; less than 75% of the Company's revenues produced in or assets located in Iran involve contracts with or provision of oil-related or mineral-extraction products or services to the Government of Iran or a project or consortium created exclusively by that government; and the Company has failed to take substantial action.
- (2) The Company has, on or after August 5, 1996, made an investment of \$20 million or more, or any combination of investments of at least \$10 million each that in the aggregate equals or exceeds \$20 million in any 12-month period, which directly or significantly contributes to the enhancement of Iran's ability to develop petroleum resources of Iran.

The terms "Business operations", "Company", "Mineral-extraction activities", "Oil-related activities", "Petroleum resources", and "Substantial action" are all defined in the Code.

Failure to make the disclosure required by the Code shall cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid, offer, or proposal or awarding the contract. The name of each Company disclosed as doing business or having done business in Iran will be provided to the State Comptroller.

Check the appropriate statement:

Company has no business operations in Iran to disclose.

Company has business operations in Iran as disclosed the attached document.

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

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

NA-FEDERAL

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

RETURN WITH BID

L. Political Contributions and Registration with the State Board of Elections

Sections 20-160 and 50-37 of the Illinois Procurement Code regulate political contributions from business entities and any affiliated entities or affiliated persons bidding on or contracting with the state. Generally under Section 50-37, any business entity, and any affiliated entity or affiliated person of the business entity, whose current year contracts with all state agencies exceed an awarded value of \$50,000, are prohibited from making any contributions to any political committees established to promote the candidacy of the officeholder responsible for the awarding of the contracts or any other declared candidate for that office for the duration of the term of office of the incumbent officeholder or a period 2 years after the termination of the contract, whichever is longer. Any business entity and affiliated entities or affiliated persons whose state contracts in the current year do not exceed an awarded value of \$50,000, but whose aggregate pending bids and proposals on state contracts exceed \$50,000, either alone or in combination with contracts not exceeding \$50,000, are prohibited from making any political contributions to any political committee established to promote the candidacy of the officeholder responsible for awarding the pending contract during the period beginning on the date the invitation for bids or request for proposals is issued and ending on the day after the date of award or selection if the entity was not awarded or selected. Section 20-160 requires certification of registration of affected business entities in accordance with procedures found in Section 9-35 of The Election Code.

By submission of a bid, the contractor business entity acknowledges and agrees that it has read and understands Sections 20-160 and 50-37 of the Illinois Procurement Code, and that it makes the following certification:

The undersigned business entity certifies that it has registered as a business with the State Board of Elections and acknowledges a continuing duty to update the registration in accordance with the above referenced statutes. A copy of the certificate of registration shall be submitted with the bid. The bidder is cautioned that the Department will not award a contract without submission of the certificate of registration.

These requirements and compliance with the above referenced statutory sections are a material part of the contract, and any breach thereof shall be cause to void the contract under Section 50-60 of the Illinois Procurement Code. This provision does not apply to Federal-aid contracts.

M. Lobbyist Disclosure

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

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

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

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

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

Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.

Or

Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:

Name and address of person: _____
All costs, fees, compensation, reimbursements and other remuneration paid to said person: _____

RETURN 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 bidder further certifies that the Department has received the disclosure forms for each bid.

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

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$25,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the contract. Furthermore, pursuant to Section 5-5, the Procurement Policy Board may review a proposal, bid, or contract and issue a recommendation to void a contract or reject a proposal or bid based on any violation of the Procurement Code or the existence of a conflict of interest as provided in subsections (b) and (d) of Section 50-35.

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

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

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

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

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ___ NO
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? YES ___ NO ___
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO ___

(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)

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

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

RETURN WITH BID

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

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

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

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

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

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDIVIDUAL (type or print information) NAME: ADDRESS Type of ownership/distributable income share: stock sole proprietorship Partnership other: (explain on separate sheet): % or \$ value of ownership/distributable income share:

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

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

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

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary.

RETURN WITH BID

3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, 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 100% of the annual 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 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No ___

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

Yes ___ No ___

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

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State 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 60% of the annual salary of the Governor, provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____

-
3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, 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 100% of the annual 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 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No ___

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes ___ No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the 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 ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ___ No ___

RETURN WITH BID

(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 ___

3. Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

RETURN WITH BID

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s): _____

Nature of disclosure: _____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by: _____ Date _____
Signature of Individual or Authorized Representative

NOT APPLICABLE STATEMENT

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

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

_____ Date _____
Signature of Authorized Representative

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

RETURN WITH BID

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**Form B
Other Contracts &
Procurement Related Information
Disclosure**

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

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$25,000, 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 CHECKED

<input type="checkbox"/>	_____	_____
	Signature of Authorized Representative	Date

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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

RETURN WITH BID

**Contract No. 85529
WINNEBAGO County
Section 99-00493-00-BR (Rockford)
Project BRM-5099(065)
Route FAU 5077 (Morgan Street)
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 _____ Telephone Number _____

Address _____

NOTICE REGARDING SIGNATURE

The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required.

Signature: _____ Title: _____ Date: _____

- Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.
- Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.
- Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.
- Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

RETURN WITH BID

ADDITIONAL FEDERAL REQUIREMENTS

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

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:
1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES _____ NO _____
 2. If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES _____ NO _____

RETURN WITH BID

**Contract No. 85529
WINNEBAGO County
Section 99-00493-00-BR (Rockford)
Project BRM-5099(065)
Route FAU 5077 (Morgan Street)
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.

(IF AN INDIVIDUAL)

Firm Name _____
Signature of Owner _____
Business Address _____

(IF A CO-PARTNERSHIP)

Firm Name _____
By _____
Business Address _____
Name and Address of All Members of the Firm: _____

(IF A CORPORATION)

Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____
Attest _____
Signature _____
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)
Business Address _____

(IF A JOINT VENTURE)

Corporate Name _____
By _____
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, please attach an additional signature sheet.



Return with Bid

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

Item No. _____

Letting Date _____

KNOW ALL MEN BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

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

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by

their respective officers this _____ day of _____ A.D., _____.

PRINCIPAL

SURETY

(Company Name)

(Company Name)

By _____ (Signature & Title)

By: _____ (Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,
County of _____

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

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

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

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

My commission expires _____

Notary Public

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

Electronic Bid Bond ID# _____

Company / Bidder Name _____

Signature and Title _____



(1) Policy

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

(2) Obligation

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

(3) Project and Bid Identification

Complete the following information concerning the project and bid:

Route _____	Total Bid _____
Section _____	Contract DBE Goal _____
Project _____	(Percent) (Dollar Amount)
County _____	
Letting Date _____	
Contract No. _____	
Letting Item No. _____	

(4) Assurance

I, acting in my capacity as an officer of the undersigned bidder (or bidders if a joint venture), hereby assure the Department that on this project my company : (check one)

Meets or exceeds contract award goals and has provided documented participation as follows:
Disadvantaged Business Participation _____ percent

Attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

Failed to meet contract award goals and has included good faith effort documentation to meet the goals and that my company has provided participation as follows:
Disadvantaged Business Participation _____ percent

The contract goals should be accordingly modified or waived. Attached is all information required by the Special Provision in support of this request including good faith effort. Also attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

Company

By _____

Title _____

Date _____

The "as read" Low Bidder is required to comply with the Special Provision.

Submit only one utilization plan for each project. The utilization plan shall be submitted in accordance with the special provision.

Bureau of Small Business Enterprises **Local Let Projects**
2300 South Dirksen Parkway Submit forms to the
Springfield, Illinois 62764 Local Agency

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

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

Name:
Address:
Phone No.

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

**Contract No. 85529
WINNEBAGO County
Section 99-00493-00-BR (Rockford)
Project BRM-5099(065)
Route FAU 5077 (Morgan Street)
District 2 Construction Funds**



Illinois Department of Transportation

SUBCONTRACTOR DOCUMENTATION

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

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

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

RETURN WITH SUBCONTRACT

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

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

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

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

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

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

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

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

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

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

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

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

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

B. Felons

1. The Illinois Procurement Code provides:

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

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

RETURN WITH SUBCONTRACT

C. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

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

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

E. Section 42 of the Environmental Protection Act

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

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

Name of Subcontracting Company

Authorized Officer

Date

RETURN WITH SUBCONTRACT
SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

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

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO ___
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ___ NO ___
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES ___ NO ___

(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)

4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO ___

(Note: Only one set of forms needs to be completed per person per subcontract even if a specific individual would require a yes answer to more than one question.)

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

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

RETURN WITH SUBCONTRACT

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDIVIDUAL (type or print information) NAME: ADDRESS Type of ownership/distributable income share: stock sole proprietorship Partnership other: (explain on separate sheet): % or \$ value of ownership/distributable income share:

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

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

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

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary.

RETURN WITH SUBCONTRACT

3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, 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 100% of the annual 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 60% of the annual salary of the Governor, 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 two 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 ___ No ___

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

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State 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 60% of the annual salary of the Governor, 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 60% of the annual salary of the Governor, 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 100% of the annual 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 60% of the annual salary of the Governor, 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 two 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 ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government.
Yes ___ No ___

RETURN WITH SUBCONTRACT

(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 ___

3. Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

RETURN WITH SUBCONTRACT

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s): _____

Nature of disclosure: _____

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by: _____ Date _____
Signature of Individual or Authorized Officer

NOT APPLICABLE STATEMENT

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

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

_____ Date _____
Signature of Authorized Officer

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT
OF TRANSPORTATION

Form B
Subcontractor: Other Contracts &
Procurement Related Information
Disclosure

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

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 subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No ___

If "No" is checked, the subcontractor 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 CHECKED

<input type="checkbox"/>	_____	_____
	Signature of Authorized Officer	Date



NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., April 29, 2011. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 85529
WINNEBAGO County
Section 99-00493-00-BR (Rockford)
Project BRM-5099(065)
Route FAU 5077 (Morgan Street)
District 2 Construction Funds**

Remove the existing eight-span open spandrel reinforced concrete arch bridge with precast concrete deck beams on the approaches and construct a three-span composite welded plate girder end spans and a steel tied arch middle span supported on concrete abutments and piers, 503'-3/8" in length over the Rock River and the total reconstruction of Morgan Street between IL Route 2 and IL Route 251 in the city of 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

Gary Hannig,
Secretary

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2011

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-07) (Revised 1-1-11)

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Effective as of the: March 11, 2011 Letting

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		GBSP4	Polymer Modified Portland Cement Mortar	June 7, 1994	June 1, 2007
		GBSP11	Permanent Steel Sheet Piling	Dec 15, 1993	Jan 1, 2007
		GBSP12	Drainage System	June 10, 1994	Jan 1, 2007
174	X	GBSP13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Oct 4, 2010
		GBSP14	Jack and Remove Existing Bearings	April 20, 1994	Jan 1, 2007
		GBSP15	Three Sided Precast Concrete Structure	July 12, 1994	Jan 18, 2011
		GBSP16	Jacking Existing Superstructure	Jan 11, 1993	Jan 1, 2007
		GBSP17	Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2007
		GBSP18	Modular Expansion Joint	May 19, 1994	Jan 1, 2007
		GBSP21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	Jan 1, 2007
180	X	GBSP22	Cleaning and Painting New Metal Structures	Sept 13, 1994	Oct 4, 2010
		GBSP25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	April 30, 2010
		GBSP26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	April 30, 2010
		GBSP28	Deck Slab Repair	May 15, 1995	Jan 18, 2011
		GBSP29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Jan 18, 2011
		GBSP30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Jan 18, 2011
		GBSP31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Jan 18, 2011
		GBSP32	Temporary Sheet Piling	Sept 2, 1994	Jan 1, 2007
		GBSP33	Pedestrian Truss Superstructure	Jan 13, 1998	Oct 4, 2010
		GBSP34	Concrete Wearing Surface	June 23, 1994	Jan 12, 2009
		GBSP35	Silicone Bridge Joint Sealer	Aug 1, 1995	Oct 4, 2010
		GBSP36	Surface Preparation and Painting Req. for Weathering Steel	Nov 21, 1997	May 11, 2009
		GBSP37	Underwater Structure Excavation Protection	April 1, 1995	Mar 6, 2009
189	X	GBSP38	Mechanically Stabilized Earth Retaining Walls	Feb 3, 1999	Jan 18, 2011
		GBSP42	Drilled Soldier Pile Retaining Wall	Sept 20, 2001	Oct 9, 2009
		GBSP43	Driven Soldier Pile Retaining Wall	Nov 13, 2002	Oct 9, 2009
		GBSP44	Temporary Soil Retention System	Dec 30, 2002	May 11, 2009
		GBSP45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Jan 1, 2007
		GBSP46	Geotextile Retaining Walls	Sept 19, 2003	Oct 9, 2009
		GBSP47	High Performance Concrete Structures	Aug 5, 2002	Jan 1, 2007
		GBSP50	Removal of Existing Non-composite Bridge Decks	June 21, 2004	Jan 1, 2007
198	X	GBSP51	Pipe Underdrain for Structures	May 17, 2000	Jan 22, 2010
		GBSP52	Porous Granular Embankment (Special)	Sept 28, 2005	Nov 14, 2008
		GBSP53	Structural Repair of Concrete	Mar 15, 2006	Jan 22, 2010
		GBSP55	Erection of Curved Steel Structures	June 1, 2007	
		GBSP56	Setting Piles in Rock	Nov 14, 1996	Jan 1, 2007
		GBSP57	Temporary Mechanically Stabilized Earth Retaining Walls	Jan 6, 2003	Oct 4, 2010
		GBSP58	Mechanical Splicers	Sep 21, 1995	May 11, 2009
		GBSP59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	July 9, 2008
		GBSP60	Containment and Disposal of Non-Lead Pain Cleaning Residues	Nov 25, 2004	Mar 6, 2009
		GBSP61	Slipform Parapet	June 1, 2007	Jan 12, 2009
		GBSP62	Concrete Deck Beams	June 13, 2008	Oct 9, 2009
		GBSP63	Demolition Plans for Removal of Existing Structures	Sept 5, 2007	
		GBSP64	Segmental Concrete Block Wall	Jan 7, 1999	Oct 4, 2010

		GBSP65	Precast Modular Retaining Walls	Mar 19, 2001	Oct 4, 2010
		GBSP66	Wave Equation Analysis of Piles	Nov 14, 2008	
		GBSP67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	
199	X	GBSP68	Piling	May 11, 2009	Jan 22, 2010
202	X	GBSP69	Freeze-Thaw Aggregates for Concrete Superstructures Poured on Grade	April 30, 2010	
		GBSP70	Braced Excavation	Aug 9, 1995	Jan 18, 2011
203	X	GBSP71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 4, 2010
		GBSP72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	

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LR SD 12		<input type="checkbox"/> Slab Movement Detection Device	Nov. 11, 1984	Jan. 1, 2007
LR SD 13		<input type="checkbox"/> Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR SD406		<input type="checkbox"/> Safety Edge	April 1, 2011	
LR 105	208	<input checked="" type="checkbox"/> Cooperation with Utilities	Jan. 1, 1999	Jan. 1, 2007
LR 107-2		<input type="checkbox"/> Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
LR 107-4	211	<input checked="" type="checkbox"/> Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 107-6		<input type="checkbox"/> Selection of Labor	Aug. 1, 2010	
LR 108		<input type="checkbox"/> Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 212		<input type="checkbox"/> Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1		<input type="checkbox"/> Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		<input type="checkbox"/> Asphalt Stabilized Base Course, Plant Mix	Feb. 20, 1963	Jan. 1, 2007
LR 400-1		<input type="checkbox"/> Bituminous Treated Earth Surface	Jan. 1, 2007	Jan. 1, 2008
LR 400-2		<input type="checkbox"/> Bituminous Surface Mixture (Class B)	Jan. 1, 2008	
LR 402		<input type="checkbox"/> Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 403-2		<input type="checkbox"/> Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 406		<input type="checkbox"/> Filling HMA Core Holes with Non-shrink Grout	Jan. 1, 2008	
LR 420		<input type="checkbox"/> PCC Pavement (Special)	May 12, 1964	Jan. 2, 2007
LR 442		<input type="checkbox"/> Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451		<input type="checkbox"/> Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1		<input type="checkbox"/> Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2		<input type="checkbox"/> Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542		<input type="checkbox"/> Pipe Culverts, Type _____ (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663		<input type="checkbox"/> Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 702	212	<input checked="" type="checkbox"/> Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 1004		<input type="checkbox"/> Coarse Aggregate for Bituminous Surface Treatment	Jan. 1, 2002	Jan. 1, 2007
LR 1030		<input type="checkbox"/> Growth Curve	Mar. 1, 2008	Jan. 1, 2010
LR 1032-1		<input type="checkbox"/> Emulsified Asphalts	Jan. 1, 2007	Feb. 7, 2008
LR 1032-2		<input type="checkbox"/> Multigrade Cold Mix Asphalt	Jan. 1, 2007	Feb. 1, 2007
LR 1095		<input type="checkbox"/> Fast-Dry Pavement Marking Paint Black (Lead Free Waterborne Type)	April 1, 2011	
LR 1102		<input type="checkbox"/> Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2007	

BDE SPECIAL PROVISIONS
For the April 29 and June 17, 2011 Lettings

The following special provisions indicated by an "x" are applicable to this contract. An * indicates a new or revised special provision for the letting.

<u>File Name</u>	<u>Pg #</u>		<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80240			Above Grade Inlet Protection	July 1, 2009	
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
80243			American Recovery and Reinvestment Act Provisions	April 1, 2009	
80236			American Recovery and Reinvestment Act Signing	April 1, 2009	April 15, 2009
80186			Alkali-Silica Reaction for Cast-in-Place Concrete	Aug. 1, 2007	Jan. 1, 2009
80213			Alkali-Silica Reaction for Precast and Precast Prestressed Concrete	Jan. 1, 2009	
80207	213	X	Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas (NOTE: This special provision was previously named "Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders".)	Nov. 1, 2008	Nov. 1, 2010
80192			Automated Flagger Assistance Device	Jan. 1, 2008	
80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	April 1, 2009
80241			Bridge Demolition Debris	July 1, 2009	
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
* 80166	214	X	Cement	Jan. 1, 2007	April 1, 2011
80260	217	X	Certification of Metal Fabricator	July 1, 2010	
80198			Completion Date (via calendar days)	April 1, 2008	
80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80094	218	X	Concrete Admixtures	Jan. 1, 2003	April 1, 2009
80215	222	X	Concrete Joint Sealer	Jan. 1, 2009	
80226	224	X	Concrete Mix Designs	April 1, 2009	
80261			Construction Air Quality – Diesel Retrofit	June 1, 2010	
80237	226	X	Construction Air Quality – Diesel Vehicle Emissions Control	April 1, 2009	July 1, 2009
80239	228	X	Construction Air Quality – Idling Restrictions	April 1, 2009	
80227	230	X	Determination of Thickness	April 1, 2009	
80177			Digital Terrain Modeling for Earthwork Calculations	April 1, 2007	
* 80029	242	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 1, 2011
* 80177			Drainage and Inlet Protection Under Traffic	April 1, 2011	
80179			Engineer's Field Office Type A	April 1, 2007	Jan. 1, 2011
80205			Engineer's Field Office Type B	Aug. 1, 2008	Jan. 1, 2011
80189	251	X	Equipment Rental Rates	Aug. 2, 2007	Jan. 2, 2008
80228			Flagger at Side Roads and Entrances	April 1, 2009	
80249			Frames and Grates	Jan. 1, 2010	
80265	253	X	Friction Aggregate	Jan. 1, 2011	
80229			Fuel Cost Adjustment	April 1, 2009	July 1, 2009
80169			High Tension Cable Median Barrier	Jan. 1, 2007	April 1, 2009
80194			HMA – Hauling on Partially Completed Full-Depth Pavement	Jan. 1, 2008	
80245	257	X	Hot-Mix Asphalt – Anti-Stripping Additive	Nov. 1, 2009	
80246	258	X	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	
80250	259	X	Hot-Mix Asphalt – Drop-Offs	Jan. 1, 2010	
80259	260	X	Hot-Mix Asphalt – Fine Aggregate	April 1, 2010	
80109			Impact Attenuators	Nov. 1, 2003	Nov. 1, 2008
80110			Impact Attenuators, Temporary	Nov. 1, 2003	Jan. 1, 2007
80252	261	X	Improved Subgrade	Jan. 1, 2010	
80266			Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds ≤ 40 MPH	Jan. 1, 2011	Jan. 2, 2011
* 80230	264	X	Liquidated Damages	April 1, 2009	April 1, 2011
80267			Long-Span Guardrail over Culvert	Jan. 1, 2011	
80045			Material Transfer Device	June 15, 1999	Jan. 1, 2009
80203	265	X	Metal Hardware Cast into Concrete	April 1, 2008	April 1, 2009

File Name	Pg #		Special Provision Title	Effective	Revised
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80238			Monthly Employment Report	April 1, 2009	Jan. 1, 2010
80253			Movable Traffic Barrier (NOTE: This Special Provision was previously named "Moveable Traffic Barrier System".)	Jan. 1, 2010	Jan. 1, 2011
80262	266	X	Mulch and Erosion Control Blankets (Note: the Special Provision was previously named "Mulch")	Nov. 1, 2010	April 1, 2011
80180	270	X	National Pollutant Discharge Elimination System / Erosion and Sediment Control Deficiency Deduction	April 1, 2007	Nov. 1, 2009
80208			Nighttime Work Zone Lighting	Nov. 1, 2008	
80231			Pavement Marking Removal	April 1, 2009	
80254	272	X	Pavement Patching	Jan. 1, 2010	
80022	273	X	Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
80232			Pipe Culverts	April 1, 2009	April 1, 2010
80263			Planting Perennial Plants	Jan. 1, 2011	
80210			Portland Cement Concrete Inlay or Overlay	Nov. 1, 2008	
80217			Post Clips for Extruded Aluminum Signs	Jan. 1, 2009	
80268	275	X	Post Mounting of Signs	Jan. 1, 2011	
80171	276	X	Precast Handling Holes	Jan. 1, 2007	
80218			Preventive Maintenance – Bituminous Surface Treatment	Jan. 1, 2009	April 1, 2009
80219			Preventive Maintenance – Cape Seal	Jan. 1, 2009	April 1, 2009
80220			Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	
80221			Preventive Maintenance – Slurry Seal	Jan. 1, 2009	
80015			Public Convenience and Safety	Jan. 1, 2000	
34261	278	X	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	280	X	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80247	282	X	Raised Reflective Pavement Markers	Nov. 1, 2009	April 1, 2010
80172	283	X	Reclaimed Asphalt Pavement (RAP)	Jan. 1, 2007	Jan. 1, 2011
80224			Restoring Bridge Approach Pavements Using High-Density Foam	Jan. 1, 2009	
80271			Safety Edge	April 1, 2011	
80131	291	X	Seeding	July 1, 2004	July 1, 2010
80264			Selection of Labor	July 2, 2010	
80152	294	X	Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	July 1, 2010
80132	299	X	Self-Consolidating Concrete for Precast Products	July 1, 2004	July 1, 2010
80127			Steel Cost Adjustment	April 2, 2004	April 1, 2009
80255			Stone Matrix Asphalt	Jan. 1, 2010	
80234			Storm Sewers	April 1, 2009	April 1, 2010
80143	301	X	Subcontractor Mobilization Payments	April 2, 2005	April 1, 2011
80075			Surface Testing of Pavements	April 1, 2002	Jan. 1, 2007
80087	302	X	Temporary Erosion Control	Nov. 1, 2002	Jan. 1, 2011
80225			Temporary Raised Pavement Marker	Jan. 1, 2009	
80256			Temporary Water Filled Barrier (NOTE: This special provision was previously named "Temporary Longitudinal Traffic Barrier System".)	Jan. 1, 2010	Jan. 1, 2011
80257			Traffic Barrier Terminal, Type 6	Jan. 1, 2010	
80269			Traffic Control Surveillance	Jan. 1, 2011	
20338	306	X	Training Special Provisions	Oct. 15, 1975	
80258	309	X	Truck Mounted/Trailer Mounted Attenuators	Jan. 1, 2010	
80270			Utility Coordination and Conflicts	April 1, 2011	
80071			Working Days	Jan. 1, 2002	

The following special provisions are in the 2011 Supplemental Specifications and Recurring Special Provisions:

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80214	Concrete Gutter, Type A	Article 606.07	Jan. 1, 2009	
80178	Dowel Bars	Article 1006.11	April 1, 2007	Jan. 1, 2008
80201	Hot-Mix Asphalt – Plant Test Frequency	Article 1030.05	April 1, 2008	Jan. 1, 2010
80251	Hot-Mix Asphalt – QC/QA Acceptance Criteria	Article 1030.05	Jan. 1, 2010	
80202	Hot-Mix Asphalt – Transportation	Article 1030.08	April 1, 2008	
80196	Mast Arm Assembly and Pole	Article 1077.03	Jan. 1, 2008	Jan. 1, 2009
80182	Notification of Reduced Width	Article 701.06	April 1, 2007	
80069	Organic Zinc-Rich Paint System	Article 1008.05	Nov. 1, 2001	Jan. 1, 2010
80216	Partial Exit Ramp Closure for Freeway/Expressway	Section 701	Jan. 1, 2009	
80209	Personal Protective Equipment	Article 701.12	Nov. 1, 2008	
80119	Polyurea Pavement Marking	Sections 780, 1095 and 1105	April 1, 2004	Jan. 1, 2009
80170	Portland Cement Concrete Plants	Article 1020.11	Jan. 1, 2007	
80211	Prismatic Curb Reflectors	Articles 782.03 and 1097.04	Nov. 1, 2008	
80223	Ramp Closure for Freeway/Expressway	Section 701	Jan. 1, 2009	
80183	Reflective Sheeting on Channelizing Devices	Article 1106.02	April 1, 2007	Nov. 1, 2008
80206	Reinforcement Bars – Storage and Protection	Article 508.03	Aug. 1, 2008	April 1, 2009
80176	Thermoplastic Pavement Marking	Article 1095.01	Jan. 1, 2007	

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

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the specifications listed in the table below, which apply to and govern the proposed improvement designated as Section 99-00493-00-BR, Rockford and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and govern.

SPECIFICATION	ADOPTED/DATED
Standard Specifications for Road and Bridge Construction	January 1, 2007
Manual on Uniform Traffic Control Devices for Streets and Highways Illinois Supplement	2009 Edition December 2009
Supplemental Specifications and Recurring Special Provisions (indicated on the Check Sheet included herein)	January 1, 2011
Standard Specifications for Water & Sewer main Construction in Illinois	Current Edition

The work described shall follow the Standard Specifications for Road and Bridge Construction in Illinois, January 1, 2007 edition as published by the Department of Transportation. All references to the Standard Specifications herein shall be considered a direct reference to the IDOT Standard Specifications for Road and Bridge Construction.

LOCATION OF IMPROVEMENT

The proposed improvements are located along Morgan Street and College Avenue between IL Rte 2 (Main Street) and IL Rte 251 (Kishwaukee Street) in downtown Rockford, Illinois. FAU Route 5077 is referenced as Morgan Street (West of the Rock River) and College Avenue (East of the Rock River). The project begins approximately 126.00 feet east of the centerline of Illinois Route 2, extending easterly across the Rock River, ending approximately 161.61 feet west of the centerline of Illinois Route 251 for a total distance of 3,426.30 feet. The project improvements also include the partial reconstruction of Seminary Street for a total distance of 768.30 feet.

DESCRIPTION OF IMPROVEMENT

This project is a roadway and bridge reconstruction of Morgan Street and College Avenue that includes the total reconstruction of the structure carrying Morgan Street over the Rock River. The work to be performed under this contract includes, but is not limited to the total reconstruction of the Morgan Street bridge, four lanes of full depth jointed concrete pavement on an improved aggregate subgrade with concrete curb and gutter, closed storm sewer system, MSE retaining walls, multi-use path, sidewalks, driveways, modern single lane roundabout intersection, landscaping, pavement marking, roadway and bridge lighting, water main, sanitary sewer, and all incidental and collateral work necessary to complete the project as shown on the plans and described herein.

ARTICLE 105.07 – COOPERATION WITH UTILITIES

The Contractor shall coordinate with applicable utilities according to Article 105.07 of the "Standard Specifications" and the following:

The Contractor shall be aware of the location of all utilities and structures in the project area. The Contractor shall conduct construction operations to avoid damage to the above-mentioned utilities or structures.

Should any damage to utilities occur, due to the Contractor's negligence, the Contractor shall be responsible for making all repairs, in a manner acceptable to the Engineer. All costs associated with making the repairs shall be the responsibility of the Contractor.

The Contractor shall notify all utility owners of the proposed construction schedule, and shall coordinate construction operations with the utility owners so that relocation of utility lines and structures may proceed in an orderly manner. Notification shall be in writing with copies transmitted to the Engineer.

A summary of the anticipated utility relocation locations has been provided for the Contractor's information. It shall be the responsibility of the Contractor to coordinate the relocation of the following facilities, along with any additional unforeseen relocation that may be necessary as a result of the proposed improvements. It shall be the Contractor's responsibility to coordinate the relocation of the following facilities with no additional compensation or extension of time for potential relocation delays.

Identified Utility Relocation Areas

1. Commonwealth Edison has existing high voltage aerial lines that are located along the east bank of the Rock River. If the Contractor determines a line outage will be required to safely work within the vicinity of the existing Overhead Transmission facilities a minimum of a **12-week prior notifications** will be required. The outage dates cannot be guaranteed due to system concerns and/or weather conditions. However, every effort will be made to accommodate the contractors need date. For this particular project, ComEd has agreed to make all necessary arrangements for a summer outage during the normally restricted time frame.

A letter stating the reason for the outage, the duration (Outages are provided Monday thru Friday, weekends are very difficult to arrange) of the outage (Provide primary dates and secondary dates for weather and/or system concerns). Also, the type of construction equipment that will be utilized, the nature of the work that will be performed, and a short explanation of the alternatives (If, any) that may be available with a short explanation of why they will not be practical to be utilized.

2. Commonwealth Edison also has overhead aerial facilities that are located along the east bank of the Rock River (closest to the River). These overhead facilities are scheduled for underground relocation within the vicinity of the Morgan Street Bridge (Work Order #05631979). The proposed underground relocation of this facility has been coordinated with the Illinois Railway and must accommodate the maintenance of rail traffic prior to the permanent abandonment of the tracks under the bridge.
3. Commonwealth Edison has overhead facilities throughout the project that are scheduled for relocation (Work Order #05631979). Some overhead lines that provide service to commercial and residential buildings will need to be relocated and coordinated during construction.
4. Nicor Gas has existing underground facilities throughout the project, in addition to the existing 8" main attached to the existing Morgan Street Bridge. Nicor currently has plans to relocate the existing gas facilities throughout most of the project limits (Work Oder #127695, #127702).
5. AT&T Long Distance has an existing underground conduit under Morgan Street that runs parallel on the west side of the CC&P railroad tracks. This line is in conflict with the proposed drainage and is schedule for relocation.

6. AT&T Distribution has existing overhead and underground facilities throughout the project limits that are scheduled for relocation. Some of the existing aerial facilities will be coordinated with ComEd's relocation during construction.
7. Kentucky Data Link has overhead fiber optic cable that is attached to the existing ComEd overhead facilities that run parallel to the Rock River (closest to the River). The relocation of this existing fiber optic facility shall be coordinated with the ComEd underground relocation within the vicinity of the Morgan Street Bridge. The proposed underground relocation of this facility has been coordinated with the Illinois Railway and must accommodate the maintenance of rail traffic prior to the permanent abandonment of the tracks under the bridge.
8. The City of Rockford's water relocation has been included in the contract documents and shall be performed by the Contractor in accordance with the plans and special provisions.
9. The Rock River Water Reclamation District has facilities that will be impacted by the proposed improvements and the relocation has been included in the contract documents and shall be performed by the Contractor in accordance with the plans and special provisions.

ARTICLE 105.08 – COOPERATION BETWEEN CONTRACTORS

The Contractor shall coordinate with adjacent contracts according to Article 105.08 of the "Standard Specifications" and the following:

The Contractor is advised that certain operations will involve cooperation with other railroad personnel and Contractors performing work on or adjacent to this project for the City of Rockford. The Contractor shall cooperate to the fullest extent with City of Rockford, Chicago Central & Pacific Railroad, Illinois Department of Transportation, and any other Contractors working on adjacent projects in compliance with the provisions of Article 105.08 of the Standard Specifications.

Illinois Department of Transportation IL Rte. 2 (Main Street) Intersection Improvements

The Contractor shall coordinate and schedule the adjoining Morgan Street reconstruction activities with the improvements to the intersection with Morgan Street and South Main Street (IL Rte 2). The Main Street (IL Rte 2) project is anticipated to begin in the spring of 2012 with a completion date towards the end of 2013.

Chicago, Central & Pacific Railroad At-Grade Highway/Rail Crossing at Morgan Street

The Contractor shall coordinate construction activities, access, and schedule with the reconstruction and widening of the CC&P at-grade rail/highway crossing at Morgan Street. This work will be performed by others and it shall be the Contractor's responsibility to coordinate the adjacent Morgan Street reconstruction activities to limit the need for a railroad flagger at this crossing.

Chicago, Central & Pacific Railroad & The Illinois Railway Track Improvements at the Rockford Junction.

The Contractor shall coordinate the Morgan Street Bridge demolition and construction activities, rail traffic, and subsequent abandonment of the Illinois Railway associated with the Rockford Junction Track Improvement project, located south of the Morgan Street Bridge. The project is one of several projects essential to the overall improvements to accommodate the track reconfiguration and eventual consolidation of the Illinois Railway (IR) rail traffic onto the Chicago Central & Pacific Railroad. The project will result in the elimination/abandonment for the IR under the Morgan Street Bridge. The span of the Morgan Street Bridge over the existing track must remain in place until the completion of Rockford Junction Track Project and rail traffic must be maintained until October 1, 2011.

No adjustments will be made for delay or suspension of work due to the fault of the Contractor in coordinating project schedule, staging and work items with adjacent Contracts. This contract is one of several projects essential to the overall improvements to the Morgan Street Bridge corridor

reconstruction. Each of the contracts depends on certain portions of the work to be completed by others in order to complete the project on schedule.

The following table indicates all such items of the work which have specific completion dates. It is essential that the Contractor responsible for the work complete these items on or before the dates indicated so that other contracts may plan to execute their work accordingly.

		To Allow Work on Morgan Street Project (Section # 99-00493-00-BR)												
		Completion Date	Structure Work Elements					Roadway Work Elements						
Must Complete Work			Existing Bridge Demo (Span Over Existing Illinois Railway)	Bridge Demo (Except East RR Span)	Construct Temporary Haul Road (Existing IR Tracks)	Install Sub-Structure Elements (East Abutment)	Install Sub-Structure Elements (East Pier)	Construct West Approach Embankment	Install Proposed Drainage Outlet (East Side)	Construct Morgan Street Pavement (Main Street to CC&P RR Crossing)	Construct College Avenue Pavement (Seminary Street to Kishwaukee Street)	Construct Morgan Street Pavement (CC&P RR Crossing to Bridge)	Construct College Avenue Pavement (Seminary Street to Bridge)	Final Pavement Marking
Rockford Junction Track Project (Section # 10-44493-00-RR)	Illinois Railway Construction (Track Re-Alignment)	October 1, 2011	X		X	X	X		X					
	Rail Signal International (Signal At-Grade Crossing Upgrades)	October 1, 2011	X		X	X	X		X					
	CC&P Track Connection & Signal Upgrades	October 1, 2011	X		X	X	X		X					
Illinois Route 2 Intersection	Pavement Widening & Intersection Reconstruction	Fall 2013												X
CC&P RR At-Grade Highway/Rail Crossing (Section # 10-00577-00-SP)	Widen & Reconstruct At-Grade Crossing & Signal Upgrades	2012										X		
Sanitary Sewer Relocation (Morgan Street Contract)	* Construct Junction Vault & Service Line at East Abutment	Morgan Street Contractor Schedule										X		X
	* Complete modifications to the existing junction vault under proposed West Embankment	Morgan Street Contractor Schedule						X						
Nicor Gas	Nicor Relocation that allows abandonment of 8 Inch Gas Line Attached to Structure	May 2011	X	X										
Water Relocation (Morgan Street Contract)	Install Proposed VM from Main Street to Buchanan Street	Morgan Street Contractor Schedule		X						X		X		
	Install Proposed VM from Kishwaukee Street to East Side of Bridge	Morgan Street Contractor Schedule		X							X		X	
Con Edison Power	Relocate Overhead Power Lines on East River Bank	May 2011	X											

* Morgan Street contract critical path work items.
 ** High-Voltage Lines can be de-energized during demolition, setting of girders, and pile driving operations.

SECTION 107 - LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

The Contractor shall observe and comply with the Legal Regulations and Public Responsibilities according to Section 107 of the "Standard Specifications" and the following:

Protection of Existing Drainage Facilities During Construction:

All existing drainage structures shall be kept free of debris resulting from construction operations. All work and material necessary to prevent accumulation of debris in the drainage structures will be considered as incidental to the contract. Any debris in the drainage structures resulting from construction operations shall be removed at the Contractor's own expense, and no extra compensation will be allowed.

Should reconstruction or adjustment of a drainage structure be required by the Engineer in the field, the necessary work and payment shall be done in accordance with Section 602 and Article 104.02 respectively of the "Standard Specifications".

During construction, if the Contractor's forces encounter or otherwise becomes aware of any sewers, underdrains or field drains within the right-of-way other than those shown on the plans, they shall inform the Engineer. The Engineer shall direct the work necessary to maintain or replace the facilities in service, and to protect them from damage during construction if maintained. Existing facilities to be maintained that are damaged because of non-compliance with this provision shall be replaced at the Contractor's own expense. Should the Engineer direct the replacement of a facility, the necessary work and payment shall be done in accordance with Section 550, Section 601 and Article 104.02 respectively of the "Standard Specifications".

Construction Safety and Health Standards:

It is a condition of this contract and shall be made a condition of each subcontract entered into pursuant to this contract that the Contractor and any Subcontractor shall not require any laborer or mechanic employed in performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to their health or safety, as determined under Federal Construction Safety and Health Standards.

ARTICLE 107.04 - PERMIT REQUIREMENTS

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 and any additional permit bonds as required.

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

ARTICLE 107.09 - PUBLIC CONVENIENCE AND SAFETY

The Contractor shall limit public inconveniences safety conflicts according to Article 107.09 of the "Standard Specifications" and the following:

Safety and Convenience:

The Contractor shall maintain entrances along the proposed improvement. Interference with traffic movements and inconvenience to owners of abutting property and the public shall be kept to a minimum. Any delays or inconveniences caused by the Contractor, by complying with these requirements shall be considered as incidental to the contract and no additional compensation will be allowed.

Contractors shall plan their work so that there will be no open holes in the pavement and that all barricades will be removed from the roadway during non-working hours, except where required for public safety.

ARTICLE 107.12 – PROTECTION OF RAILROAD TRAFFIC AND PROPERTY

This special provision amends Article 107.12 of the “Standard Specifications” as follows:

Replace the fifth paragraph with:

If the Contractor elects to cross the tracks at a location not shown on the plans or agreed between the City and the Railroads, the Contractor shall pay the costs of Railroad flaggers required for transporting material and equipment across the track. These costs shall be considered as included in the contract unit prices bid for the various items of work involved.

The contractor shall submit a Railroad Flagger Schedule to the Engineer and the Railroads shall include the anticipated dates and locations when the Railroad flagging will be required on the project. The Contractor shall maintain and update the flagger schedule as the work progresses. The Contractor shall schedule the work in such a manner to avoid inefficient utilization of railroad FLAGGERS.

ARTICLE 107.23 – PROTECTION OF STREAMS, LAKES, RESERVOIRS, NATURAL AREAS, WETLANDS, PRAIRIE AREAS, SAVANNAHS, AND ENDANGERED AND THREATENED SPECIES

The Contractor shall take sufficient precautions to prevent pollution of streams, lakes, reservoirs, and wetlands with fuels, oils, bitumens, calcium chloride, or other harmful materials according to Article 107.23 of the “Standard Specifications”.

To prevent pollution by residual concrete and/or the byproduct of washing out the concrete trucks, concrete washout facilities shall be constructed and maintained on any project which includes cast-in-place concrete items. The concrete washout shall be constructed, maintained, and removed according to this special provision and the standard included in these plans. Concrete washout facilities shall be required on all projects regardless of the need for NPDES permitting. On projects requiring NPDES permitting, concrete washout facilities shall also be addressed in the Storm Water Pollution Prevention Plan.

The concrete washout facility shall be constructed on the job site according to the standard provided in the plans. The Contractor may elect to use a pre-fabricated portable concrete washout structure. (As detailed in the plans) The Contractor shall submit a plan for the concrete washout facility, to the Engineer for approval, a minimum of 10 calendar days before the first concrete pour. The working concrete washout facility shall be in place before any delivery of concrete to the site. The Contractor shall ensure that all concrete washout activities are limited to the designated area.

The concrete washout facility shall be located no closer than 50 feet from any environmentally sensitive areas, such as water bodies, wetlands, and/or other areas indicated on the plans. Adequate signage shall be placed at the washout facility and elsewhere as necessary to clearly indicate the location of the concrete washout facility to the operators of concrete trucks.

The concrete washout facility shall be adequately sized to fully contain the concrete washout needs of the project. The contents of the concrete washout facility shall not exceed 75% of the facility capacity. Once the 75% capacity is reached, concrete placement shall be discontinued until the facility is cleaned out. Hardened concrete shall be removed and properly disposed of outside the right-of-way. Slurry shall be allowed to evaporate, or shall be removed and properly disposed of outside the right-of-way. The Contractor shall immediately replace damaged basin liners or other washout facility components to prevent leakage of concrete waste from the washout facility. Concrete washout facilities shall be inspected by the Contractor after each use. Any and all spills shall be reported to the Engineer and cleaned up immediately. The Contractor shall remove the concrete washout facility when it is no longer needed.

Basis of Payment: This work will not be paid for separately, but shall be incidental to the concrete work items included in the contract.

ARTICLE 107.25 – PROTECTION AND RESTORATION OF TRAFFIC SIGNS

The Contractor shall protect and restore traffic signs within the limits of the project according to Article 107.25 of the "Standard Specifications" and the following:

1. It is the Contractor's responsibility to remove all traffic signs.
2. The Contractor shall store the signs for City Pick-up.
3. Repair or replacement of any signs damaged during sign removal is the responsibility of the Contractor.
4. Construction traffic control shall remain until City crews replace the permanent signs identified in the plans as "Provided by City".
5. All work required of the Contractor for this item will be incidental to the contract, and no additional payments will be made.

ARTICLE 107.30 – CONTRACTOR'S RESPONSIBILITY FOR WORK

The Contractor shall comply with the Contractor's Responsibility for Work according to Article 107.30 of the "Standard Specifications" and the following:

The City of Rockford has specified the completion of proposed pavement throughout specific locations on the project in accordance with Article 108.09. The contractor shall detour all construction traffic, including but not limited to semi trailers, tandem trucks, equipment delivery vehicles, concrete trucks, and other miscellaneous construction vehicles away from pavement that has been completed. Designated side streets, haul roads, and alternative routes must be utilized by the Contractor upon completion of the proposed pavement locations to avoid damage and excessive loading on completed pavement.

The contractor shall be responsible to protect, maintain, and detour construction traffic from any completed pavement at no additional cost to the Contract.

ARTICLE 108.05 – COMPLETION DATE PLUS WORKING DAYS

It is the intent of the City of Rockford that this project be constructed in an orderly and timely manner. The Contractor shall take special note of the provisions of Article 105.06 and Article 108.05 paragraph 2 of the "Standard Specifications" which shall be adhered to.

The Contractor shall coordinate all work between their forces, subcontractors, CC&P RR, Illinois Railway, City of Rockford, and the Illinois Department of Transportation to enable completion by December 23, 2013. The Contractor will be allowed 5 (five) working days after the December 23, 2013 completion date to complete punch list items.

The contractor shall also comply with the interim completion dates provided in the contract documents and further described in Article 108.09.

Interim Completion dates applicable to this contract include:

- Complete all necessary utility, drainage, and roadway improvements from the intersection of College Avenue & Seminary Street to Kishwaukee Street. This section of roadway from the intersection at Seminary Street to Kishwaukee Street must be completed and open to traffic prior to November 23, 2011.

ARTICLE 108.09 – FAILURE TO COMPLETE THE WORK ON TIME

This Special Provision amends Section 108.09 (FAILURE TO COMPLETE THE WORK ON TIME) of the Standard Specifications for Road and Bridge Construction as follows:

This contract is one of several projects essential to the overall improvements to the Morgan Street Bridge corridor reconstruction. Each of the contracts depends on certain portions of the work to be completed by others in order to complete the project on schedule.

Interim Completion dates applicable to this contract include:

- Complete all necessary utility, drainage, and roadway improvements from the intersection of College Avenue & Seminary Street to Kishwaukee Street. This section of roadway from the intersection at Seminary Street to Kishwaukee Street must be completed and open to traffic prior to November 23, 2011.

The Contractor shall conduct and coordinate the construction activities in a manner so as to complete all work required for the improvement except as herein specified on or before December 23, 2013. The Contractor will be allowed 5 (five) working days after the December 23, 2013 completion date to complete punch list items.

In the event the Contractor fails to complete the work by any of the completion dates listed above, or within such extended time as may be allowed, the Contractor shall pay the Department liquidated damages as specified in Article 108.09 of the Standard Specifications for each day of overrun, and the original contract amount will be used to establish the daily charges. In the event that the contractor fails to complete the work by any of the completion dates listed above, or within such extended time as may have been allowed the liquidated damages will be changed for every day shown on the calendar including Saturdays, Sundays and legal holidays until the completion of the required work.

20101000 TEMPORARY FENCE

Description: This work shall consist of furnishing, installing and removing temporary barrier wall, barbed wire, warning signs, chain link fence and chain link gates or sight screen chain link fence and sight screen chain link gates and all associated hardware at the locations shown in the plans.

General: This work shall be completed according to the details provided in the plans and Section 640 and 664 of the Standard Specifications and as noted herein.

Temporary Jersey Barrier Wall shall be used as the proposed foundation for the chain link fence. Additional grading or leveling material for the concrete barrier wall shall be included in the cost of installation.

Gates will be of a size and location as shown in the plans. Sight screen will be required at the locations shown in the plans.

The fence shall be equipped with 30 inch diameter single roll of razor ribbon above the top rail with 1 single row of barbed wire (2 strand, 4 point)

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

In order to assure security, the Contractor shall be responsible for monitoring any openings in the existing fence during the 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 to maintain the temporary fence once installation has been completed.

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.

Method of Measurement: TEMPORARY FENCE will be measured per FOOT, along the top of the fence from center to center of posts, including the length occupied by gates.

Basis of Payment: Following approval of the installation, 60 percent of the bid price will be eligible for payment. The remaining 40 percent will be paid following the removal of each installation. This work shall be paid for at the contract unit price per FOOT for TEMPORARY FENCE.

20101100 TREE TRUNK PROTECTION

Description: This work shall consist of furnishing, installing and removing tree trunk protection for trees adjacent to, or within the project site.

General: The work shall be performed according to Article 201.05 of the "Standard Specifications", the details provided in the plans and the following:

Prior to construction, the Contractor shall install a snow fence or other highly visible barrier around designated trees in a manner meeting the Engineer's approval. Visual barriers, such as single strand wire or plastic flagging, are not acceptable for this purpose. The barrier shall be maintained in the proper location and in good repair until the completion of construction. Removal and disposal of the barrier shall be the Contractor's responsibility.

Method of Measurement: Tree Trunk Protection will be measured for payment as EACH per tree according to Article 201.10(c) of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per EACH for TREE TRUNK PROTECTION.

20200100 EARTH EXCAVATION

Description: This work shall consist of the excavation, stockpiling, and transportation of suitable excavated material for placement in either structural or non-structural embankment locations throughout the limits of the project. This work shall also consist of the excavation, stockpiling, transportation and disposal of excess suitable and unsuitable materials.

General: This work shall conform to the requirements of Section 202 of the "Standard Specifications" and the following:

Earth Excavation shall consist of the following material source locations listed below and shall be utilized as suitable and unsuitable material for placement in either structural or non-structural embankment locations throughout the project:

1. Earth excavation to subgrade elevation
2. Earth excavation for topsoil stripping/removal
3. Undercutting, as determined by the Engineer
4. Earth excavation for existing stockpiled material on-site (As shown on plans)
5. Earth excavation of additional material delivered to site from Rockford Junction RR Project

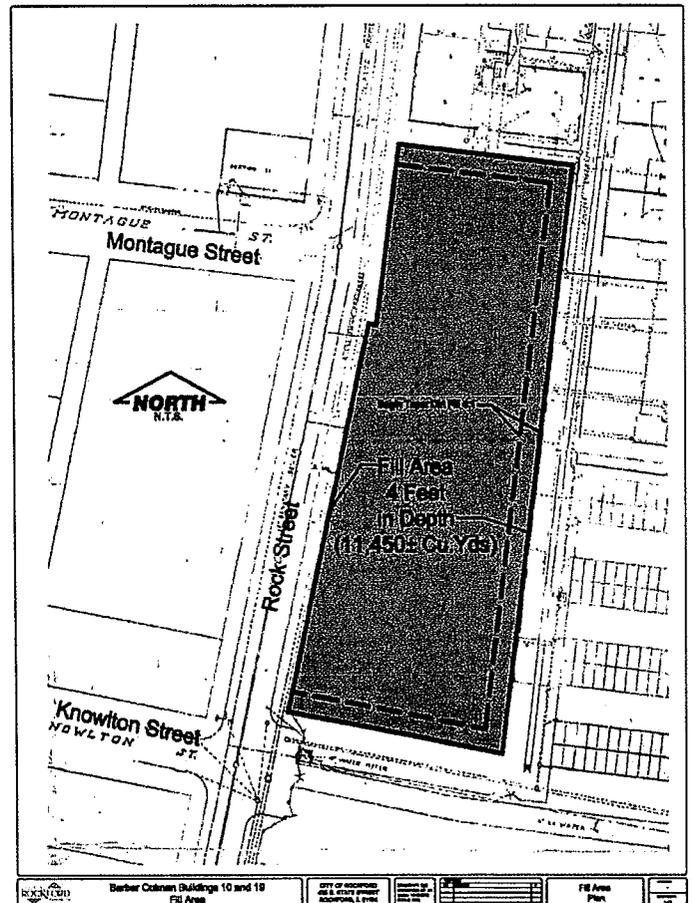
Removal and disposal of excess suitable, unsuitable and/or excess material will not be paid for separately, but is incidental to and included in the contract unit price for Earth Excavation. Any excess suitable, unsuitable and or excess material shall either be placed inside the project limits at a location designated by the Engineer or disposed of outside the right-of-way at a location designated by the Department. The designated off-site location for the transportation of any excess suitable or unsuitable material is located 2 blocks south of Morgan Street Project on Rock Street.

All cost associated with excavation, stockpiling, transportation, benching, and final placement to the satisfaction of the Engineer shall be included in the contract unit cost for EARTH EXCAVATION.

Earth moved more than once due to construction staging and/or procedures selected by the Contractor, will not be paid for separately, but shall be considered included in the cost of EARTH EXCAVATION.

Material & Classification: Embankments shall be constructed according to Section 205 of the Standard Specifications, except as modified by this Special Provision.

When embankments are to be constructed on hillsides or existing slopes which are steeper



than 3H:1V, steps shall be cut into the existing slope as shown in the plans or as directed by the Engineer.

All material proposed for use in embankment construction (Suitable: Structural Embankment Material) shall be approved by the Engineer.

Soils exhibiting the following properties shall not be allowed in Suitable: Structural Embankment locations and shall be incorporated in Unsuitable: Non-Structural Embankment locations:

Standard Dry Density (AASHTO T 99) less than 90 pcf.
Organic Content (AASHTO T 194) greater than 10 percent.
Liquid Limit (AASHTO T 89) greater than 60.

Soils exhibiting the following properties shall be utilized in the interior of the embankment and utilized in Suitable: Structural Embankment Material locations:

Less than 35% passing the #200 sieve.
Liquid Limit (AASHTO T 89) greater than 50 but less than 60.
Plasticity Index (AASHTO T 90) less than 12.

All embankment lifts shall be compacted to not less than 95% of the standard laboratory density. The standard laboratory density shall be the maximum dry density determined according to AASHTO T 99 (Method C) or AASHTO T 272.

Method of Measurement: Earth Excavation will be surveyed in its original position and the volume in CUBIC YARDS computed by the method of average end areas.

Basis of Payment: This work will be paid for at the contract unit price per CUBIC YARD for EARTH EXCAVATION.

20800150 TRENCH BACKFILL

Description: This work shall consist of furnishing and placing aggregate backfill in all proposed drainage and water main trenches made in the subgrade of the proposed improvement, and all trenches where the inner edge of the trench is within 2 feet of the proposed edge of pavement, curb, gutter, curb and gutter stabilized shoulder, structural embankment locations, multi-use path or sidewalk.

Materials: The aggregate shall be according to Article 208.02 of the "Standard Specifications", except that it may be a local material meeting the approval of the Engineer.

General: The work shall be performed according to Section 208 of the "Standard Specifications".

Method of Measurement: Trench Backfill shall be furnished for backfilling to the full width of the trench. It will be measured in CUBIC YARDS in place, except that the quantity for payment shall be limited to the following maximum width:

The maximum pay width for backfilling storm sewer and culvert trenches shall be the outside diameter of the pipe plus 18" for trench depths up to 3 feet, and the outside diameter of the pipe plus 36" for trench depths over 3 feet.

Trench Backfill is also required for removal of existing storm sewers, water main, and sanitary sewers that are located within 2 (two) feet of the proposed edge of pavement, curb, gutter, curb and gutter stabilized shoulder, structural embankment locations, multi-use path or sidewalk in accordance with Article 208.03, and shall be included in the cost of each respective removal pay item.

Basis of Payment: This work will be paid for at the contract unit price per CUBIC YARD for TRENCH BACKFILL.

21101615 TOPSOIL FURNISH AND PLACE, 4"

Description: This work shall consist of furnishing and placing top soil at the locations as shown on the plans and as directed by the Engineer.

General: This work shall conform to the applicable requirements of Section 211 of the Standard Specifications except as amended herein.

The final thickness shall be four (4) inches and the installation shall conform to the requirements of Section 211 of the Standard Specifications.

Method of Measurement: Top Soil Placement shall be measured in SQUARE YARDS and computed from the actual limits placed at the contract thickness, as delineated by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE YARD for TOP SOIL FURNISH AND PLACE, of the thickness specified. Payment for this work shall include all labor, materials, equipment and tools necessary to complete the work as herein specified for placing top soil at locations shown on the plans, as herein specified and to the line as grades as directed by the Engineer.

21301052 EXPLORATION TRENCH 52" DEPTH

Description: This work shall consist of constructing and backfilling a trench for the purpose of locating existing drainage lines, utilities, or other underground appurtenances within the construction limits of the proposed improvement.

General: The work shall be performed according to Section 213 of the "Standard Specifications". Exploration trench(s) shall be constructed at location(s) as directed by the Engineer.

The trench shall be deep enough to expose the underground line, and the width of the trench shall be sufficient to allow proper investigation to determine elevation information for conflict analysis.

The work shall include the necessary excavation and backfill required for proper investigation. The installation of TRENCH BACKFILL shall be in accordance with Section 208 of the "Standard Specifications" and shall be included in the cost of EXPLORATION TRENCH 52" DEPTH.

Method of Measurement: An estimated length of exploration trench is included in the summary of quantities to establish a unit price only. The exploration trench will be measured for payment per FOOT of actual trench constructed.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for EXPLORATION TRENCH 52" DEPTH. Payment will be based on the actual length of trench explored without a change in unit price because of adjustment in plan quantities, and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work.

25000400 NITROGEN FERTILIZER NUTRIENT
25000500 PHOSPHORUS FERTILIZER NUTRIENT
25000600 POTASSIUM FERTILIZER NUTRIENT

Description: This work shall consist of furnishing and placing fertilizer at locations where seeding or sodding has been installed.

General: This work shall conform to the applicable requirements of Section 250 of the Standard Specifications except as amended herein.

Application rates shall conform to the requirements of Section 250 of the Standard Specifications.

Method of Measurement: Fertilizer nutrient shall be measured by POUND and computed from the stated application rates and the size of the area to be fertilized, except that the Contractor shall show that all of the computed fertilizer nutrients have been applied in the work.

Basis of Payment: This work will be paid for at the contract unit price per POUND for NITROGEN FERTILIZER NUTRIENT, for PHOSPHORUS FERTILIZER NUTRIENT, and for POTASSIUM FERTILIZER NUTRIENT. Payment for this work shall include all labor, materials, equipment and tools necessary to complete the work as herein specified for applying the fertilizer nutrients at locations shown on the plans, as herein specified and as directed by the engineer.

25100630 EROSION CONTROL BLANKET

Description: This work shall consist of furnishing and placing erosion control blankets in accordance with the details and locations shown on the plans and as directed by the Engineer.

General: This work shall conform to the applicable requirements of Section 251 of the Standard Specifications and as described herein.

The erosion control blanket shall be installed on slopes 3:1 and steeper and shall otherwise conform to the requirements of Section 251 of the Standard Specifications. Blankets meeting the performance characteristics of North American Green blanket SC-150 will be considered. Other blankets of similar quality, durability and grade will be considered only if they meet the requirements of Section 280 of the Standard Specifications.

All blankets shall be installed in accordance with the manufacturer's recommendations and as required by this specification.

Method of Measurement: Erosion control blankets shall be measured in place and the area computed in SQUARE YARDS from the actual limits installed as directed by the Engineer. The required overlap in the blanket will not be measured for payment but shall be included in the cost of this item.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE YARD for EROSION CONTROL BLANKET as specified. Payment for this work shall include all labor, materials, equipment and tools necessary to complete the work as herein specified for placement of erosion control blankets at locations shown on the plans and to the satisfaction of the Engineer.

25200200 SUPPLEMENTAL WATERING

Description: This work shall be performed in accordance with Section 252 of the Standard Specifications.

General: There is a contingency of 5 units (1000 gal/unit) of watering to be used at the discretion of the Engineer to insure growth of proposed seeding and sod areas.

Method of Measurement: SUPPLEMENTAL WATERING will be measured for payment per UNIT of 1000 gallons of water applied on sod and seeded areas.

Basis of Payment: This work will be paid for at the contract unit price per UNIT for SUPPLEMENTAL WATERING.

28000250 TEMPORARY EROSION CONTROL SEEDING

Description: This work shall consist of preparing the seed bed and placing the seed mixture and other materials required on earthen areas within the project limits.

General: This work shall conform to the applicable requirements of Section 250 of the Standard Specifications except as modified herein. It is the intent of the design to install permanent seeding as soon as the seed beds can be made ready, so therefore temporary seeding will only be placed as directed by the ENGINEER.

Materials: Temporary seeding shall be Class 2 seed mixture based on the IDOT classification.

Method of Measurement: This work shall be measured in place and the area computed in POUNDS of seed applied.

Basis of Payment: This work will be paid for at the contract unit price per POUND for TEMPORARY EROSION CONTROL SEEDING of the class and type specified above. Payment shall be for all labor, materials, equipment and tools necessary to complete the work as herein specified, at locations as directed by the engineer.

28000305 TEMPORARY DITCH CHECKS

Description: This work shall consist of constructing, maintaining, and removing temporary ditch checks.

Materials: The ditch checks shall be constructed with products from the following:

The temporary ditch checks shall be limited to the following manufacturers:

Triangular Silt Dike Company, Inc.
608 Greenwood
Midwest City, OK 73110-1632
(405)741-7406

GSI Geosynthetics, Inc.
428 N. Pewaukee Road
Waukesha, WI 53188
(800) 444-5523

General: The work shall be performed according to Section 280 of the "Standard Specifications", plan details, IDOT Standard Drawings and the following:

Each silt dike shall consist of a 7 foot (approximately) long triangular section of urethane foam covered with a geotextile fabric, and installed on a geotextile fabric apron. Temporary ditch checks shall be installed at the locations specified on the Erosion Control Plan, or as directed by the Engineer. Their installation shall be according to the detail as shown on the plans and the manufacturer's recommendations.

The geotextile fabric shall conform to Article 1080.05 of the "Standard Specifications", for Geotechnical Fabric for French Drains.

The ditch checks shall become the property of the Contractor upon their removal.

Method of Measurement: Temporary Ditch Checks will be measured for payment per FOOT of section actually installed.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for TEMPORARY DITCH CHECKS. The unit price shall include all labor, equipment and materials necessary for their installation, maintenance, and removal.

28000400 PERIMETER EROSION BARRIER

Description: This work shall consist of constructing, removing and disposing of perimeter erosion barrier as part of the project's temporary erosion control system.

General: The work shall be performed according to Section 280 of the "Standard Specifications" and the following:

The perimeter erosion barrier shall be limited to temporary silt filter fence meeting the requirements of AASHTO Standard M 288-00. This specification is applicable to the use of a geotextile as a vertical, permeable interceptor designed to remove suspended soil from overland water flow. The function of a temporary silt fence is to filter and allow settlement of soil particles from sediment-laden water. The purpose is to prevent the eroded soil from being transported off the construction site by water runoff.

All removed materials shall be disposed of outside the right-of-way according to Article 202.03 of the "Standard Specifications".

Materials:

Geotextile Requirements: The geotextile used for the temporary silt fence shall be classified as supported (with a wire or polymeric mesh backing) or unsupported (no backing). The temporary silt fence geotextile shall meet the requirements of Table 6 included below. All numeric values except Apparent Opening Size (AOS) represent Minimum Average Roll Values (MARV as defined in ASTM D4439). The values for AOS are the Maximum Average Roll Values.

Table 6 – Temporary Silt Fence Requirements

Requirements	Test Methods	Wire Backed Supported Silt Fence ^a	Unsupported Silt Fence	
			Geotextile Elongation $\geq 50\%$ ^b	Geotextile Elongation $< 50\%$ ^b
Maximum Post Spacing		4 feet	4 feet	6 feet
Grab Strength	ASTM D 4632			
Machine direction		90 lbs	124 lbs	124 lbs
X-Machine direction		90 lbs	100 lbs	100lbs
Permittivity ^c	ASTM D 4491	0.05 sec ⁻¹	0.05 sec ⁻¹	0.05 sec ⁻¹
Apparent Opening Size	ASTM D 4751	0.024in maximum average roll value		
Ultraviolet stability (retained strength)	ASTM D 4355	70% after 500 hours of exposure		

Notes:

- a) Silt fence support shall consist of 14-gauge steel wire with a mesh backing of 150mm x 150mm (6in x 6in) or prefabricated polymeric mesh of equivalent strength.
- b) As measured in accordance with ASTM D 4632.
- c) These default filtration property values are based on empirical evidence with a variety of sediments. For environmentally sensitive areas, a review of previous experience and/or site or regionally specific geotextile tests should be performed by the agency to confirm suitability of these requirements.

Support Posts: The support posts may be composed of wood, steel or a synthetic material. The posts shall be a minimum length of 3 feet plus the buried depth. They shall have sufficient strength to resist damage during installation and to support the applied loads due to material build up behind the silt fence.

- 1) Hardwood posts shall be a minimum of 1.2" x 1.2"
- 2) No. 2 southern pine posts shall be a minimum of 2.6" x 2.6"
- 3) Steel posts may be U, T, L, or C shape, weighing 1.3lbs per foot.

Fence Support: The wire or polymer support fence shall be at least 30" high and strong enough to support the applied loads. Polymer support fences shall meet the same ultraviolet degradation requirements as the geotextile material (see table 6).

The wire support fence shall:

- Be a minimum of 14-gauge.
- Have a minimum of 6 horizontal wires.
- The maximum vertical wire spacing shall be 6".

Construction:

The silt fence shall be installed with a minimum height above ground of 30". The geotextile at the bottom of the fence shall be buried, in a "J" configuration to a minimum depth of 6", in a trench so that no flow can pass under the silt fence. The trench shall be backfilled and the soil compacted over the geotextile.

The geotextile shall be spliced together with a sewn seam or two sections of fence may be overlapped instead. The sewn seam shall be positioned only at a support post.

The Contractor must demonstrate to the satisfaction of the Engineer that the geotextile can withstand the anticipated sediment loading.

The posts shall be placed at spacing as shown on the project plans. Posts shall be driven or placed a minimum of 20" into the ground. The depth shall be increased to 24" if the fence is placed on a slope of 3:1 or greater. If the 20" depth is impossible to obtain, the posts shall be adequately secured to prevent overturning of the fence due to sediment loading.

The support fence shall be securely fastened to the upslope side of the fence post. The support fence shall extend from the ground surface to the top of the geotextile.

When un-supported fence is used, the geotextile shall be securely fastened to the fence posts.

Field monitoring shall be performed to verify that the placement of an armor system does not damage the geotextile.

Silt fences should be continuous and transverse to the flow. The silt fence should follow the contours of the site as closely as possible. The fence shall also be placed such that run off cannot flow around the end of the fence.

The silt fence should be located so that the drainage area is limited to an area equivalent to 1000 square feet for each 10 feet of fence length. Caution should be used where the site slope is greater than 1:1, and/or water flow rates exceed 0.1 cubic feet per second for each 10 feet of fence length.

Maintenance:

The Contractor shall inspect all temporary silt fences immediately after each rainfall and at least daily during prolonged rainfall. The Contractor shall immediately correct any deficiencies.

The Contractor shall also make a daily review of the location of silt fences in areas where construction activities have altered the natural contour and drainage runoff to ensure that the silt fences area properly located for effectiveness. Where deficiencies exist as determined by the engineer, additional silt fence shall be installed as directed by the Engineer.

Damaged or otherwise ineffective silt fences shall be repaired or replaced promptly.

Sediment deposits shall either be removed when the deposit reaches half the height of the fence or a second silt fence shall be installed as directed by the Engineer.

The silt fence shall remain in place until the Engineer directs it to be removed. Upon removal, the contractor shall remove and dispose of any excess sediment accumulations, dress the area to give it a pleasing appearance, and cover with vegetation all bare areas in accordance with the contract requirements.

Removed silt fence may be used at other locations provided the geotextile and other material requirements continue to be met to the satisfaction of the Engineer.

Method of Measurement: This work will be measured for payment in place per FOOT.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for PERIMETER EROSION BARRIER. The unit price shall include all work and materials necessary to properly install the barrier and to remove and dispose of the used materials at the completion of the project.

28200200 FILTER FABRIC

Description: This work shall consist of furnishing and installing geotechnical filter fabric in conjunction with riprap on prepared subgrade or embankment foundations. The work shall also include all work necessary to prepare the subgrade beneath the fabric.

Materials: The material shall be according to Article 1080.03 of the "Standard Specifications" and the following:

The filter fabric material shall consist of non-woven filaments formed from plastic yarn of a long – chain synthetic polymer composed of at least 85 percent by weight of polyolefins, or polyesters, and shall contain stabilizers and /or inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultra violet light and heat exposure. After forming, the fabric shall be processed so that the filaments retain their relative positions with respect to each other. The fabric shall be free of defects or flaws which significantly affect its physical and/or filtering properties.

The texture of the fabric shall be such that the gabion and foundation will remain in an equilibrium state and not slip or slide. The filter fabric shall be rot proof, mildew proof, insect resistant and have a high dimensional stability when wet, good soil filtration characteristics and high resistance to tear propagation in all directions, and meet the following minimum conditions and ASTM tests:

Weight of Fabric (oz/sq yd) ASTM D 3776 (Mod.)	6.0
Burst strength (psi) ASTM D 3786 (Note1)	280 MARV
Trapezoidal Tear Strength (lbs) ASTM D 1117 (Note 2)	60 MARV
Grab tensile Strength (lbs) ASTM D 4632 (Note 2)	160 MARV
Grab tensile Elongation (%) ASTM D 4632 (Note 2)	50 MARV
Apparent Opening size ASTM D 4751 (US Sieve)	70 MARV
Permeability (cm/sec) ASTM D 4491	0.24 MARV

*Note 1: Manufacturer's certificate of fabric to meet requirements.
Note 2: Test sample shall be tested wet.*

General: The bottom and back of the riprap (and such other areas as may be indicated on the plans) shall be lined with filter fabric. This work shall be constructed according to Section 282 of the "Standard Specifications"

Method of Measurement: The filter fabric will be measured in place and the area computed in SQUARE YARDS. The buried edges of the fabric will not be measured for payment and the overlap joints and seams will be measured as a single layer of material.

Basis of Payment: This work shall be paid for at the contract unit price per SQUARE YARD of FILTER FABRIC.

28400100 GABIONS

Description: This work shall consist of furnishing and placing a protective course of stone confined by wire baskets to be utilized as scour protection devices for the MSE wall at the West Abutment. Work shall also include excavation below a high water table, subgrade preparation, furnishing and placing non-woven geotextile fabric, furnishing, placing and compacting riprap in the gabion baskets, placing the gabion baskets into a wet excavation, choking the riprap voids with sand and other items necessary to complete the work as shown on the drawings and as specified. This work shall meet the requirements of Section 284 of the Standard Specifications except as modified herein.

General: The Contractor shall prepare subgrade and construct gabion basket system to the lines and grades shown on the drawings and as specified herein. A qualified representative of the wire basket manufacturer shall be on site for the first complete sequence of placing the filter fabric, placing stone riprap in the wire baskets, setting the baskets and installing the sand choking material.

Submittals: The Contractor shall submit in accordance with Article 105.04 of the Standard Specifications. Submittals shall include the manufacturer of the gabion system and all materials to be incorporated into the basket system. Include drawings of sufficient detail to show layout of units in plan view, elevation views and appropriate cross sections of the wire basket, wire construction, wire fasteners, anchor stakes, other connectors, tools to be utilized in the construction of the gabion system and all other related hardware. Submittal shall include the manufacturer of the fabric including shall include all information required under Section 1080 of the Standard Specifications.

Construction: The Contractor is advised to review the Structural Geotechnical Report and is advised of the existence of a high water table in the area. Open excavations are acceptable provided that all OSHA regulations are met. Should the Contractor deem that dewatering is necessary or that a temporary cofferdam or temporary excavation support system is necessary to complete the work, the Contractor shall include such costs in this pay item as no additional compensation will be considered or made.

Open excavations made adjacent to, or within the limits of the footing for the MSE wall or within the limits of the Aggregate Column Subgrade Modification shall not be backfilled with excavated materials but shall be backfilled with CA-7 and compacted to 95% relative density in accordance with ASTM D 4254.

Excavation required for the installation of the proposed Gabions shall be paid for separately at the contract unit prices for EARTH EXCAVATION and NON-SPECIAL WASTE DISPOSAL. This work shall be performed in accordance with the special provisions for these related items.

Materials: Welded wire fabric shall not be considered as a material for use in the manufacture of the wire baskets. Filter fabric shall have physical properties for Gradation 6 & 7 as specified in Article 1080.03 of the Standard Specifications. Riprap shall be RR-5 in accordance with the Standard Specification. Material removed from removal of the existing Morgan Street Bridge shall not be considered suitable for use in the gabions unless the material including quality and gradation strictly meets the requirements of the IDOT Standard Specifications for RR-5 material.

Method of Measurement: Method of measurement shall be in accordance with Article 284.07 of the Standard Specifications except as modified herein. Filter fabric, sand choking material, subgrade preparation, submittals and other items including furnishing, placing and installing items necessary to complete the work as shown on the drawings and as specified shall not be measured separately for payment.

Basis of Payment: Payment shall be made in accordance with Article 284.08 of the Standard Specifications and as modified herein. Filter fabric, sand choking material, subgrade preparation, submittals and other items necessary to complete the work as shown on the drawings and as specified and shall not be paid for separately but shall be considered to be included in the contract unit price per CUBIC YARD for GABIONS. Payment shall include all labor, materials, equipment and tools necessary

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to complete the work as herein specified, at locations shown on the plans and as directed by the Engineer.

SECTION 301 SUBGRADE PREPARATION

Description: This work shall consist of removing, transporting and disposing of unsuitable material; and backfilling the excavated area with a porous granular embankment material when preparing the subgrade beneath the 12" sub-base granular material shown on the plans.

General: The work shall be according to Section 301 of the "Standard Specifications" and the following:

Soil tests taken for this project indicate that at various locations, soft unstable soils of varying depths exist which may require their removal and replacement with porous granular embankment prior to the placing of concrete pavement or aggregate material.

A soils report is available online with the project plans and contract specifications and it is available for inspection and review at the City of Rockford, City Hall.

At all locations throughout the project limits an attempt shall be made to prepare the subgrade in accordance with Article 301.03 of the "Standard Specifications". If the Engineer then determines that stabilization cannot be obtained, undercutting to the maximum depth indicated and replacement with porous granular embankment, special and geotechnical fabric shall be accomplished.

It is anticipated that removal and replacement will be required within the following limits, with the maximum depth of undercut below the proposed top of subgrade, and the replacement material, indicated for each location:

Station to Station		Max Undercut Depth	Replacement Material
33+70	36+26	6 inches	PGE, Special
36+26	39+00	6 inches	PGE, Special
39+00	42+50	18 inches	PGE, Special
54+48	55+00	24 inches	PGE, Special
55+00	58+25	6 inches	PGE, Special
58+25	59+96	18 inches	PGE, Special
59+96	62+95	12 inches	PGE, Special
62+95	66+01	18 inches	PGE, Special

Quantities for EARTH EXCAVATION and POROUS GRANULAR EMBANKMENT, SPECIAL have been computed to include these locations.

At all locations the actual extent of removal and replacement shall be determined by the Engineer in the field at the time of construction. Undercuts deeper than the maximums indicated above shall be justified based upon cone penetrometer testing. In all cases, the undercut shall extend to one foot outside the edges of the bituminous pavement (or the backs of the curbs in curb and gutter sections) and come up at a 1:1 slope to the existing ground surface as shown on the undercut standard drawing.

A proof rolling procedure acceptable to the Engineer shall be followed in order to verify the stability of the subgrade prior to the placement of earth embankment or porous granular embankment. Verification of subgrade stability shall be done through the use of a cone penetrometer in conjunction with the Illinois Department of Transportation's Subgrade Stability Manual.

31101810 SUB-BASE GRANULAR MATERIAL, TYPE B 12"

Description: This work shall consist of furnishing and placing aggregate base course on a prepared subgrade or subbase.

General: This work shall conform to the applicable requirements of Sections 311 and 351 of the Standard Specifications except as modified herein. The maximum placement lift of the sub-base aggregate shall not exceed six (6) inches.

Method of Measurement: Sub-base granular material shall be measured in SQUARE YARDS of the thickness shown on the plans.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE YARD for SUB-BASE GRANULAR MATERIAL of the type and thickness specified as installed at the locations specified. Payment for this work shall include all labor, materials, equipment and tools necessary to complete the work as shown on the plans, details and as herein specified to the satisfaction of the Engineer.

40201000 AGGREGATE FOR TEMPORARY ACCESS

Description: This work shall consist of furnishing and constructing temporary aggregate driveways and roads to maintain ingress and egress to all abutting properties during construction operations.

Materials: The aggregate shall be according to Article 1004.04 of the "Standard Specifications" except that:

The material shall be limited to the following:

- a) crushed gravel, crushed stone or crushed concrete. The plasticity index requirements and the requirements for adding water at the central mixing plant will be waived.
- b) Reclaimed asphalt pavement (RAP) meeting the requirements of Section 1031 of the "Standard Specifications" and the following:
 - 100% passing the 3 inch sieve.
 - Well graded down through fines.
 - The RAP shall not contain steel slag or other expansive material.

General: The work shall be performed according to Article 402.10 of the "Standard Specifications" and the following:

Temporary accesses shall be constructed to the dimensions determined by the Engineer.

After the temporary aggregate accesses have served their purpose, the aggregate shall be removed, and, with the approval of the Engineer, suitable aggregate may be utilized for another purpose, such as embankment construction or driveway apron construction.

Aggregate not reused, shall be removed and disposed of outside the right-of-way according to Article 202.03 of the "Standard Specifications".

Method of Measurement: Aggregate for Temporary Access will be measured for payment in TONS according to Article 311.08(b) of the "Standard Specifications". Measurement will be made for the initial use of the aggregate only, regardless of the number of times the aggregate is moved and/or reused

Basis of Payment: This work will be paid for at the contract unit price per TON for AGGREGATE FOR TEMPORARY ACCESS. The unit price shall be payment in full for furnishing, transporting, placing, maintaining and removing the aggregate.

40600100 BITUMINOUS MATERIALS (PRIME COAT)

Description: This work shall consist of furnishing and placing a prime coat on a prepared base or hot-mix asphalt layer.

Materials: The bituminous materials shall be according to Section 1032 of the "Standard Specifications" except that the material shall be limited as follows:

Emulsified asphalt shall only be used between the dates of May 15th and September 1st. On or before May 15th, and on or after September 1st, RC-70 asphalt shall be used in lieu of emulsified asphalt.

On days between May 15th and September 1st, when the air temperature is in question, the exact type of priming asphalt shall be determined by the Engineer.

General: The work shall be performed according to Article 406.05(b) of the "Standard Specifications" and the following:

Prime Coat material shall be SS-1 on hot-mix asphalt surfaces and MC30 on aggregate surfaces.

The Contractor shall erect, to the Engineer's satisfaction, 36 inch (minimum size) FRESH OIL AHEAD, signs prior to applying the prime coat.

Shields, covers or other suitable equipment shall be provided by the Contractor to protect the motoring public, adjoining pavement, curbs, and/or structures during the application of the prime coat.

Method of Measurement: The Contractor will be required to present a weight ticket of the truckload prior to applying the prime coat. After application the truck shall then be weighed again in order to determine the net weight of prime coat that has been placed. Both tickets shall be stamped by a certified weigh master. The quantity in gallons shall be computed according to Article 1032.02 of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per GALLON for BITUMINOUS MATERIALS (PRIME COAT).

42000301 PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED)

Description: Portland Cement Concrete Pavement shall conform to Section 420 of the Standard Specification and details as shown on the plans.

General: Type B final finish shall be used as specified under Article 420.11 of the Standard Specifications.

Installation of PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED) shall include the installation of No. 6 epoxy-coated tie bars @ 24" centers for load transfer along the longitudinal joints.

Installation of PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED) shall include the installation of 1.5" dowel bars @ 12" centers, for load transfer along the transverse joints.

Installation of PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED) at pavement approaches to at-grade railroad crossings shall include all materials (reinforcement, concrete, etc.), labor and equipment to construct the railroad approaches per Standard 420501.

Method of Measurement: This work shall be measured on a SQUARE YARD basis. All transverse and longitudinal joints shall be sealed with poured joint sealant.

Basis of Payment: Payment shall be at the contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE PAVEMENT 8" (JOINTED)

42300200 PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH
42300400 PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH

Description: This work shall be constructed in accordance with Section 423 if the Standard Specifications. Aggregate base course material Type B shall be placed and compacted under the new driveway pavement. Minimum thickness for this aggregate base course material shall be four (4") inches.

The installation of PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT shall include welded wire fabric reinforcing steel equal to or better than 6"x6" D8.0/D8.0 in all alley approaches.

Method Measurement: Measurement for this work will be per SQUARE YARD.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE YARD for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT of the type and thickness specified.

42400100 PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH
42400200 PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH

Description: This work shall conform to Section 424 of the Standard Specifications and the detail herein.

General: Surface shall be scored in five (5) foot squares with a directional broom finish. Tooled joints, which are at right angles to the edge of the walk, should be placed at five foot (5') intervals. These joints shall be at least 1 ½ inches deep and not less than 1/8 inches wide, but no more than ¼ inches wide.

Expansion joints (1/2 inch) shall be placed in the sidewalks at intervals of 200 feet. They shall also be placed between the new sidewalks and the existing pavements. Asphalt joints or fiber joints with rubber joint sealer may be used. Expansion joints (1/2 inch) shall be placed between all existing structures and the new sidewalks.

Curing and protection shall be in accordance with Article 1020.13 of the Standard Specifications.

Curb Ramps will be placed at all intersections within the construction limits. The basis of payment for this work shall be included in item for PORTLAND CEMENT CONCRETE SIDEWALK of the type and thickness specified and will not be paid for separately.

Curb Ramps shall be thickened to 6" and include welded wire fabric reinforcement.

Method of Measurement: Measurement for this work will be per SQUARE FOOT.

Basis of Payment: will be at the contract unit price per SQUARE FOOT for PORTLAND CEMENT CONCRETE SIDEWALK of the type and thickness specified.

42400800 DETECTABLE WARNINGS

Description: This work shall consist of furnishing and installing detectable warnings in accessibility ramps.

Materials: The detectable warnings shall be stainless steel panels of the sizes shown on the plans and shall be supplied from one of the following manufacturers:

- | | |
|--|--|
| 1) MetaDome,
2136 E. Dayton Street
Madison, WI 53704
Phone # 608-249-8644
http://www.metadome.com/ | Product Name: MetaPanel

Required coating system:
Meta-Coat II, Federal Yellow |
| 2) Advantage Tactile Systems, Inc.
241 Main Street
Suite 100
Buffalo, NY 14203
Phone # 1-800-679-4022
Fax # 1-800-679-4023

http://www.advantagetactile.com/ | Product Name: Advantage Tactile System

Required coating system:
Diamond Tek, Federal Yellow

Supplier: RKD Construction
11633 W. Grand Avenue
Melrose Park, IL 60164 |

General: Detectable warnings shall be according to Article 424.09 of the "Standard Specifications".

Method of Measurement: This work will be measured for payment in place installed, in SQUARE FOOT. The concrete area under the detectable warnings will be measured for payment as PORTLAND CEMENT CONCRETE SIDEWALK of the thickness specified, with no deductions made for the detectable warnings panels located within the ramp.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE FOOT of DETECTABLE WARNINGS.

SECTION 442 SAW CUTTING

Description: This work shall consist of sawing existing pavements to such a depth that when the pavement is removed, a clean neat edge will result with no spalling of the remaining pavement. Saw cutting shall be performed at all locations where the pavement is removed and will be replaced.

Basis of Payment: This work item shall be considered incidental to construction and no further compensation will be allowed.

50100100 REMOVAL OF EXISTING STRUCTURES

Description: This work shall be performed in accordance with Section 501 of the Standard Specifications and as herein specified.

General: Included in this work shall be the removal of the existing eleven span substructure and superstructure carrying Morgan Street over the Rock River. The structure consists of the following:

1. West approach: Reinforced concrete cantilevered sidewalk on existing retaining walls including roadway pavement, curb and gutter on fill material between the retaining walls, an approach pavement slab supported on timber piles. Length of west approach is approximately 178'-2³/₄". The excavation and incorporation of existing material between the retaining walls is not included in the quantity for earth excavation and shall be included in the contract unit cost for this item. The existing material shall be evaluated for incorporation into the proposed embankment in accordance with the specifications for EARTH EXCAVATION.
2. West approach span: One span, approximately 34'-5¹/₂" over Buchanan Street (vacated R.O.W.) consisting of precast, prestressed concrete deck beams bearing at one end on the back of the west approach abutment and the other end on a two column pier, including an installed permanent shoring system for the south side of the span.
3. Main structure: Reinforced concrete open spandrel concrete arch consisting of eight spans ranging from approximately 58'-0" center to center of supports to approximately 96'-0" center to center of supports. Supports consist of nine solid reinforced concrete substructure elements integrated with the arch spans. Three substructure elements are founded on spread footing and six substructure elements are founded on timber piles.

Existing Pier #4 shall be removed to an elevation of 689.00 (1 foot below the proposed excavation limits for the gabion basket installation)

The existing reinforced concrete pier foundations in the river (existing Pier #6 and Pier #7) have been retrofitted in 1959 for Scour Countermeasures) shall be removed to Elevation 650.0 feet m.s.l.). The remaining pier and abutment foundations shall be removed to 24-inches below the mudline of the overbanks of the river.

4. East approach span: Three spans, approximately 16'-6 1/2", 38'-10 3/8" over the Illinois Railway (to be abandoned), and 42'-4-1/4" consisting of precast, prestressed concrete deck beams bearing at one end on the back of the east approach abutment and the other end on two column piers founded on spread footings, ending at the east main span pier founded on timber piles. Roadway pavement, curb and gutter, reinforced concrete sidewalks with approach pavement slab supported on timber piles.

The existing east approach abutment shall be removed in its' entirety, including all existing substructure elements that may be in conflict with the installation of the proposed substructure improvements at the new east abutment.

The bridge is approximately 50 feet wide and approximately 975.9 feet long. Following are estimated quantities for structure removal:

Substructure Concrete	4,867 cubic yards
Superstructure Concrete	554 cubic yards
Structural Steel	1,430,320 pounds

Concrete, steel materials and other appurtenances, except for the items noted below, removed from any part of the existing structure shall be disposed of offsite, in accordance with Article 202.03 of the Standard Specifications.

The following items from the existing structure shall be removed, loaded, transported, unloaded and moved to an on-site storage location by the Contractor. All items shall become property of the City of Rockford.

The Contractor shall notify the following person, a minimum of two (2) weeks prior to the final removal of the salvage items: Mr. Mark Stockman, Street Superintendent, 1-815-987-5371

SALVAGE EQUIPMENT ON BRIDGE:

1. Metal rail, including removable connection hardware, located along the outside edges of the bridge and approach.
2. Name Plate, located at north east quadrant of the bridge.
3. 8'x16' Steel Plates installed over the existing expansion joint locations (16 Each)

All other bridge materials that are removed are to become the property of the Contractor and shall be disposed of in a manner acceptable to the State of Illinois, federal regulatory agencies and other local authorities.

The Contractor shall submit a detailed demolition plan to the engineer for review and approval. Such plan shall also be subject to review and approval of the United States Corps of Engineers. The demolition plan shall be complete in all respects, identifying all sequences of the demolition and shall include, but not be limited to: design and fabrication details of temporary supports (if necessary); design and fabrication details (if necessary); complete sequence for dismantling and removing the superstructure and substructure components; timing and arrangements for disabling the utilities fastened to the bridge, electrical power to the lighting system, and any other details related to the demolition.

The design of any temporary structural supports and or making any modifications to the structural integrity of the bridge substructure or bridge superstructure elements prior to the demolition of such elements shall be performed by or under the direct supervision of a structural engineer licensed to practice in the State of Illinois. The Contractor shall submit to the engineer for review, all structural design computations, structural details and shop fabrication drawings. Structural details and computations shall bear the seal of a structural engineer licensed in the State of Illinois.

Existing Pier 6 and existing Pier 7 shall remain intact and undamaged and shall not be removed until after the two new piers (Pier 1 and Pier 2) have been constructed above the river water surface at an elevation meeting the satisfaction of the City of Rockford Department of Public Works. The existing piers shall serve as devices to delineate the limits of the channel during construction of new Pier 1 and new Pier 2.

The Contractor shall make available any removal items not scheduled for salvage to the City of Rockford for their use in a monument. The Engineer will perform the designation of these items.

Basis of Payment: All work described under this Special Provision will be paid for EACH at the contract unit price for REMOVAL OF EXISTING STRUCTURES.

IEPA NOTIFICATION OF DEMOLITION:

The Illinois Environmental Protection Agency form "Notification Of Demolition and Renovation" must be submitted by the Engineer not less than 10 working days before the start of demolition operations. This form must be delivered by U.S. Postal service, commercial delivery service or hand delivery to the Illinois Environmental Protection Agency, Attn: Asbestos Unit, P.O. Box 19276, Springfield, IL 62794-9276. Contact Dale Halford at IEPA at (217) 557-2478 for further information.

50202901 COFFERDAM (LOCATION 1)

Description: This work shall be performed in accordance with Article 502.06 of the Standard Specifications. The components of the cofferdam are not allowed to pass through any part of the pier or foundation elements.

General: All designs for the cofferdam, including the temporary sheet piling system, struts, walers and sealcoat, shall be the responsibility of the Contractor. The cofferdam drawings and computations shall be sealed by a Structural Engineer licensed to practice in the State of Illinois. Prior to start of construction, the cofferdam drawings and specifications shall be submitted to the Engineer and approved by the Department in accordance with Article 502.06 of the Standard Specifications.

Basis of Payment: This work shall be paid for EACH according to Article 502.13 of the Standard Specifications.

50300285 FORM LINER TEXTURED SURFACE

Description: This work shall consist of furnishing and erecting concrete for liner and associated concrete pattern work on the face of piers, wingwalls, abutments, and MSE retaining walls as noted on the plans.

General: The concrete liner shall be a thermal form 0.150 mil and shall conform to one of the following form liner manufacturers:

Pattern No. 460

Greenstreak Group, Inc.
3400 Tree Court Industrial Blvd.
St. Louis, MO 63122
www.greenstreak.com

Pattern No. 1506

Spec Formliners, Inc.
530 E. Dyer Rd.
Santa Ana, CA 92707
www.specformliners.com

The Contractor shall be required to produce a field sample for approval of stamping quality. The form liner sample shall be approved by the Engineer prior to ordering materials, placing forms, or pouring concrete. In the event that additional samples are required, the Contractor must provide additional samples for approval at no additional cost to the contract.

Method of Measurement and Basis of Payment:

This work will be paid for at the contract unit price per SQUARE FOOT for FORM LINER TEXTURED SURFACE. Payment shall include all labor, materials, equipment and tools necessary to complete the work as shown on the plans, as herein specified and as directed by the Engineer.

50500105 FURNISH AND ERECT STRUCTURAL STEEL

Description: This work shall consist of furnishing, fabricating and erecting structural steel in accordance with Section 505 of the Standard Specifications, the additional requirements set forth herein and as detailed on the drawings.

In addition to the requirements set forth in the Standard Specifications, the following requirements shall apply:

General: The contractor shall submit for the engineer's review, a detailed erection plan and procedure, including but not limited to the sequence of girder erection and bolt tightening, and provisions for the stability of girders and tied arch elements and blocking of the bearings during erection and until the concrete deck has reached its design strength. The detailed erection plan and procedure shall be sealed by a licensed structural engineer, registered in the State of Illinois. The engineer's review of such plan and procedure does not relieve the contractor of any responsibility.

The contractor's attention is directed to the requirements for stability of steel girders and tied arch elements from erection through strength development of the concrete deck. The girders of this bridge shall be stabilized by use of falsework, temporary bracing, compression flange stiffening trusses, by use of one or more holding cranes until a sufficient number of girders have been erected and cross frames installed or other proven methods as detailed by the contractor's engineer.

The tied arch elements of this bridge shall be stabilized by use of falsework, temporary bracing, compression flange stiffening trusses, by use of one or more holding cranes until a sufficient number of tied arch elements have been erected and other framing elements are installed or other proven methods as detailed by the contractor's engineer. The methods used by the contractor shall address all temporary arch member conditions including but not limited to wind, simple and cantilever span conditions, temporary support points and reactions, and expected deflections for temporary conditions.

The above requirements shall be documented in the stability calculations and erection drawings submitted for review.

The details in the plans were developed assuming all girders and girder cross frames, as well as all arch elements are fully installed and that the contractor adheres to the concrete deck placement sequence shown on the drawings. The contractor's erection procedure or changes to the concrete deck placement sequences could cause deflections, camber, and screed elevations to differ from those calculated in the drawings. The differences could affect "fit up" of the steel or cause incorrect final deck elevations.

There are no alternate concrete deck placement sequences allowed.

The girders and cross bracing should be fabricated for web vertical in steel-load only position. The contractor's erection sequence should consider this fabrication requirement and its effects in fit up during erection.

The contractor may elect to utilize the existing piers or a portion of the existing piers to be part of the falsework for the erection of the arch elements and or end span elements.

The contractor shall be aware that scour countermeasures have been constructed in 1959 at locations designated on the original drawings for Pier 6 and Pier 7. The condition of the scour countermeasures is reduced due to the length of time the countermeasures have been in service. If the Contractor desires to utilize Pier 6 or Pier 7 or both piers, an underwater inspection of the substructure elements and the scour countermeasures is recommended to verify the integrity of the piers to continue to provide support intended for falsework or other uses during construction. The underwater inspection shall be performed at a minimum in accordance with the requirements set forth by the National Bridge Inspection Standards (NBIS) U.S. Department of Transportation, Federal Highway Administration. The underwater inspector shall be prequalified by IDOT to perform the work.

TIED ARCH FABRICATION

The following additional provisions shall apply:

Shop Drawings: The submittal shall include calculations to show temporary loads, stresses, and deflections at each stage of erection on both the temporary and permanent members. Erection of the structure shall be by methods that will not increase final dead load bending moments in the arch rib or tie girder. The length of arch rib sections shown on the shop drawings shall take account of shortening due to dead loads. The length of tie girder sections shown on the shop drawings shall take account of lengthening due to dead loads. The calculations shall be made by an Illinois licensed structural engineer with proven experience in construction of this type of bridge span. All calculations and verifications shall bear the seal and signature of the Illinois licensed structural engineer and shall become a permanent part of the project records.

Welding Requirements: Minimizing the distortion of the large box sections and other complex steel sections during welding is of prime importance and is the responsibility of the contractor. Distortion or warping due to weld shrinkage shall be controlled by the use of proper welding fabrication sequences and by use of temporary bracing or struts if necessary.

Special attention is called to paragraph 3.4.3. of AWS Specifications. The phrase "member or structure" also includes subassemblies to be placed inside the arch ribs. Welding fabrication sequences shall be shown on the shop drawings. Review and comment by the Engineer on the sequences does not relieve the contractor of his responsibility to fabricate the work within the tolerances specified in the AWS Welding Code.

In addition to these tolerances, the following tolerances are specified for the arch rib:

1. Maximum variation in straightness measured from a vertical plane shall be 5/16" between field splices;
2. Maximum variation from specified vertical curvature shall not exceed 1/4 ";
3. Maximum variation in fabricated member length between field splices shall be plus or minus 1/8".

Special procedures will be required for fabrication of the arch rib hanger plates, their matching hanger stiffener plates and the tie girder hanger plates, so that high quality welds can be performed, and any lamellar tearing of the hanger plates can be detected and corrected.

The welding of this sub-assembly shall be completed prior to assembling the hanger plate diaphragm in the arch rib or tie girder. Not sooner than 48 hours after completing the fillet welds connecting the stiffener plates to the hanger plate and hanger plates to diaphragm, these welds shall be inspected over 100 percent of their length for lamellar tearing in the base metal of the hanger plate (as well as for defects in the welds as specified elsewhere). At the contractor's option, the hanger plates may be ordered to meet the requirements of ASTM A 770, in order to reduce the likelihood of lamellar tearing. Also, the contractor's welding process and procedures shall be those most likely to avoid lamellar tearing, including buttering of the weld metal. In the event lamellar tears are detected which in the judgment of the Engineer cannot be satisfactorily repaired, the sub-assembly shall be refabricated using a new hanger plate.

Prior to the start of qualifying welders, welding operators and welding procedures, the contractor, the inspector and the Engineer shall have a conference to insure that agreement has been reached regarding the details of the procedures, the sequence of welding to be followed, the handling of materials to be inspected, the status of qualification for welders and welding operators, and the approval of electrodes, wire, flux, and other welding materials and equipment. It shall be the contractor's responsibility to call this conference at his fabricating plant at a time mutually convenient to all parties concerned.

Miscellaneous and inadvertent arc strikes on the steel shall be avoided. If such strikes occur, they shall be ground flush and tested for cracks using either Liquid Penetrant or Magnetic Particle testing.

Minor repairs to submerged arc welds will be permitted by manual welding with low hydrogen electrodes. Appropriate preheat shall be applied prior to such minor welding. Any cracks which develop in the base metal shall only be repaired with a procedure approved by the Engineer.

Grinding of welds shall be in the direction of final stress.

Under no circumstances shall temporary tack welds be used on the tie girder flange plates or tie girder web plates.

No temporary or permanent welds, if not shown on the plans or permitted in the specifications, shall be made without specific written authorization by the Engineer. Tack welds on fills will not be permitted.

Welded connections in the arch span shall be tested as follows:

1. 100 percent of all butt weld splices in the web and flanges of the floorbeams shall be tested by ultrasonic or radiographic testing. 100 percent of all butt weld splices in the flanges (top and bottom plates) of the arch ribs, 100 percent in members RS1 thru RS3 and RS8 thru RS10 and 50 percent in members RS3 thru RS8 of each vertical butt weld splice in the webs of the arch ribs shall be tested by radiographic testing. In the vertical web splice, the maximum center-to-center spacing of radiographs shall be two times the length of the radiograph.
2. Fillet welds and partial penetration groove welds (and other welds which due to type or location cannot be tested by ultrasonic testing) between main components of built-up main members, including floorbeams, arch ribs, and bearing stiffeners, shall be tested by magnetic particle testing in accordance with the requirements of Article 6.7.6 of the AWS Code as follows: 100 percent of each weld length until quality control has been established to a level of acceptability per AWS Code as determined by the Engineer. If quality control level is acceptable, then 30 percent of each weld length shall be tested (10 percent at each end of a weld and 10 percent at random lengths and spaces in between). If the 30 percent testing reveals defects unacceptable to the Engineer, 100 percent testing shall be reinstated until acceptable quality control has been again established. This procedure shall be repeated as often as may be considered necessary by the Engineer.
3. The entire length of the full penetration welds attaching the diaphragms to the hanger plates and stiffener plates to the hanger plates shall be tested by magnetic particle testing using the yoke method.
4. The amount of testing performed on fillet welds connecting flanges to webs of floorbeams and other fillet welds not otherwise named will be reduced to a random 10 percent of the total length of each such weld length as specified above. If the 10 percent testing reveals defects unacceptable to the Engineer, 100 percent testing shall be reinstated until acceptable quality control has been again established. This procedure shall be repeated as often as may be considered necessary by the Engineer.
5. If any unacceptable defects are found in any test length of weld, the full length of the weld over 5 ft. on either side of the test length, whichever is lesser, shall be tested. Welds requiring repair shall be retested after repairs are made.

Shop Assembly: Shop assembly shall be in accordance with the progressive laydown method stated in the plans.

Plates: All exposed corners of plate cut edges, whether gas cut, plasma cut, oxygen cut or sheared, shall be rounded to 1/16" radius or equivalent flat surface at a suitable angle.

TIED ARCH HANGERS

This section governs the fabrication and erection of hangers for the Tied Arch span.

MATERIALS

1. **Rolled plates, shapes, and bars:** All rolled plates, shapes, and bars for structural use shall conform to the requirements of AASHTO M 270 (ASTM A 709), unless otherwise specified. Grade of structural steel shall be as indicated on the drawings. Structural steel denoted as M270 Gr. 50W T3 on the plans shall meet a longitudinal Charpy V-notch impact test requirements of AASHTO M 270, Zone 3 when sampled and tested in accordance with the procedures of AASHTO T 243. Structural steel Fracture Critical Members (FCM) denoted as M270 Gr. 50W F3 (FCM) on the plans shall meet the Charpy V-notch impact test requirements of AASHTO M 270, Zone 3 when sampled and tested in accordance with the procedures of AASHTO T 243 and the requirements of Section 12 of AASHTO/AWS D1.5-2008.
2. **Hanger Sockets.** The lower sockets for hanger strands shall be fully annealed low-alloy castings ASTM A 148, Grade 80-50. In addition to the tension tests required by ASTM A 148, Charpy Impact tests in accordance with ASTM A 781, S9 shall be made. If Charpy V-notch test values are less than 24 ft.-lbs at 10 degrees F for any heat, sockets represented by that heat will be rejected. Additional tests at the contractor's expense shall be made in the case of disputes.

Quality control of bridge strand lower anchor castings shall be in accordance with the following:

- a) Each casting shall be visually examined for defects in accordance with Standard Practice SP-55, current edition, of the Manufacturers Standardization Society of the Valve and Fitting Industry's "Quality Standard for Steel Castings for Valves, Flanges, and Fittings and Other Piping Components". Defects judged to be unacceptable by the standard as determined by the Engineer shall be repaired to the satisfaction of the Engineer, or the casting shall be replaced by a new casting. The Engineer shall be the sole judge as to the reparability of a casting. To determine the type and amount of repair, where repairs are required, the Contractor shall perform such additional non-destructive tests at each rejectable defect as determined by the Engineer. Such tests may be radiograph, ultrasonic, magnetic particle, or liquid penetrant as the Engineer may direct or approve and shall be at the sole expense of the Contractor. Weld preparation shall be examined by magnetic particle or liquid penetrant methods in accordance with ASTM A 781, S5. Repaired areas shall be retested using liquid penetrant or magnetic particle as directed or approved. At the Engineer's option, large repairs may require heat treatment in accordance with ASTM A 148 requirements.
- b) Visual inspection as required above shall be performed by a commercial testing laboratory approved by the Engineer as being qualified to perform such work. Non-destructive tests shall be performed by the same approved laboratory in accordance with the appropriate Supplementary Requirements of ASTM A 781. The Engineer shall be the sole judge as to the suitability of a repaired casting.

All sockets and their necessary bolts, washers, and shims shall be galvanized.

The upper sockets for hanger strands shall be open strand steel sockets, 2400 series (modified), as furnished by Clodfelter Bridge and Structures International (CBSI), Muncy Machine & Tool Company, PA, or the Crosby Group LLC, Tulsa, OK. Sockets shall be fully annealed low-alloy castings ASTM A 148, Grade 105-85. In addition to the tension tests required by ASTM A 148, Charpy Impact tests in accordance with ASTM A 781, S9 shall be made. If Charpy V-notch test values are less than 24 ft.-lbs. at 10 degrees F for any heat, sockets represented by that heat will be rejected. Additional tests at the contractor's expense shall be made in the case of disputes.

3. **Bridge Strand Hangers.** Hangers shall be made up of two 2.50 inch diameter, single strand multiple wire, zinc coated bridge (structural) strands, conforming to the requirements of ASTM A 586, modified to require all wires be furnished with Class C weight zinc coating throughout and shall be prestretched as indicated in the plans. Strands shall be properly coiled or rolled on reels. Any kinked or damaged strand will be rejected. Straightening of bent wires will not be permitted.

- a) **Testing of Strand Wire:** The zinc-coated steel wire used in the parallel wire strand shall, prior to fabrication, conform to the requirements of ASTM A 586, paragraph 7.

The tests for ultimate strength shall be made of specimens cut from both ends of each single length or coil of zinc-coated wire. The Engineer or his inspector shall witness as many of these tests as may be necessary to satisfy him that the wire meets the requirements of these specifications. When requested by the Engineer, the contractor shall, in the presence of the inspector, make check tensile test of any coils selected at random by the inspector. For making these check tensile tests, the inspector shall preferably select the coils from among those which have not been tested in his presence.

The test for stress at 0.7 percent elongation shall be made on samples from at least 10 percent of the coils as manufactured. If the strength at 0.7 percent elongation as so determined falls below the required strength in any lot of wire, the inspector may require that all coils of such lot be tested and will reject all individual coils which do not meet strength requirements.

Tests for galvanizing (weight and adherence) shall be made on samples of not less than 5 percent of the coils of any lot of wire. The percentage of coils tested for galvanizing shall be increased at the request of the Engineer. If tests of any of these coils fail to meet the requirements, then tests shall be made of all of the coils in the lot. Unless at least 80 percent of the coils pass the test, the entire lot will be rejected. Any coil failing to meet requirements will be rejected.

Certified test reports covering all the tests specified herein shall be furnished to the Engineer.

- b) **Fabrication of Bridge Strands:** The contractor shall manufacture the hanger strand to meet the specified strength requirements. When tested in direct tension, the breaking strength of each hanger strand shall be not less than 354 tons. All wires of each strand shall have Class C coating of zinc.

The strand shall be made on machines of sufficient size to insure good workmanship. Once the manufacture of the strand has been started, no changes shall be made as to the grade of wire, construction or lay of strand, or other factors which would affect the uniformity of the product.

The contractor shall pre-stretch all hanger strands by stressing each strand with a load equal to 50 percent of the breaking strength in straight tension. Pre-stretching of the strands shall follow the procedure outlined in the plans and reaches a stable condition as defined by ASTM A 586. The contractor shall determine the modulus of elasticity of each strand in accordance with ASTM A 586 requirements.

From each pre-stretched length of strand, one piece not less than 8 feet long shall be cut, after pre-stretching, and tested for strength and elasticity. The ends of the test pieces shall be socketed with sockets of a design similar to those to be used in the bridge. If, after six or more tests of pre-stretched strands have been made, the Engineer finds that the strength and elasticity have sufficient uniformity, one test may be made thereafter from each manufactured length of strand instead of one from each pre-stretched length. When examined visually, sockets used in the tests shall show no distress after testing.

The strand shall show a well defined and uniform elastic stretch and recovery under stressing.

The strand shall be measured in the shop for the various hanger lengths while under tension equal to one-quarter of the total hanger dead load values for DL-A and DL-B as shown on sheet 51 of 79 of the plans.

At the time the strands are measured, the contractor shall mark a longitudinal line between sockets and shall paint a continuous stripe on the strand so as to eliminate any change in length of the strand due to twisting. Strands shall be erected with sockets in the same relative position to each other as existed when strands were measured and with paint stripe in straight line.

Certified test reports covering all the tests specified herein shall be furnished to the Engineer.

- c) **Hanger Socketing:** The sockets shall be attached to strands in accordance with procedures submitted to the Engineer prior to fabrication, and as required to meet the tests herein specified. Care should be exercised to insure socket and strand alignment. Great care shall be taken that the lengths of the hanger strands after socketing be correct and check measurements shall be made under the total dead load for each hanger and any variation from the correct length recorded. The hanger lengths shall be determined by the contractor and shown on working drawings which shall be approved by the Engineer. Lengths shall be within a tolerance of 0 in. long to ¼ in. short.

The wires of a strand, after being splayed in preparation for socketing, shall be cleaned of grease and other impurities by a carefully controlled process that will assure no harm is done to the wire galvanizing coating. After socketing, the strand wires adjacent to the socket shall be relubricated.

The basket of the socket shall be preheated to expel moisture and to prevent the molten zinc from congealing before it has completely filled the narrow lower end of the basket. Strands will be rejected if the socketing procedure results in bare wires within the socket.

The zinc used to attach the sockets to the strand shall comply with ASTM Specifications B6, High Grade, or better. The molten zinc shall be placed at the lowest practical temperature so as to minimize the affect of heat on the strands. The zinc temperature at time of pouring shall be recorded for each socket and furnished to the Engineer.

In order to confirm the effectiveness of hanger socketing, the contractor shall prepare at least six test specimens of strand for test purposes. Test specimens at least 25 strand diameters long, with sockets (selected at random from those which are to be used in filling the order) attached to each end, shall be stressed to destruction in a suitable testing machine. The sockets used for these tests shall not be used in the structure. Under this test the specimens shall develop the ultimate strengths above specified. Material and method of socketing shall be the same for both test specimens and bridge strands. The sockets in every instance shall be of sufficient strength to produce failure in the strand material.

Certification shall be provided showing that the requirements of ASTM A 148 and B6 have been met. A tabulation of shop measured lengths of each hanger shall be furnished to the Engineer.

4. **High Strength Fasteners for Hangers:** This special provision is intended to cover requirements for only those bolts to be used for the bridge strand hanger lower connections.

Bridge strand hanger lower connections to the tie girder shall be made as shown on the plans using galvanized anchor bolts conforming to the requirements of ASTM F1554, Gr. 105. Compressible-washer-type direct tension indicators (DTI's) shall be installed to prove the tension in the bolts. DTI's are non-standard and shall conform to the requirements stated in the plans. Nuts shall conform to the requirements of ASTM A563. Washers shall conform to the requirements of ASTM F 436. Nuts and washers shall be galvanized. Bolts, together with their nuts and washers shall also conform to the following:

- a) Quality assurance shall meet the requirements of ASTM F1554. The sampling of the bolts shall be in accordance with the requirements of ASTM F1554, and tests shall be conducted on full size specimens for proof load determination in accordance with the requirements of ASTM A 370, Method 2, Yield Strength, of Supplement III.
- b) All bolts and nuts shall be inspected on all surfaces by magnetic particle inspection conforming to the requirements of ASTM E 709. Inspection shall be performed prior to galvanizing. Any piece showing a crack, seam, or other flaw which, in the opinion of the Engineer would constitute a stress riser, will be rejected.
- c) A longitudinal Charpy V-notch test shall be made for each lot of finished bolts prior to galvanizing in accordance with the requirements of ASTM A 673 and A 370. The test shall show the steel meets impact test values of 15 ft.-lb. at -20 degrees F.
- d) All hanger bolts shall be given special treatment to eliminate the possibility of hydrogen embrittlement which may result from the pickling and hot-dipping processes. Treatment shall conform to the requirements of ASTM A 143, Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement. The producer shall make test for embrittlement, in accordance with Article 9.2 of ASTM A 143, on three galvanized bolts taken from the shipping lot. In addition, three ungalvanized bolts and three galvanized bolts shall be provided to the Engineer for testing in accordance with Article 9.2 of ASTM A 143.
- e) The threads of each nut shall be coated with anti-galling lubricant. At erection, no bolt shall be fully torqued more than once.
- f) The contractor shall provide to the Engineer test reports covering the requirements stated in these specifications. These reports shall be certified by the manufacturer as representing the bolts furnished for the project.

5. Hanger Spacers.

- a) Materials: All materials shall be new. No reclaimed rubber material shall be incorporated in the spacer. The elastomeric materials of the compound for natural rubber shall be 100 percent virgin natural polyisoprene with a durometer hardness of 50 (ASTM D2240 - Shore A) in accordance with Article 1052.02 of the Standard Specifications and as modified herein. The properties of the elastomeric compound shall be determined from test specimens conforming to Part B of ASTM Designation D 15. A variation of +20 percent in tensile strength and ultimate elongation under "physical properties" will be permitted when test specimens are cut from the finished product.

The natural rubber laminate with bonded steel plates shall be an integral unit and shall be incapable of being separated by mechanical means into a separate, well-defined elastomeric layer.

The stress-strain relationship for shear of the finished natural rubber pads at room temperature shall not exceed the limitations given in Table A. The ultimate breakdown limit of the pad under compressive loading shall be no less than 13.8 MPa.

- b) Construction: The natural rubber pads shall be individually moulded to the required size, and shall conform to the requirements of the class designated as RMA-A3-Fe-T.063-Be Grade 2 Method B in the Rubber Handbook, Second Edition, 1963, by the Rubber Manufacturers Association, Inc., and the dimensions of the units shall be within the following listed tolerances.

Total Thickness of elastomer	± 1/16 inch
Total out to out thickness of unit	± 1/8 inch
Diameter of unit	± 1/8 inch

The units shall be fabricated of AASHTO M270 Grade 50W steel. Pipe shall meet ASTM A53 requirements. Fabrication shall meet applicable requirements of Section 705. The clamp assemblies shall be hot dipped galvanized after fabrication in accordance with ASTM A153 requirements. Galvanized surfaces to which natural rubber pads are to be adhered shall be ground smooth and free of galvanized coating prior to the bonding process. Units shall be shop fabricated ready for installation when shipped. Synthetic rubber sleeve material shall be cut to size in the shop.

At erection, the synthetic rubber sleeve material shall be wrapped around the hanger strands at the positions indicated and held in position by two bands of wire seizing per strand. The clamp assemblies shall be installed so that the rubber sleeve material rests uniformly within the pipe sections and is centered vertically in the clamps. Nuts with lock washers shall be thoroughly tightened.

- c) Testing and Certification: The manufacturer shall perform shear load tests at room temperature on one natural rubber pad and the contractor shall furnish to the Engineer certified copies of the results of the tests.

The contractor shall also furnish to the Engineer certified copies of the rubber manufacturer's test report on the physical properties of the natural rubber pads to be furnished and a certification by the manufacturer that the pads to be furnished conform to all the requirements shown on the plans and as stipulated herein.

In addition to the clamps furnished for the work, the contractor shall furnish to the Engineer, one full size clamp device for testing. This specimen will not be returned nor incorporated into the work.

- d) Packaging: The units shall be packaged and crated in such a manner that they will not become damaged while being handled, transported or stored. Any unit damaged by handling, transporting or storing shall be replaced by the contractor at his expense.

TABLE C
Shear

Stress (kPa)	350kPa
Strain (percent)*	25 percent

*Percent of elastomer thickness.

CONSTRUCTION

Hangers and Hanger Assemblies: Hangers shall be erected either at the same time as or following the erection of the arch ribs. It is anticipated that hanger upper sockets will be first placed into the connections on the arch rib and the lower hanger anchors will be connected as the tie girders and floorbeams are erected.

Hangers shall be installed so that each strand in a two strand hanger will be equally stressed (within 10 percent of its prorated dead load stress). Steel shims, as necessary, shall be provided for adjustment of strand hangers. The contractor shall develop the procedure he proposes to use in erecting and testing for equal stressing of strands and shall submit such plans to the Engineer for approval before commencing hanger erection operations. The uniformity of stress shall be verified after steel dead load only is applied and again after the concrete dead load is applied to the hangers. The Contractor's method of testing shall be approved by the Engineer.

Hangers shall be erected with sockets and anchors in the same relative position to each other as existed when strands were measured and socketed, and with paint stripe in a straight line.

Suitable identification marks shall be provided on bridge strand hangers in order to facilitate erection. The contractor shall use suitable means to protect the hangers in transit.

Hanger spacer clamps shall be installed on hanger strands as shown on the plans after final adjustments to the hanger length have been made.

Openings between abutting ends of shims in the shim pack at each strand hanger lower anchor of the arch spans shall be caulked as specified herein to seal the openings against the entry of water. Other locations noted on the plans and as directed by the Engineer shall be similarly caulked to seal small openings in the finished structural steel where the entry of water is undesirable. Sealant for such openings shall conform to the requirements of Fed. Spec. TT-S-001543, and shall be General Electric Company Silicone Construction Sealant or Clear; Dow Corning Corporation 790 Sealant. The sealant shall fill the openings and bond to all surfaces bounding the openings to form a watertight seal. A sufficient quantity of sealant shall be applied at each opening to assure a minimum depth of sealant of 3/8". Surfaces shall be clean, dry, rust free and dust free when the sealant is applied. The use of the sealant, including any primer or other surface preparation which may be required, shall be as recommended by the manufacturer of the sealant.

The upper hanger plates and hanger stiffener plates shall be fitted to the arch rib and completely assembled before pin holes for hanger pins are drilled. The lower hanger plates shall be fitted to the tie girder and completely assembled before pin holes for hanger pins are drilled.

Hanger assemblies, pins and pin plates shall be assembled and checked for proper fit up while in the shop.

METHOD OF MEASUREMENT.

Method of measurement shall be in accordance with Article 505.12 of the Standard Specifications.

BASIS OF PAYMENT.

Structural steel fabricated, furnished and erected in place will be paid for at the LUMP SUM price for FURNISHING AND ERECTING STRUCTURAL STEEL, including all additional requirements set forth herein and as shown on the drawings.

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FAU Route 5077 (Morgan Street)
Section 99-00493-00-BR
Winnebago County
Contract No. 85529

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54213669 PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"

54213687 PRECAST REINFORCED CONCRETE FLARED END SECTIONS 42"

Description: This work shall consist of constructing precast concrete flared end sections at the locations as shown on the plans. This work shall meet the requirements of Section 542 of the Standard Specifications, the plan details and as herein specified.

General: This work shall conform to the applicable requirements of Section 542 of the Standard Specifications except that only concrete flared end sections will be allowed. End blocks will be required and galvanized steel grating will be required at the flared end sections.

Method of Measurement and Basis of Payment:

This work will be paid for at the contract unit price EACH for PRECAST REINFORCED CONCRETE FLARED END SECTIONS, of the size specified. Payment shall include all labor, materials, equipment and tools necessary to complete the work as shown on the plans, as herein specified and as directed by the Engineer.

SEC 550 STORM SEWERS, RUBBER GASKET

Description: This item is included to satisfy the EPA requirements for horizontal and vertical separation of storm sewer and watermains or water service lines outlines in Section 41 of the Standard Specifications for Water and Sewer Main Construction in Illinois. (Current Edition)

General: Storm Sewers, Rubber Gasket is to be used at locations where the watermain or water service line crosses below the storm sewer, regardless of vertical separation, or where the bottom of the watermain or water service line is less than 18 inches above the top of the storm sewer.

This work shall consist of constructing storm sewers of the required inside diameter with the necessary fitting 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.

Method of Measurement and Basis of Payment:

This work will be measured and paid for at the contract unit price per FOOT for STORM SEWERS, RUBBER GASKET of the type and size indicated.

SEC 551 SANITARY SEWER REMOVAL

Description: This work shall be done in accordance with Section 551 of the Standard Specifications for Road and Bridge Construction.

General: Any existing sanitary sewer facilities that are encountered during construction, resulting in a conflict with the installation of proposed drainage, electrical conduit, water main, or any other proposed underground improvement shall be exposed, removed, and disposed of materials off-site. Disposal shall be made at a legal disposal site.

Trench Backfill requirements shall be completed in accordance with Article 208.03 and shall be included in the cost for SANITARY SEWER REMOVAL.

No additional compensation shall be made for Excavation or Trench Backfill associated with the SANITARY SEWER REMOVAL due to existing depth or location of existing sanitary sewer facilities differing from those shown on the plans.

This work shall also 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. The cost for plugging existing sanitary sewers shall be included in the cost for SANITARY SEWER REMOVAL.

The Rock River Water Reclamation District shall be notified prior to the removal of any existing Sanitary Sewer facility within the project limits.

Basis of Payment: Basis of payment shall be the contract unit bid price per FOOT for SANITARY SEWER REMOVAL of the type and size indicated.

SEC 561 WATER MAIN RELOCATION

GENERAL

Water mains, service connections and appurtenances shall be constructed in accordance with American Water Works Association (AWWA) Standard C600 as amended herein. Subjects not governed by the above shall be governed by the pertinent provisions of the following, listed in order of precedence:

- (a) Great Lakes - Upper Mississippi River Board of State Sanitary Engineers Recommended Standards for Water Works, latest revision.
- (b) Standard Specifications for Water and Sewer Main Construction in Illinois, latest revision.

Construction standards and all materials not addressed herein, but used in water distribution construction shall comply with the Rockford Water Division Specifications available from the water utility.

Manufacturers and/or their suppliers will be required to provide a statement indicating that all components they provide are "American Made". Failure to provide certification shall be cause for rejection.

Certificates of compliance with these specifications shall be provided with all materials supplied. Failure to conform to these specifications or failure to provide the required certification shall be cause for rejection of materials.

WATER MAIN MATERIALS

All water mains shall conform to AWWA Standard C151 & C111 and, be constructed of Class 52 Ductile Iron pipe for all sizes through twelve (12) inch, and Class 51 Ductile Iron pipe for all sizes larger, when High Density Polyethylene (HDPE) is specified in design then, it shall conform to AWWA Standard C906. All pipe, shall be cement mortar lined inside, conforming to AWWA Standard C104, and bituminous coated on the outside.

Pipe-to-pipe joints on straight runs of main shall be "push-on" type with the exception of submerged river crossings or other special applications. Approval of joints in those situations will be made by the Rockford Water Division. All joints on fittings, valves, and bends, shall be "mechanical" type with ductile iron retainer glands. To ensure electrical conductivity, brass wedges ***MUST*** be used with push on joints in accordance with Section 41-2.05C of the Standard Specifications for Sewer and Water in Illinois. All mechanical joints shall be tightened to the manufacturer's specification using a torque stick.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

WATER MAIN GRADES

Water mains shall be laid at a uniform grade between main junctures. Where a uniform grade is not possible, the grade shall be designed so that the number of changes in the direction of slope are the minimum possible.

- a.) Where both ends of a section of main are at a lower elevation than an intermediate point, a means of releasing entrapped air (e.g. fire hydrant, air release valve) must be provided at the top of the "hill".

- b.) Where both ends of a section of main are at a higher elevation than an intermediate point, a means of flushing out sediment through a fire hydrant must be provided at the bottom of the "valley."

The minimum radii of curves which may be laid by deflecting twenty (20) foot lengths of push-on joint pipe at the joints are:

- 8" - 230' radius
- 12" - 230' radius
- 16" - 380' radius
- 20" - 380' radius
- 24" - 380' radius
- 30" - 380' radius
- 36" - 380' radius

- a.) Curve radii shall be measured in the plane defined by centerlines of the pipe.
- b.) Curves with smaller radii than permitted above shall be made using bends and offsets.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

PROTECTION OF WATER SUPPLIES

No water main shall pass through or come into contact with any part of a sewer manhole or storm sewer inlet structure.

Horizontal and vertical separation between water mains, water appurtenances and all storm and sanitary sewers, and appurtenances, or other sewerage structures shall be as follows:

- a.) Whenever possible, water mains shall be laid no less than ten (10) feet horizontally from any sewer, sewer appurtenance or other sewerage structure.
- b.) When it is impossible to accomplish a ten (10) feet horizontal separation between a water main and a sewer, the bottom of the water main must be at least eighteen (18) inches above the top of the sewer and the water main and sewer must be constructed in separate trenches. Where separate trenches are not possible, the water main must be constructed on a shelf of undisturbed earth located as far as possible from the sewer.
- c.) When it is impossible to accomplish the separations required above, both the water main and the sewer must be constructed of water main materials and the sewer must be pressure tested for water tightness at the maximum expected surcharge head.
- d.) Whenever a water main crosses a sewer, the bottom of the water main must be at least eighteen (18) inches above the top of the sewer for all portions of the water main located less than ten (10) feet from the sewer.
- e.) When it is impossible to accomplish the vertical separation required above, both the water main and the sewer must be constructed of water main materials and the sewer must be pressure tested for water tightness at the maximum expected surcharge head. Wherever the water main is less than ten (10) feet from the sewer, a full twenty (20) foot length of water main pipe shall be centered at the point of sewer crossing.
- f.) In addition to the above, when it is necessary that a water main cross under a sewer the bottom of the sewer must be at least eighteen (18) inches above the top of the water main

for all portions of the water main located less than ten (10) feet from the sewer. The sewer must also be supported to prevent settling.

Water mains and services shall have a minimum cover of six (6) feet, and a maximum cover of eight (8) feet from the top of the pipe to the finished ground surface. Any variation from this policy is at the discretion of the Water Division engineering staff.

- g.) Water mains and services with less than five-foot (5) of cover shall be insulated. A ½-inch thick closed cell foam insulation is to be wrapped around shallow services and then an Insulation board (polystyrene) is to be laid, over top of main and service. The 4'x 8' standard boards shall orientate to provide a minimum coverage of eighteen (18) inches beyond the outside edge of the pipe being covered. The insulation board shall have a minimum R-value of R-9 and comply with ASTM C 578-92 Type 1X. One 2-inch thick sheet of insulation is equivalent of 1 foot of ground cover when determining thickness requirements. (See Standard Detail)
- h.) All water main, and services to the property line, shall have a plastic caution tape placed in the trench approximately 3 feet above the top of the pipe to warn excavators of the nearby pipe. The tape shall be yellow with black lettering and 4 inches in width.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

PIPE FITTING SPECIFICATIONS

Pipe fittings shall be 250 PSI rated cast iron or ductile iron, fully complying with the provisions of AWWA Standard C110 (ANSI Standard A21.10). Ductile iron "compact" fittings, rated at 350 PSI, are acceptable provided they fully comply with the AWWA Standard C153 (ANSI Standard A21.53).

All fittings shall be cement mortar lined in accordance with the provisions of AWWA Standard C104 (ANSI Standard A21.4).

Fitting joints shall be mechanical type, fully complying with the provisions of AWWA Standard C111 (ANSI Standard A21.11). Fittings shall be furnished with ductile iron retainer glands and all joint accessories.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main fittings.

THRUST BLOCKING

The parameters involved in the design of thrust blocks shall include pipe size, maximum system pressure, angle of the bend, (or the configuration of the fitting), and the horizontal bearing strength of the soil. Bearing surface should, where possible, be placed against undisturbed soil. Where it is not possible, the fill between the bearing surface and undisturbed soil must be compacted to at least 90% Standard Proctor density.

Thrust blocks shall be used wherever there is a change in horizontal direction, and on dead ends. On vertical down and vertical up bends, restrained glands are required.

Thrust blocks shall be P.C. concrete, a minimum twelve (12) inches thick, formed between the pipe, or fitting and the undisturbed trench wall, and shall be, anchored in such a manner that the pipe and fitting joints will be accessible for repairs.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

TRENCH DEPTH

Trenches shall be excavated to a depth sufficient to provide a minimum cover of six (6) feet, and a maximum cover of eight (8) feet from the top of the pipe to the finished ground surface. Trench depth shall be increased where necessary so that the main is installed on a uniform gradient despite minor local variations in surface grade.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

PROPER BACKFILLING

All trenches shall be backfilled, from the bottom of the trench to the centerline of the pipe, with granular backfill or approved native material. The backfill material shall be deposited in the trench for its full width on each side of the pipe simultaneously, distributed evenly by hand, and compacted by tamping.

All trenches shall be backfilled, from the centerline of the pipe to a depth of one (1) foot above the top of the pipe, with granular backfill or approved native material compacted by tamping. The contractor shall use special care in placing this portion of the backfill so as to avoid injuring or moving the pipes.

When the type of backfill is not indicated in the plans, or elsewhere specified, the trench shall be backfilled, from one (1) foot above the pipe to the finished grade, with native material, or other materials approved by the City, in twelve (12) inch layers compacted by tamping.

Granular backfill is required under pavements, curbs, driveways, or sidewalks planned to be constructed within three (3) years after backfill. The area requiring such granular backfill shall be indicated in the plans. Where the excavation is made through or within two (2) feet of permanent pavements, curbs, driveways, or sidewalks, or where such structures are undercut by the excavation, or where such structures may reasonably be expected to be constructed over or within two (2) feet of the excavation within three (3) years after backfilling, the entire backfill to the subgrade of the structures shall be made with select granular material, as approved by the City, placed in six (6) inch layers, loose measurement, and compacted to not less than ninety-five (95) percent of standard laboratory density.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

SETTING VALVES

Water main valves shall be located on right-of-way lines extended, or lot lines extended, unless otherwise shown on the plans.

- a.) Three (3) valves shall be installed at each cross fitting, two (2) valves at each tee fitting, and one (1) valve on each hydrant branch.
- b.) Additional mainline valves shall be installed as needed so that no more than five hundred (500) feet of main will be isolated by any shut-off.
- c.) Valves shall be arranged so that no more than four (4) need be closed to isolate any section of main.

d.) Access to the valve shall be through a cast iron valve box.

Valves less than (12) inches in size shall be "gate valves". Valves twelve (12) inches and larger in size shall be "butterfly valves".

A cast iron valve box shall be provided for every valve. The valve-operating nut shall be readily accessible for operation through the valve box opening, which shall be set flush with the finished surface.

When valve vaults are required, they shall be constructed of concrete block, concrete brick laid up in alternate courses of headers and stretchers, or precast concrete, placed upon a concrete foundations ring (4) four inches thick with a minimum outside diameter of five (5) feet. Precast concrete base or foundation ring shall be placed on a well-graded granular bedding material not less than six (6) inches thick, extending to the limits of the excavation. The bedding course shall be firmly tamped and made smooth and level. Concrete block or brick shall be set in mortar with the vertical joints broken to provide drainage. The cone of the vault shall be no more than thirty-six (36) inches in height and at grade shall accept the manhole rim and cover specified below.

Manhole rims and covers shall be of "light" construction when located outside of paved surfaces; of "heavy" construction when located in paved surfaces; and of "extra heavy" construction when located in paved surfaces designated by the City as major arterial streets.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

VALVE SPECIFICATIONS

a) **Gate Valves**

Gate valves shall be iron body, bronze-mounted, non-rising stem, "double disc" gate valves with parallel seat or "resilient seat wedge" type, opening left (counter clockwise), and shall fully comply with the provisions of AWWA Standard C500 for double disc type and AWWA Standard C509 for resilient seat type.

Gate valves shall be furnished with "O" ring stem seals.

All joints shall be "mechanical joint" type and shall fully comply with the AWWA Standard C111 (ANSI Standard A21.11).

The following manufacturers are listed as offering valves in essential compliance with these specifications. Responsibility rests with the supplier for demonstrating that a particular valve model complies fully with these specifications. Manufacturers other than those listed may be acceptable provided the supplier can satisfy the City's specifications indicating that all components they provide, are "American made".

1. Mueller Company, Decatur, Illinois
2. American Flow Control, Birmingham, AL
3. Kennedy Valve, Elmira, New York

b) **Butterfly Valves**

Butterfly valves shall be of the rubber, seated type that are, in full compliance with the provisions of AWWA Standard C504. In addition the following special requirements shall prevail over the general provisions of the above referenced standards.

Butterfly valves shall be class 150B as designated in AWWA Standard C504.

Valve bodies shall be of "cast iron" conforming to ASTM A-126 class B or of "ductile iron" conforming to ASTM A-536 grade 65-45-12. Valve ends shall be of "mechanical joint" type and shall be integral with the bodies.

Valve discs shall be of the offset shaft type so as to provide a full-uninterrupted three hundred sixty (360) degree sealing surface. Discs shall be streamline and present the smallest profile consistent with the structural requirements of the valve class. Valve discs shall be constructed of ductile iron conforming to ASTM A-536 grade 65-45-12.

Valve seats shall be of "Buna-N" rubber. Seats mounted on the disc shall be clamped thereon. Seats mounted in valve bodies shall be cemented and clamped or bonded to the valve body. Seat clamps shall be of stainless steel with stainless steel fasteners. Seats shall mate with a continuous three hundred sixty (360) degree sealing surface of 18-8 stainless steel.

Valve shafts shall be of 18-8 Type 304 stainless steel. A stub shaft comprises two (2) separate shafts inserted into the valve-disc hubs. Each stub shaft shall be inserted into the valve-disc hubs a distance of at least one and one half (1-1/2) shaft diameters.

Valve actuators shall meet the requirements of AWWA Standard C504 for nut input, and shall require a minimum of two (2) turns per inch of valve size from fully open to fully closed position. Valves shall be designed for buried service and shall turn left (counter-clockwise) to open.

The following manufacturers are listed as offering valves essential for compliance with these specifications. Responsibility rests with the supplier for demonstrating that a particular valve model complies fully with these specifications. Manufacturers other than those listed may be acceptable provided the supplier can satisfy the City's specifications indicating that all components they provide, are "American made".

1. Kennedy Valve, Elmira, New York
2. American-Darling Valve, Birmingham, Alabama
3. Mueller Company, Decatur, Illinois

c) **Tapping Valves**

Tapping gate valves shall be iron-bodied, bronze mounted, non-rising stem, "double disc" gate valves with parallel seats or "resilient seat wedge" type, opening left (counter clockwise), and shall fully comply with the latest provisions of AWWA Standard C500 for double disc type and C509 for resilient type. Auxiliary type will not be accepted.

Valves shall be furnished with "O" ring stem seals.

Seat openings shall be larger than the nominal size of the valve by an amount sufficient to pass a full diameter tapping machine cutter through the valve.

Tapping valves shall be furnished with standard AWWA mechanical joint outlet end and flanged inlet end. Flanged end will have a raised face to match the groove in the tapping sleeve outlet flange. Both the flange and mechanical accessories along with the ductile iron retainer glands (RWDS-21-1994) will be furnished.

The following manufacturers are listed as offering valves in essential compliance with these specifications. Responsibility rests with the supplier for demonstrating that a particular valve model complies fully with these specifications. Manufacturers other than those listed may be acceptable provided the supplier can satisfy the City's specifications indicating that all components they provide, are "American made".

1. Mueller Company, Decatur, Illinois
2. Kennedy Valve, Elmira, New York

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

SETTING FIRE HYDRANTS

Fire hydrants shall be located as shown on the plans or as otherwise directed so as to provide complete accessibility and minimize the possibility of damage from vehicles or injury to pedestrians.

- a.) Access to the hydrant auxiliary valve shall be through a cast iron valve box. The valve operating nut shall be readily accessible for operation through the valve box opening, which shall be set flush with the finished surface.

All hydrants shall stand plumb and have their nozzles parallel or at right angles to the curb, with the pumper nozzle facing the curb. No portion of the pumper hose nozzle cap shall be less than twenty-four (24) inches from the gutter face of the curb, driveway or other vehicular traffic surface. Hydrants shall be set with indicated bury line to finished grade, and with centerline of all nozzles at least eighteen (18) inches, but not more than twenty-four (24) inches above finish grade. Break-a-way flange shall be installed not less than two (2) inches, nor more than six (6) inches above finished grade. Precautions must be taken to provide adequate drainage of hydrants. Hydrant drains shall not be connected to or located within 10 feet of sanitary sewers or storm drains.

Each hydrant shall be connected to the main by a six (6) inch diameter branch line controlled by an independent six (6) inch gate valve placed within eighteen (18) inches in front of the hydrant. Restrained joints shall be used on the tee branch, both sides of the auxiliary control valve, and the hydrant shoe.

Each hydrant shall be placed upon a two (2) foot square concrete base set upon undisturbed soil. The hydrant shall be braced until the backfill is made.

A cast iron valve box shall be provided for every valve. The valve-operating nut shall be readily accessible for operation through the valve box opening, which shall be set flush with the finished surface.

When hydrant valve vaults are required they shall be constructed of precast concrete, or constructed in the manner previously specified under gate valve vaults. The neck of the vault shall be drawn toward the main where a manhole rim and cover shall be installed. The cone slot on a precast concrete vault shall be blocked, bricked, and mortared around the hydrant barrel to prevent both barrel movement and soil penetration.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

FIRE HYDRANT SPECIFICATIONS

Fire hydrants shall fully comply with all of the general provisions of the latest revision of AWWA Standard C502 and with the special requirements hereinafter provided.

The inlet connection shall be six (6) inch oversized mechanical joint type, which is designed to be installed on Class D Pit Cast or Class 250 Cast Iron pipe and Class 52 Ductile Iron pipe by using two (2) types of available gaskets furnished with the hydrant. Gaskets for oversized cast iron and ductile iron are to be color coded to identify which gasket is to be used on which pipe. The interior shoe and lower valve plate shall be coated with an epoxy at a minimum of four (4) mils

thickness. Ductile iron restrained retainer glands, bolts, nuts, and gaskets, shall conform to AWWA Standard C111.

The main valve shall be five and one-quarter (5-1/4) inches in size, closing with water pressure. The upper valve plate and seat ring shall both be of solid, one-piece bronze construction, and the seat ring shall be attached to the hydrant shoe by threading into a bronze fitting. The zinc content in the bronze shall not exceed sixteen (16) percent. The main valve assembly shall include provisions to restrain movement of the main valve and stem in any direction other than parallel to the axis of the stem.

Lower barrel length shall be based on a nominal six (6) foot bury (trench) depth. Barrel and stem extensions shall be available in six (6) inch lengths and longer lengths in increments of six (6) inches. The manufacture's name, size of main valve opening, and year of manufacture shall be cast in the upper barrel of the hydrant.

Nozzles shall be fastened mechanically into the upper barrel and have the nozzle caps chained to the upper barrel. Leaded in nozzles shall not be allowed. The centerline of all nozzles shall be no less than eighteen (18) inches, but not more than twenty-four (24) inches above the groundline bury mark on the lower barrel of the hydrant.

Both hydrant operating nut and nozzle cap nuts shall be one (1) inch square at the base tapering to seven-eighths (7/8) inch at the top and not less than one (1) inch in height. The hydrant-operating nut shall turn right (clockwise) to open.

Hydrants shall be of the "break-away" flange and stem coupling design. The breakaway design shall allow for three hundred sixty (360) degree facing nozzles by infinite degrees. Safety stem coupling shall be of frangible design, which provides for a clean break or tear into halves upon impact. Stem coupling shall be secured to the stem with stainless steel pins and fasteners.

Fire hydrants installed in public R.O.W. and in easements maintained by the City, shall have the upper barrel, above the groundline, painted a minimum of one (1) coat of "Yellow" Rustoleum Industrial grade Iron Oxide Primer and two (2) finish coats of "Traffic Yellow" Rustoleum Industrial grade oil base Alkyd Enamel. Hydrants installed on private property, in conjunction with the owners fire protection system, shall be painted "Red". Painting and coatings shall be in accordance with AWWA Standard C502.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

HYDRANT LUBRICATION

Each threaded nozzle and cap, shall be coated with a premium, synthetic, food grade, non-drying thread sealant and anti-seize compound, approved by the specific hydrant manufacturer, immediately before or after installation.

Approved Hydrants:

Only the following manufacturers and models are accepted by the City of Rockford.

1. Kennedy Guardian K-81A
2. Mueller Super Centurion A-423

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

VALVE BOXES

Valve boxes shall be Tyler/Union cast iron 6850 series, with "WATER" imprinted on top cover with a debris cap and with an Adapter II by Adaptor Inc. installed.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

RESTRAINED GLANDS

Restrained glands shall be cast from ductile iron and machined to dimensions and/or tolerances hereinafter specified either directly or by reference.

Restrained glands shall be designed for use in place of standard glands for AWWA Standard C111 (ANSI Standard A21.11) mechanical joints. The approved restrained gland type shall be:

- (a) Individually activated wedge type gland (*e.g. Megalug style; Uniflange style*) shall be used for restraint due to its increased resistance to joint separation as pressure or external forces increase and its ability to provide joint resiliency and deflection. The wedge type gland shall have a working pressure up to three hundred fifty (350) psi. in main sizes through sixteen (16) inches, and two hundred fifty (250) psi. in larger sizes along with a minimum safety factor of 2:1. The wedges shall be ductile iron heat treated to a minimum hardness of 370 BHN. It shall also have individual activated wedge screws with specially engineered heads designed to break off when desired torque is reached, leaving a hex head in case future removal is required.

Restrained glands shall be used on all water mains, hydrant and large service branches, which have vertical down and vertical up bends and any intermediate joints between those bends. Joint restraint will also be required on at least two (2) full pipe lengths of the horizontal run either side of the bend.

On horizontal bends; pipe size, angle of bend, maximum system pressure, soil classification and moisture content, depth of bury, type of trench bedding and compaction and whether or not the pipe is polyethylene wrapped, will all be used in calculating the pipe length to soil friction needed for proper joint restraint on either side of the bends.

Hydrant installations including the branch end of the tee, as well as the pressure side of distribution valves used at main dead ends, will also require the use of restrained glands.

Restrained glands shall be furnished factory coated with bituminous material meeting the requirements for outside coatings of AWWA Standard C151 (ANSI Standard A21.51).

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

SERVICE CONNECTIONS

Every property with frontage along a water main and having an inhabitable dwelling shall be provided a water service to the property line when the main is constructed, unless the property has an existing service connection to another main along which the property fronts. Every property shall have a separate service connection to the water main, and no more than one property shall be served by any one connection to a main.

Service connection sizes shall be approved by the City based on design criteria in the AWWA Manual M-22. Services shall be sized so flow velocity at maximum anticipated demand is no

more than 10.0 fps and friction losses between the main and the water meter at maximum demand is no more than 25.0 psig.

- (a) All new residential subdivisions zoned R-1 shall be provided with a minimum one (1) inch service connection.
- (b) On existing single family residences with less than two (2) full bathrooms or when replacing existing services, three quarter (3/4) inch service connections will generally be adequate.
- (c) Duplexes and larger single-family residences with two (2) or more full bathrooms generally can be served with one (1) inch service connections. A detailed analysis using AWWA Manual M-22 should be conducted on those large single family homes or two family duplexes where large demand fixtures (e.g., sprinkler systems, etc.) need to be factored in.
- (d) Service connections for multifamily residences, commercial and industrial properties will require detailed analysis to determine size.
- (e) Service taps are to be made only by the City of Rockford or their approved representative, after the appropriate service connection fees are received.
- (f) A crimping tool shall not, be used to temporarily stop a water service, except in an emergency. If a crimping tool is used to stop a service line, the final repair shall be as directed by the Engineer, but in no case shall un-crimping the line be allowed. The temporary freezing of a service is the approved method of use for the City of Rockford.

Service branch pipes two (2) inches in diameter and smaller shall be seamless "Type K soft" copper tubing for underground service, conforming to ASTM B-88-47, complying with Section 12.20 of these specifications. Service branch pipes larger than two (2) inches shall be Class 52 ductile iron.

Each service shall be provided with a valve at the point of connection with the main. For copper services, the valve at the main shall be a corporation stop; for ductile iron services, connection to the main shall be made by means of either a tapping valve and sleeve or installation of a tee and standard gate valve. Corporation stops shall be, buried. Gate valves shall be, provided with a valve box.

The table below lists the largest service sizes that may be tapped directly into the main for each size of main. For other main or service sizes, a service saddle or tapping sleeve is required.

<u>MAIN SIZE</u>	=	<u>LARGEST DIRECT TAP</u>
4 inch	=	3/4 inch
6 inch thru 20 inch	=	1 inch
24 inch	=	1-1/2 inch
30 inch	=	2 inch

Combination services (Fire and Domestic) will be allowed with a single valve at the main, with access to the valve through a pre-cast manhole, and shall split outside the building with an individual stop on the domestic service located a minimum of five (5) feet from the building or as approved by the City of Rockford Water Division.

Standard service connection sizes are 1", 1-1/2", 2", 4", 6" and 8" in addition to the standard water main sizes. When design calculations yield an intermediate service connection size the next larger standard size shall be used.

No service connection shall be larger than the main to which it is connected. On dead end mains no service connection shall be larger than 1/2 the main size.

Copper service connections shall be connected to the main by a corporation stop and shall be controlled by a curb stop accessible through a curb box. The curb stop and box shall be installed on the R.O.W. line and shall not be located in or under any service walk or driveway. If any curb stop box is located in a walk or driveway, an A.Y. McDonald, cast iron box receptacle (part 5639) must be used. Where the entire area between the curb and R.O.W. line is paved, the top of the curb box must be fitted with a pavement sleeve.

Service connections shall be installed perpendicular to the water main at the point of connection and extend in a straight line to the boundary of the R.O.W. or easement in which the main is located. Where a service perpendicular to the main will not reach the property to be served, the service shall be laid in a straight line between the main and the property line.

Ductile iron service connections shall be connected to the main by a tapping sleeve and valve or by a tee and standard valve. Access to the valve shall be provided with a valve box. Valve vaults may be required in special circumstances as directed by the Water Superintendent.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

COPPER TUBING SPECIFICATIONS

Tubing shall be seamless Type K copper tubing, suitable for underground service, and conforming with ASTM B-88-47 Type K, soft. Copper is to be of one continuous piece. No joints, couplings, etc. allowed from main to curb stop, *unless* authorized by the City Engineer, Water Superintendent or their representative.

Tubing shall be supplied in the following standard water tube sizes:

- (a) 1 inch
- (b) 1-1/2 inch
- (c) 2 inch

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

COPPER COMPRESSION JOINT SPECIFICATIONS

Compression joint is hereby defined to be a joint whereby plain end copper tubing is connected to a fitting and locked into place by compressive forces created when a nut threaded onto the body of the fitting is tightened. A compression joint shall require no preparation of the end of the tubing other than simple cleaning.

A compression joint shall consist of:

- (a) A receptacle in the fitting body for the end of the copper tubing, the outside of which receptacle shall be threaded to accept the coupling nut; and
- (b) A gasket which shall provide the hydraulic seal for the joint and transmit the compressive forces to the gripper band; and
- (c) A gripper band which shall produce circumferential indentations in the tubing, thereby restraining the tubing and preventing joint separation; and
- (d) A coupling nut which shall thread onto the body of the fitting and, upon tightening, compress the gasket and gripper band; and

(e) A device or means of providing positive electrical continuity through the joint.

The gasket shall be made of a synthetic rubber material capable of providing a watertight seal when installed at temperatures ranging from minus twenty (-20) degrees Fahrenheit to one hundred (100) degrees Fahrenheit. It shall be capable of maintaining a watertight seal through repeated temperature cycles between thirty-two (32) degrees Fahrenheit and eighty (80) degrees Fahrenheit, and shall be undamaged by water temperatures up to one hundred sixty (160) degrees Fahrenheit. The gasket shall be, totally confined by the fitting body/coupling nut assembly.

The gripper band shall be made from corrosive resistant steel. It shall be concave in shape so as to produce two parallel circumferential indentations in the tubing, and shall overlap itself upon compression.

The coupling nut shall be made of waterworks bronze (ASTM B-62).

The fitting body receptacle and coupling nut eye shall be manufactured to a close tolerance to Type K copper water tube, so that the tubing cannot be inserted into the coupling assembly unless the tubing is truly round in cross section and axially straight.

Compression couplings shall include provision for positive electrical connection between the tubing and the fitting body. The electrical connection shall be adequate to conduct 200 amps without damage to the gasket or any other part of the joint.

Compression coupling joints shall not pull apart at loads less than 2000 pounds.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

CORPORATION STOP VALVE SPECIFICATIONS

Corporation stop valves shall be manufactured of waterworks bronze (ASTM B62), with full diameter stop orifice, and thread patterns conforming to AWWA Standard C800 figure 1 for Type K copper service tube.

Design and dimension of corporation stops must conform, with Mueller H-15000 stops to allow use in the City's tapping machines.

Corporation stop valves shall be, furnished in one (1) inch, one and one-half (1-1/2) inch and two (2) inch sizes for use with Type K copper tubing in the same standard water tube sizes.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

CURB STOP VALVE SPECIFICATIONS

Curb stop valves shall be manufactured of 85-5-5 waterworks bronze (ASTM Standard B62), with full round top orifices, and ninety (90) degree stop rotation. Tee heads must be designed for connection to curb box shut-off rods similar to Mueller #82865 or #580563.

Curb stop valves shall be "O" ring seal plug or ball types. Inverted or tapered plug valves, as well as stop and waste designs, are not accepted.

Curb stop valves shall be, furnished in one (1) inch, one and one-half (1-1/2) inch, and two (2) inch sizes for use with Type K copper tubing.

The following manufacturers are listed as offering curb stop valves in essential compliance with these specifications. Responsibility rests with the supplier to demonstrate that a particular curb stop model complies fully with these specifications. Manufacturers other than those listed may be acceptable, and will be given full consideration, provided the supplier can satisfy the City that these specifications are met.

1. Mueller Company, Decatur, Illinois
2. A.Y. McDonald Manufacturing Company, Dubuque, Iowa

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

CURB STOP BOX SPECIFICATIONS

Curb stop boxes shall be extension type, with arch pattern bases, for a nominal six (6) foot trench depth. Upper sections shall be of steel and shall telescope a minimum of twelve (12) inches. Provisions shall be made to prevent the upper sections from turning or from pulling out of the base sections.

Upper sections for three-quarter (3/4) inch and one (1) inch curb stop boxes shall be one (1) inch size. Upper sections for larger curb stop boxes shall be one and one-quarter (1-1/4) inch in size. The base sections shall be adequately sized to accommodate Mueller Oriseal pattern curb stops.

Stationary rods thirty-six (36) inches long shall be furnished with curb stop boxes. Rod design shall center the upper end of the rod in the upper box section.

Lids shall be furnished with curb stop boxes. Lids shall have brass bushings iron pipe threaded, and shall be cast with lettering to indicate a water service valve.

Curb stop boxes shall be coated, inside and outside, with coal tar enamel. Stationary rods and lids shall also be coated with coal tar enamel.

The following manufacturers are listed as offering curb stop boxes in essential compliance with these specifications. Manufacturers other than those listed may be acceptable, and will be given full consideration, provided the supplier can satisfy the City that these specifications are met.

<u>Stop size</u>	<u>Manufacturer</u>	<u>Box Number</u>	<u>Lid Number</u>
1	A.Y. McDonald	5601	5601-L
1	Mueller	H-10314	89982
1-1/2 & 2	Mueller	H-10386	89990

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

SERVICE SADDLE SPECIFICATIONS

Service saddles shall be of the double strap type in pipe sizes up to sixteen (16) inch, and triple strap in larger pipe diameters. Saddles shall be designed for a working pressure of three hundred (300) PSI.

Outlet opening shall be furnished with AWWA "CC" type tapered threads in one and one-half (1-1/2) inch, and two (2) inch sizes.

The saddle body shall be made of ductile iron with an enamel coating, and complying with ASTM Standard A536. Straps and nuts shall be made of forged low alloy steel, electro-galvanized with

di-chromate seal and conforming to ASTM Standards A108 and B633. The inlet gasket shall be of "Buna-N" rubber, cemented in place.

In soils considered corrosive, service saddle material of construction shall be: Saddle body made of 85-5-5 waterworks bronze, with straps and nuts made of silicon bronze, all in compliance with AWWA Standard C800.

The following manufacturers are listed as offering service saddles in essential compliance with these specifications. Responsibility rests with the supplier to demonstrate that a particular saddle fully complies with these specifications. Manufacturers other than those listed may be acceptable, and will be given full consideration, provided the supplier can satisfy the City that these specifications are met.

1. Smith-Blair, Incorporated, Texarkana, Texas
2. Ford Meter Box Company, Wabash, Indiana

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

SERVICE FITTING SPECIFICATIONS

Service fittings shall be manufactured of waterworks bronze (ASTM B-62).

Services fittings shall be, furnished in one (1) inch, one and one-half (1-1/2) inch, and two (2) inch sizes for use with Type K copper tubing in the same standard water tube sizes.

Copper joints on service fittings shall be furnished with compression joints complying with Section 12.19 of these specifications.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

HORIZONTAL DIRECTIONAL BORING

Directional boring/drilling installation shall be accomplished where required on the Plans or in the Special Conditions to minimize disturbance of existing surface improvements. The Contractor shall be compensated for the restoration work only within the areas at the connection points, or other locations as may be approved by the Engineer. The Contractor shall be responsible for repairs, without compensation, for any other repair areas, including pit/boring points and areas above the drilled pipe where underground pressure may cause heaving or damage to pavement and ground surfaces.

The Contractor must submit boring/drilling pit locations to the City and the Engineer for approval before beginning construction. Boring pits may be located within roadway right-of-way and easements as authorized by the City of Rockford. Any other locations that may be desired by the contractor for boring pits or other uses shall be the responsibility of the Contractor to attain authorization, including private property as may be required.

The drilling equipment shall be capable of placing the pipe as shown on the plans. The installation shall be by a steerable drilling tool capable of installing continuous runs of pipe without intermediate pits, at a minimum distance and radius requirements per the manufacture's specification and recommendations. The guidance system shall be capable of installing pipe within 6-inches of the plan vertical dimensions required to remove and reinstall pipe, which vary in depth and alignment from these tolerances.

Pull back forces shall not exceed the allowable pulling forces for the pipe being installed. The minimum radius of the pipe shall be per the manufacture's specification and recommendations. Drilling fluid shall be a mixture of water and benonite clay and shall be designed for existing soil conditions. Disposal of excess fluid and spoils shall be the responsibility of the Contractor.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

HYDROSTATIC TESTING

After the pipe has been laid and partly backfilled as specified, all newly laid pipe or any valved sections of it shall, unless otherwise expressly specified, be subjected to a hydrostatic pressure equal to fifty (50) percent more than the operating pressure at the lowest elevation of the pipe section, but not to exceed the pressure rating of the type of pipe specified. The duration of each pressure test shall be for a period of not less than one hour and not more than six hours. The basic provisions of AWWA C-600 and C-603 shall be applicable.

Each valved section of pipe shall be, slowly filled with water and the specified test pressure applied. Before applying the specified test pressure, all air shall be expelled completely from the pipe, valves and hydrants. If permanent air vents are not specified, the contractor shall install corporation stops at all points located at a higher elevation than the immediately adjacent sections of main so that air can be expelled as the line is filled with water. After air has been expelled, corporation stops shall be closed and test pressure applied.

After test pressure has been reached and the system allowed to stabilize, not more than plus or minus five pounds per square inch gauge (+or- 5 PSIG) deviation will be allowed for the duration of the test.

All exposed pipe, fittings, valves, hydrants and joints shall be carefully examined. All joints showing visible leaks shall be repaired by the contractor. Any cracked or defective pipe, fittings, valves, or hydrants discovered in consequence of the pressure test shall be removed and replaced by the contractor. The test shall be repeated until satisfactory to the City.

A leakage test shall be conducted if the pressure test cannot be satisfactorily completed. Leakage shall be defined as the quantity of water that must be supplied into the newly laid pipe, or any valved sections thereof, to maintain pressure within five pounds per square inch (5 PSI). Leakage **shall not** be measured by a drop in pressure in a test section over a period of time.

No pipe installation will be, accepted if the leakage is greater than specified in AWWA Standard C600-87, which is, determined by the following formula:

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

JOB NO. _____

ROCKFORD WATER DIVISION
LEAKAGE TEST RESULTS

Date _____ Subdivision _____

Inspector _____ Contractor _____

$$\text{Formula: } L = \frac{SD \sqrt{P}}{132,200}$$

L = Allowable leakage, in gallons per hour *
S = Length of pipeline, in feet
D = Pipe diameter, in inches
P = Test pressure, in PSI (100 PSI minimum) (150 PSI Standard)

ALLOWABLE LEAKAGE: L = _____ gals. / hr.*

TEST RESULTS: L = _____ gals. / hr.

* NOTE : When testing against closed metal-seated valves, an additional leakage per closed valve of 0.0078 gph/inch of nominal valve size shall be allowed.

PROCEDURE

1. Slowly fill the water main expelling air at the highest point.
2. Corporation stop used for test procedure should be at the highest elevation, otherwise 0.433 PSI/ft. differential must be added to the 100 PSI minimum test pressure.
3. After test pressure has been reached, start one (1) hour timing period.
4. During one (1) hour test, periodically pressurize system to maintain no more than five (5) PSI loss from original test pressure.
5. Note the original water mark and amount of draw-down on final pressurization at the end of the one (1) hour test.
6. Measure and record the amount of water lost compared to the allowable leakage determined in the formula above. No pipe installed will be accepted if the leakage is greater than determined by the formula.

ALLOWABLE LEAKAGE :

$$L = \frac{SD \sqrt{P}}{132,200}$$

L = Leakage (gals./hr.)
S = Pipeline length (ft.)
D = Pipe diameter (in.)
P = Test pressure (100 PSI minimum = 10)

(150 PSI Standard = 12.25)

EXAMPLE :

- 1500 ft. – 30 - inch water main
- 1720 ft. - 8 - inch water main
- 115 ft. - 6 - inch hydrant branches off 8 - inch main

NOTE : Only services larger than two (2) inches, where branch control valves might be found at property lines, are to be included in the leakage formula.

$$L = \frac{(1500) (30) \left(\frac{12.25}{\sqrt{150}} \right)}{132,200} = \frac{551,250}{132,200} = 4.16 \text{ gal./hr. (30 inch)*}$$

$$L = \frac{(1720) (8) \left(\frac{12.25}{\sqrt{150}} \right)}{132,200} = \frac{168,560}{132,200} = 1.27 \text{ gal./hr. (8 inch)}$$

$$L = \frac{(115) (6) \left(\frac{12.25}{\sqrt{110}} \right)}{132,200} = \frac{8,452}{132,200} = 0.06 \text{ gal./hr. (6 inch)}$$

* Leakage test on the thirty (30) inch main conducted independently of the eight (8) inch main test. Allowable leakage on the eight (8) inch main and hydrant branches were combined.

ALLOWABLE LEAKAGE :
 = 4.16 gals./hr. (30 inch)
 = 1.33 gals./hr. (6 & 8 inch)

DISINFECTION

After the backfill has been completely made, the contractor shall disinfect the pipeline in compliance with the provisions of AWWA Standard C651 and the provisions herein specified.

Prior to disinfection, the pipeline or valved section thereof, shall be flushed at a minimum flow velocity of two and one-half (2-1/2) feet per second. Following full development of flow, flushing shall continue until the discharge runs clear or until the City direct flushing operations to cease. In no event shall the duration of flushing be less than ten (10) minutes. Water used in flushing shall be introduced into the pipeline at a point of connection with the existing distribution system designated by the City.

After flushing, the water main shall be disinfected in accordance with AWWA Standard C651. Water used in disinfecting the pipeline shall be introduced into the pipeline through the pressure test connection made under the provisions of Hydrostatic Testing.

Bacteriological sample shall be collected from the pipeline following disinfection and final flushing. Samples shall be sent to the Winnebago County Health Department or a State approved laboratory for analysis. Sample paperwork shall indicate the chlorine residual (either free or total) at the time the sample was collected. Failure to record the residual shall result in the rejection of the sample (see attached samples for guidance). If the sample shows the presence of coliform organisms, the contractor shall repeat the disinfection procedure. On resampling, two (2) consecutively good samples on successive days will be required.

If valved sections of the pipeline are disinfected separately, each section will be considered a separate pipeline for disinfection and flushing until disinfection of the upstream section has been satisfactorily completed as determined by bacteriological analysis.

A copy of the final *COLIFORM ANALYSIS REPORT*, from the State approved laboratory, is to be sent to the City Water Engineering Supervisor and also a copy to the Water Division Operations Center, Water Quality Supervisor or their representative.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

MISCELLANEOUS FITTINGS & CONNECTIONS

Description: This work shall consist of furnishing and installing ductile iron fittings to connect water main pipe as shown on the plans and described in the Special Provisions herein

Method of Measurement: Measurement for this work will be per EACH in place for all fittings, i.e.; ells, reducers, tees, crosses, sleeves, offsets, and bends as shown in the plans. In the event that the contractor's means and methods result in additional fittings being required, these additional fittings shall not be applicable for payment.

Basis of Payment: This work shall be paid for at the contract unit price per EACH for DUCTILE IRON WATER MAIN BEND, of the angle and size specified; DUCTILE IRON WATER MAIN REDUCER, of the size specified; DUCTILE IRON WATER MAIN TEE, of the size specified; DUCTILE IRON WATER MAIN FITTINGS, MECHANICAL JOINT 8"X6" HYDRANT TEE; DUCTILE IRON WATER MAIN FITTING -, of the size and type specified; DUCTILE IRON WATER MAIN FITTINGS, of the type, angle, and size specified.

This shall be full compensation for all materials, labor, equipment, restraining glands, mechanical joints, and appurtenances required to connect the fittings to the main pipe and shall include all work and materials associated with construction of the thrust block. The use of tie rods and/or friction clamps will not be measured for payment, but shall be considered included in the unit cost bid of the water main.

REQUIREMENTS FOR SCHEDULED WATER MAIN VALVE SHUT OFF:

- a) The Contractor shall obtain the permission of the Water Superintendent, or his designee, prior to any water main valve shut off.
- b) The Contractor shall notify all water customers affected by the water main valve shut off at least 24 hours in advance, using forms supplied by the Water Division.
- c) The Contractor shall notify the Water Division Operations Center Operator (987-5712) prior to any water main valve shut off and provide the following information (pursuant to Illinois Municipal Code 65 ILCS 5/11-20-10.5):
 - Streets and boundaries of shut down
 - Time of shut down
 - Approximate duration of shut down
 - Number of customers affected
 - If non-residential customers (hospitals, nursing homes, restaurants, etc.) are affected, a count of how many individuals affected will be provided.
- d) The Contractor shall notify Water Division Operations Center Operator upon completion of repairs and restoration of water service.

- e) The Contractor shall demonstrate, to the satisfaction of the Engineer, that water service at each residence or business affected by the shut down has been restored once the water service line has been reconnected.
- f) The Contractor shall meet with Water Division personnel at least two (2) days prior to start of construction to coordinate exercising valves and determining valve shut off patterns during construction. The shut down shall be allowed to proceed only after the Water Division representative has determined that the required valves are functioning. The Contractor shall be responsible for turning valves on and off during construction and accepts the responsibility for any damages to valves during construction.

Basis of Payment. All costs of work associated with scheduled water main valve shut off shall be included in the individual bid items and no additional compensation shall be allowed.

REQUIREMENTS FOR UNSCHEDULED (EMERGENCY) WATER MAIN VALVE SHUT OFF:

- a) In the event the Contractor must perform an unscheduled water main valve shut off; the Contractor shall notify the Water Division Operations Center Operator (987-5712) as soon as possible.
- b) The Contractor shall notify all water customers affected by the water main valve shut off and the need to boil water as soon as possible, using forms supplied by the Water Division.
- c) The Contractor shall provide the following information (pursuant to Illinois Municipal Code 65 ILCS 5/11-20-10.5):
 - Streets and boundaries of shut down
 - Time of shut down
 - Approximate duration of shut down
 - Number of customers affected
 - If non-residential customers (hospitals, nursing homes, restaurants, etc.) are affected, a count of how many individuals affected will be provided.
- d) If the Contractor is involved in repairs, the Contractor shall notify Water Division Operations Center Operator upon completion of repairs when water service has been restored.

Basis of Payment. This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main items.

POLYETHYLENE ENCASEMENT OF WATER MAIN

The water main, including valves, fittings, hydrant barrels, and appurtenances, shall be fully encased in polyethylene film meeting the requirements of these Specifications, unless noted otherwise. The film shall be furnished in tube form for installation on pipe and all pipe-shaped appurtenances such as bends, reducers, offsets, etc. Sheet film shall be provided and used for encasing all odd-shaped appurtenances such as valves, tees, crosses, etc.

The polyethylene tubing shall be installed on the pipe prior to being lowered into the trench. Tubing length shall be sufficient to provide a minimum overlap at all joints of one foot or more. Overlap may be accomplished with a separate sleeve tube placed over one end of the pipe prior to connecting another section of pipe, or by bunching extra overlap material at the pipe ends in accordion fashion. After completing the pipe jointing and positioning the overlap

material, the overlap shall be secured in place with plastic adhesive tape wrapped circumferentially around the pipe not less than three (3) turns.

After encasement, the circumferential slack in the tubing film shall be folded over at the top of the pipe to provide a snug fit along the barrel of the pipe. The fold shall be held in place with plastic adhesive tape applied at intervals of approximately three (3) feet along the pipe length. Also, any rips, punctures, or other damage to the tubing shall be repaired as they are detected. These repairs shall be made with adhesive tape and overlapping patches cut from sheet or tubing material.

At odd-shaped appurtenances such as valves, the tubing shall overlap the joint and be secured with plastic adhesive tape. After which the appurtenant piece shall be wrapped with a flat film sheet or split length of tubing by passing the sheet under the appurtenance and bringing it up around the body. Seams shall be made by bringing the edges together, folding over twice, and taping down. Whenever encasement is terminated, it shall extend for at least two (2) feet beyond the joint area.

Openings in the tubing for branches, service taps, air release valves and similar appurtenances shall be made by cutting an X-shaped slit and temporarily, folding back the film. After installing the appurtenance, the cut tabs shall be secured with tape and the encasement shall be completed as necessary for an odd-shaped appurtenance.

Polyethylene encasement material shall conform to the requirements of AWWA Standard C-1051A21.5 for tube installation and 8-mil nominal film thickness.

Basis of Payment: This work will not be paid for separately, but shall be included in the contract unit cost for all associated water main pipe, fittings, hydrants, and associated items.

LINE STOPS 10"

This work shall consist of cutting the existing water main under pressure, installing a tapping saddle and hydraulically inserting a bladder (expansion plug) to temporarily stop the flow of water. When the water main connections are made, the Line Stop shall be removed and the tee capped and location marked on the Record Drawings. LINE STOPS 10" shall be left in place and the location noted on the Record Drawings. Temporary line stops are on lines to be abandoned and the Contractor may recover the tapping materials. All work shall conform to the applicable portions of Section 561 of the Standard Specifications, the Standard Specifications for Water & Sewer Main Construction in Illinois, and the City of Rockford's Water Distribution System Design and Specifications. In case of a conflict, the stricter standard shall apply.

The Contractor may use the existing shut off valves adjacent to the location where the end caps are to be installed or removed. However, the Contractor shall not assume that they will shut the water off. Therefore, it is the Contractor's responsibility to adequately stop the water so that an end cap can be installed or a connection can be made between the existing water main and the new water main. No additional compensation will be given to the Contractor if these shut off valves do not work.

The Contractor shall obtain permission from the Department of Public Works Water Division prior to any water main shut down. The water service may not be disrupted for longer than two hours between the hours of 9 am to 4 pm on Monday through Friday. No disruption in service will be allowed on Saturdays, Sundays, or Holidays. It shall be the Contractor's responsibility to notify the homeowners/business owners of any water service disruptions at least 24 hours in advance utilizing forms supplied by the Water Division. It shall also be the Contractor's responsibility to assure that each resident with water service has had water pressure restored after water has been turned on.

Method of Measurement: Measurement for this work will be per EACH in place for the various size water mains.

Basis of Payment: This work will be paid for at the contract unit price bid per EACH for LINE STOPS 10".

CUT AND CAP EXISTING 4" WATER MAIN
CUT AND CAP EXISTING 6" WATER MAIN
CUT AND CAP EXISTING 8" WATER MAIN
CUT AND CAP EXISTING 10" WATER MAIN

The work required to cut and plug existing water mains shall be completed in accordance with the details shown in the plans; at the locations shown on the plans, the City of Rockford Water Division Specifications and the requirements of the Engineer. This item shall consist of furnishing and installing all material and providing all labor necessary to cut and plug the existing water main. This item will also include removal and proper disposal of all material required to complete the work.

Method of Measurement: Measurement for this work will be per each in place for the various size water mains.

Basis of Payment: This work will be paid for at the contract unit price per EACH for CUT AND PLUG EXISTING WATER MAIN for the various size water mains.

WATER MAIN REMOVAL

The work required to remove the existing water mains shall be completed in accordance with the details shown in the plans; at the locations shown on the plans, the City of Rockford Water Division Specifications and the requirements of the Engineer. This item shall consist of providing all labor necessary to remove the existing water mains. This item will also include removal and proper disposal of all material required to complete the work.

Trench Backfill requirements shall be completed in accordance with Article 208.03 and shall be included in the cost for water main removal.

Method of Measurement: Measurement for this work of the various sizes will be per FOOT of pipe removed and properly disposed.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for WATER MAIN REMOVAL of the various sizes of pipe removed.

ADJUSTING WATER VALVE BOXES

This work includes furnishing all labor and materials (including new frame and lid) needed to bring the water valve boxes to the new grade of the street as specified by the Engineer, as shown on the plans and in accordance with Section 602 and the attached detail with the exception that, only Class SI concrete shall be used to fill around the new water valve box. The water valve box lid that was removed will be salvaged by the Contractor for the City of Rockford pick-up.

Method of Measurement: Measurement for this work will be per EACH.

Basis of Payment: This work will be paid for at the contract unit price per EACH for ADJUSTING WATER VALVE BOXES

VALVE VAULTS TO BE REMOVED

This work shall be performed in accordance with Section 602 and 605 of the "Standard Specifications". This item shall consist of providing all labor necessary to remove the existing valve vaults. This item will also include removal and proper disposal of all material required to complete the work.

Trench Backfill requirements shall be completed in accordance with Article 208.03 and shall be included in the cost for VAULVE VAULTS TO BE REMOVED.

Method of Measurement: Measurement for this work will be per EACH valve vault removed.

Basis of Payment: This work will be paid for at the contract unit price per EACH for VAULVE VAULTS TO BE REMOVED.

VALVE BOXES TO BE REMOVED

This work shall be performed in accordance with Section 602 and 605 of the "Standard Specifications". This item shall consist of providing all labor necessary to remove the existing valve boxes. This item will also include removal and proper disposal of all material required to complete the work.

Trench Backfill requirements shall be completed in accordance with Article 208.03 and shall be included in the cost for VAULVE BOXES TO BE REMOVED.

Method of Measurement: Measurement for this work will be per EACH valve box removed.

Basis of Payment: This work will be paid for at the contract unit price per EACH for VAULVE BOXES TO BE REMOVED.

CONNECTION TO EXISTING WATER MAIN 4" CONNECTION TO EXISTING WATER MAIN 6" CONNECTION TO EXISTING WATER MAIN 8" CONNECTION TO EXISTING WATER MAIN 10"

This work shall consist of furnishing and installing all material and providing all labor necessary to connect the proposed water main to the existing water system. All workmanship and materials shall conform to the City of Rockford Water Division Specifications latest revisions.

The item shall include all material, including any additional pipe fittings, pipe, or other material necessary to make the connection.

Method of Measurement: Measurement for this work will be per EACH in place for the various size water mains.

Basis of Payment: This work will be paid for at the contract unit price per EACH for CONNECTION TO EXISTING WATER MAIN of the diameters specified.

WATER SERVICE INSTALL. 1" COMPLETE WATER SERVICE INSTALL. 2" COMPLETE

This work shall conform to the Standard Rockford Water Division Specifications, The Standard Specifications and the requirements of the Engineer. This item shall consist of furnishing and installation of copper water service line complete with corporation stop valve, curb stop valve and curb stop box. Curb stop boxes shall be placed on the right-of-way line. Also included in this item are the cost of all connections, and backfilling. These services shall be installed at the locations shown on the plans. The final location is to be verified by the Contractor and owners. Additional copper service behind the curb stop box will be required where water and sewer

services are not separated by 10 feet. Additional fittings will be required where existing services are less than 1" in diameter.

Method of Measurement: Measurement for this work will be per EACH.

Basis of Payment: This work will be paid for at the contract unit price EACH for WATER SERVICE INSTALL 1" COMPLETE and WATER SERVICE INSTALL 2" COMPLETE of the diameter specified which price shall be payment in full.

DUCTILE IRON WATER MAIN 6"

This work shall conform to the Standard Rockford Water Division Specifications, The Standard Specifications, and the requirements of the Engineer. This item shall consist of furnishing and installation of ductile iron water service line complete with corporation stop valve, curb stop valve and curb stop box. Curb stop boxes shall be placed on the right-of-way line. Also included in this item are the cost of all connections, and backfilling.

These services shall be installed at the locations shown on the plans. The final location is to be verified by the Contractor and owner.

Method of Measurement: Measurement for this work will be per FOOT.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for DUCTILE IRON WATER MAIN 6".

FIRE HYDRANT WITH 6" VALVE AND VALVE BOX

Description: Fire Hydrants shall consist of furnishing and installing in accordance with the City of Rockford Water Division requirements and standards herein.

General Requirements: Valves shall be furnished and installed in accordance with the City of Rockford Water Division specifications and the requirements of the Engineer. The Contractor shall contact the Water Division Superintendent for approval of grade, type and style of valves and fittings required to complete installation prior to bidding, ordering or placing.

All pipe from the main to the valves and hydrant along with tees, coupling, elbows, etc. shall be furnished and installed as shown on the plans and shall be included in the pay item. If crossing a sewer or within 10' horizontal distance, the main to the hydrant shall receive watermain protection. No additional compensation for watermain protection shall be paid.

Basis of Payment: Basis of payment shall be at the contract unit price EACH for FIRE HYDRANT WITH 6" VALVE AND VALVE BOX.

GATE VALVE WITH BOX 4" GATE VALVE AND BOX 8"

Description: This work shall consist of furnishing all labor, equipment and material necessary to install a Gate Valve, of the size specified on the plans, complete with valve box at the location shown on the plans or as directed by the Engineer and in accordance with the City of Rockford Water Main Specifications and Section 602 of the Standard Specifications.

Cost of the valve box shall be included in the contract unit price bid for this item.

Method of Measurement: Measurement for this work will be per EACH in place.

Basis of Payment: This work will be paid for at the contract unit price per EACH for GATE VALVE AND BOX 8" and GATE VALVE WITH BOX 4", of the size specified.

DUCTILE IRON WATER MAIN 8"

Description: This work shall be furnished and installed in accordance with the City of Rockford Water Division Specifications and the requirements of the Engineer. Bacteriological sampling shall be done in accordance with the AWWA C651-99 regulations and EPA regulation section 652.203. The City of Rockford shall receive a copy of all bacteriological laboratory reports. All water mains shall be made from ductile iron. All fittings (bends, tees, crosses, and plugs) required to complete this installation shall be as shown upon the plans or as directed by the Engineer.

Method of Measurement: Measurement for this work will be per FOOT in place. All fitting required for water main that is 12" diameter in size and smaller will be measured separately, and paid at the unit cost of the associated items in the contract.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for DUCTILE IRON WATER MAIN of the diameters specified and of the particular kind of material when specified.

SEC 563 SANITARY SYSTEM WORK REQUIREMENTS

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 Watermains, NASSCO Specifications for Sewer Collection System Rehabilitation, and Rock River Water Reclamation District *General Provisions and Technical Specifications for Sanitary Sewers 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 Public 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 1-8200-892-0123, 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, driveway, 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, railroads rights-of-way of 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 of 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. The 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-ways.

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 sewer pay items.

QUALITY CONTROLS, TESTS & CERTIFICATION

Costs for testing, installing, reinstalling, backfilling, compaction, and retesting shall be borne by the Contractor. 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 service from the Convent Community Church.

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.

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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.

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

56400500 FIRE HYDRANT TO BE REMOVED

Description: Where shown on the plans, the existing fire hydrant assemblies shall be excavated and removed. The pipe remaining in the ground shall be plugged with mortar.

The Fire Hydrant assembly shall be placed at a central location for pickup by City forces and shall remain the property of the City. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement and Basis of Payment:

Basis of payment shall be paid for at the contract unit price per EACH for FIRE HYDRANT TO BE REMOVED.

JUNCTION CHAMBER, SPECIAL

Description: This work shall consist of furnishing all materials, pipe sleeves, pipe fittings, pipe supports, exterior joint wraps and seals, manhole castings with custom lids, junction chamber steps, riser rings, water tight joints, air release valve, custom manhole casting in approach slab pavement, styrofoam material, accessories, equipment, tools, transportation, services and performance of all operations required to construct and install a 10'x7' precast concrete junction chamber, modifications to existing sanitary structure, and the installation of the proposed service connection as shown and detailed on the plans or as directed by the Rock River Water Reclamation District.

Submittals: The Contractor shall submit for review, the design computations, shop drawings and construction specifications for the junction chamber. Computations, specifications and drawings all shall be prepared by, and signed and sealed by a licensed Structural Engineer in Illinois. There shall be no exceptions to this requirement. In addition to any ASTM standards for precast concrete structures, the design and computations shall comply with the latest versions of ACI 318 Building Code Requirements for Reinforced Concrete, ACI 350.1 Tightness Testing of Environmental Engineering Concrete Structures, ACI 350.2 Concrete Structures for Containment of Hazardous Materials, ACI 350.3 Seismic Design of Liquid-Containing Concrete Structures and Commentary and ACI 350.4 Design Considerations for Environmental Engineering Concrete Structures. Submittals shall be prepared in accordance with Article 105.04 of the IDOT Standard Specifications for Road and Bridge Construction, the contract drawings and as specified herein.

General: Work associated with the fabrication of the precast concrete junction chamber shall be in accordance with Section 504 of the "Standard Specifications" and as shown on the details provided in the plans.

The Contractor shall remove the existing sanitary sewer riser to the elevations shown on the plans. Non-shrink grout shall be formed and installed as a leveling pad around the existing circumference of the existing riser (to remain). Upon final removal, the Contractor shall verify the existing diameter of the manhole riser (to remain) prior to fabrication and delivery of the proposed pre-cast junction chamber.

Excavation required for the removal of the existing manhole riser and installation of the proposed junction chamber shall be paid as STRUCTURE EXCAVATION and no additional payment shall be made to accommodate alternate Contractor means and methods for installation.

Backfill required for the removal of the existing manhole riser and installation of the proposed junction chamber shall be included in the cost for this item and no additional payment shall be made to accommodate alternate Contractor means and methods for installation. The Contractor shall ensure that no debris is allowed to fall into the existing sanitary sewer manhole during removal, and maintaining existing sanitary sewer service during construction is included the cost for this item.

The fabrication and installation of all manhole castings, custom manhole castings, custom manholes lids, and standard manhole lids shown in the plans shall be included in the cost for this item. The custom manhole lid shall accommodate the proposed extension of the six inch PVC service line into the existing manhole riser. The custom manhole castings in the approach slab pavement shall be furnished and installed in accordance with the details shown in the plans and RRWRD details and specifications. All pipe supports, sleeves, fittings, valves, and other necessary hardware shall be fabricated and installed in accordance with the plan details and RRWRD details and specifications.

Method of Measurement: This work will be measured per EACH as JUNCTION CHAMBER, SPECIAL as shown in the plans.

Basis of Payment: This work will be paid for at the contract unit price per EACH as JUNCTION CHAMBER, SPECIAL as shown in the plans. Payment shall include all labor, materials, transportation, equipment and tools necessary to complete the work as herein specified, as shown on the plans and as directed by the Engineer.

60624610 CORRUGATED MEDIAN (DOWELLED)

Description: This work shall consist of installing the P.C.C. corrugated median in accordance with Section 606 of the Standard Specifications and Standard Drawing 606306.

Installation of CORRUGATED MEDIAN (DOWELLED) shall include the installation of No. 6 epoxy-coated tie bars @ 24" centers for load transfer along the longitudinal joints.

The installation shall also include the necessary sawing, material, labor and equipment to construct to the lines and grades shown within the plans and Standard 420001.

Work shall also include the necessary transitions from the mountable corrugated median to match existing pavement or raised median elevations before and after the corrugated median limits shown on the plans.

Method of Measurement: This work will be measured by the SQUARE FOOT for CORRUGATED MEDIAN (DOWELLED).

Basis of Payment: This work will be paid for at the contract unit price per SQUARE FOOT of CORRUGATED MEDIAN (DOWELLED). Payment shall include all labor, materials, equipment and tools necessary to construct to the lines and grades shown on the plans and standard drawings.

X6640300 CHAIN LINK FENCE REMOVAL

Description: This work shall consist of removal and disposal, off-site, of all fencing and foundations and other miscellaneous hardware not to be incorporated into the proposed work. Except as modified herein, the work shall conform to the applicable portions of Sections 201 and 664 of the Standard Specifications.

Removal shall be performed within the footprint of the project improvements, and include but not limited to removal of chain link fence, posts, foundations, gates, bracing, tension wires and other hardware associated with the fence to be removed.

General Requirements:

The Contractor shall submit a Phasing Plan for the work. The Phasing Plan must agree with the Staging Drawings provided, unless otherwise directed by the Engineer.

The Contractor shall remove and dispose of materials off-site. Disposal shall be made at a legal disposal site. The Contractor shall provide written authorization to the Engineer for the use of that location.

Other contractors, the Railroad, or utility companies may be performing work adjacent to the locations where clearing is to be carried out. Contractor is responsible to coordinate all necessary construction activities with the work of others in coordination with the Engineer.

Construction Requirements:

The Contractor shall consider the suggested construction phasing plan in the execution of the work. The work shall be performed in accordance with an approved construction phasing plan coordinated with the Engineer.

Remove and dispose of existing posts, fabric and appurtenances. Carefully cut the portion of the fence to be removed from any portion of the fence to remain. If a portion of the fence is to remain, install stretcher bars and terminations at new end post. This work shall meet the applicable requirement of Section 664 of the Standard Specifications.

Method of Measurement and Basis of Payment:

Chain link fence removal will be measured in-place and will be paid for at the contract unit price per FOOT for CHAIN LINK FENCE REMOVAL. Payment shall include all labor, materials, equipment and tools necessary to complete the work as herein specified, at locations shown on the plans and as directed by the engineer.

SEC 669 REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

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

General: There are areas on the project site that require the management of environmentally impacted soils. Details of the location, disposition and contractor requirements are detailed in this section.

Qualifications: The Contractor or subcontractor completing work under this section is required to have 40 HAZWOPER trained personnel, with current 8 hour refresher, and current medical monitoring to complete work in the areas and depths presented in this section.

Contractor Requirements: Two weeks prior to conducting any work in the areas and depths presented in this section the Contractor will provides the following to the Engineer:

1. List of workers and company.
2. Current 8 Hour HAZWOPER Refresher Certificates
3. Medical clearance from physician stating personnel are fit to perform work with required personal protective equipment (PPE).
4. Health and Safety Plan (HASP) prepared for worker exposure to contaminants listed in the Preliminary Site Investigation. Generally the contaminants of concern are levels of Lead, Arsenic, Mercury and Polynuclear Aromatic compounds (PNAs) that are above the Tier 1 Remediation Objective for construction workers. Level D working conditions are anticipated. The contaminants level and locations do not warrant the need for an Exclusion Zone, Decontamination Zone or Support Zone. Contractor will detail procedures for decontamination that are in accordance with Section 669.06. Based on the contaminates at the site and the observed contaminant levels Dry Decontamination is acceptable.

Location of Impacted Soils: Contaminated soils exist at shallow depths in the project area. Impacted soils could be encountered during Earth Excavation activities, stormwater sewer construction, sanitary sewer removal, storm sewer removal, water main removal and construction of water mains and service lines. Impacted soils may also be encountered during the abandonment of subgrade utilities. Details of the identified contaminated soils are included in the Preliminary Site Investigation (PSI) available at Rockford City Hall, Department of Public Works.

The following describes the lateral extent of the impact areas and the depth within those areas where soil, if excavated, will have to be specially managed on the project site.

1. The full width of the project limits from Morgan Street Station 34+50 to Station 46+50 to a soil depth of 3 feet. Existing pavement and aggregate base would not be included. Contaminants of concern are: Mercury and select PNAs.
2. The full depth of soils removed for the construction of the, proposed Gabion Baskets, Aggregate Columns, and MSE wall between Morgan Street Station 46+50 and Station 47+60 must be managed as specified. Soils at a greater depth than 5 feet are not expected to be contaminated, but will still be managed as such unless additional analytical testing by the Contractor or the City demonstrates otherwise. Contaminants of concern are: Lead, Mercury and PNAs.
3. The area between College Avenue Station 58+00, 20' LT and Station 59+75, 20' LT extending to the north edge of the project limits to the full depth of all excavation. Existing pavement and aggregate base would not be included. Contaminants of concern are: Mercury and select PNAs.
4. The area between Seminary Street Station 10+20, 35' LT and Station 11+50, 10' LT extending to the west edge of the project limits to the full depth of all excavation. Existing pavement and aggregate base would not be included. Contaminants of concern are: Mercury and select PNAs.

Management of Impacted Soils: Soils in the area and depths designated above must stay on the project site and on the side of the river where the soil was generated. Impacted soil removed on the west side of Rock River must be moved to the material stockpile location as presented on Sheet 21. The soils will be covered with two (2) layers 6 mil plastic sheeting, or equivalent, and waited down to prevent precipitation from eroding the soils allowing soil to be transported beyond the footprint of the stockpile. Contractor shall inspect and maintain sheeting until the soil is placed. This stockpiled soil on the West side of the Rock River must be placed in a location where non-structural soils for landscaping purposes near the cone of bridge are specified and on the East side of the river soil will be placed along the former railroad tracks where non-structural soils are specified to be placed. In both soil placement locations two (2) eight (8) inches of non-contaminated soil fill from elsewhere on the project must be placed over the placed impacted soil followed by placemen to topsoil as presented specified.

An Environmental Firm will monitor the excavation, soil stockpiling, and final placement of the impacted soil. The Environmental Firm will be retained by the City of Rockford.

Method of Measurement:

Items under this Special Provision will be measured for payment in accordance with Article 669.15 of the Standard Specifications with the following exceptions:

Trench excavations shall be calculated using maximum pay widths and maximum pay depths. The maximum pay depths vary with location and shall be as indicated in this special provision under the section, "Location of Impacted Soils." The maximum pay widths shall be as follows:

Sanitary sewer removal - Shall conform with Special Provision 20800150 Trench Backfill.

Storm sewer removal - Shall conform with Special Provision 20800150 Trench Backfill.

Storm sewer - Shall conform with Special Provision 20800150 Trench Backfill.

Water main removal, Water Main and Water Services – Shall be as indicated in the table below.

<u>Pipe I.D. (inches)</u>	<u>Maximum Pay Width (feet)</u>
<4	3.25
4 to 6	3.58
8	3.78

Basis of Payment:

This work, excavation, stockpiling and placement of soil, will be paid by the contract unit price per CUBIC YARD for NON-SPECIAL WASTE DISPOSAL.

81900200 TRENCH AND BACKFILL FOR ELECTRICAL WORK

Description: This work shall consist of constructing and backfilling a trench for the accommodation of raceways, unit duct, and cables for roadway lighting and fiber optic facilities shown on the plans in accordance with Section 819 of the "Standard Specifications" and the following requirements.

Construction Requirements: Trenches shall be constructed and measured for payment in accordance with the details shown on the plans.

Basis of Payment: This work shall be paid at the contract unit price per FOOT for TRENCH AND BACKFILL FOR ELECTRICAL WORK.

X0321865 ANTI-GRAFFITI PROTECTION SYSTEM

Description: This item consists of furnishing and applying a protective coat to cast in place concrete and on mechanically stabilized earth retaining walls used on this project. The protective coat application may be sprayed, brushed, or rolled on per the manufacturer's instructions. The material applied shall permit the removal of graffiti (paint etc.) from the surface with the application of soap and water, or other simple means of removal.

Specifications of the material shall be submitted to the City of Rockford (Resident Engineer) for approval prior to ordering the material. The cost for this item shall also include a sample of the product applied to a similar concrete mix sample for review and approval.

Basis of Payment: This work shall be paid at the contract unit price per SQUARE FOOT for ANTI-GRAFFITI PROTECTION SYSTEM.

X0322924 RETAINING WALL REMOVAL

Description: 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 existing 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.

The Contractor shall remove and dispose of materials off-site. Disposal shall be made at a legal disposal site and shall be included in the contract unit cost for RETAINING WALL REMOVAL.

Method of Measurement: This work shall be measured by the SQUARE FOOT of exposed wall along the centerline of the top face of the wall to the wall elevation at the existing ground.

Basis of Payment: This work shall be paid for at the contract unit price per SQUARE FOOT for RETAINING WALL REMOVAL.

X0322936 REMOVE EXISTING FLARED END SECTION

Description: This work shall consist of the excavation, removal, transportation, and disposal of existing flared end sections in accordance with Section 551 of the Standard Specifications.

Method of Measurement and Basis of Payment:

This work will be paid for at the contract unit price EACH for REMOVAL OF EXISTING FLARED END SECTION, regardless of size. Payment shall include all labor, materials, equipment and tools necessary to complete the work as shown on the plans, as herein specified and as directed by the Engineer.

X0323760 SANITARY SEWER SERVICE, 6" PVC, COMPLETE

Description: 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 by the Engineer, modifications and connections to service manholes and junction vaults, bends, and air-tight stoppers in the upper end of each service.

General Requirements: 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.

The work shall also include modifications to the existing service manhole (to remain). The existing manhole shall be filled with CLSM to the elevation shown on the plans to accommodate the proposed service line into the existing manhole.

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 for SANITARY SEWER SERVICE, 6" PVC, COMPLETE.

X0324554 CONCRETE FLAT SLAB TOP

Description: This work shall consist of excavation, cleaning, and reconstructing existing restricted depth manholes with a concrete flat slab top.

Materials: The materials shall be in accordance with Article 602.02 of the Standard Specifications.

General Requirements: The work shall be performed according to Section 602 of the "Standard Specifications", IDOT Standard Drawing 602401 [manhole type A], and IDOT Standard Drawing 602601 [flat slab top] and the following:

The existing manhole is known to be damaged and will require non-shrink grout to level the top of the existing manhole structure. No additional payment or compensation will be made for any unforeseen conditions or additional repairs necessary to maintain drainage during construction.

The reinforced concrete slab will be used in lieu of the cone section.

Basis of Payment: This work shall be paid for at the contract unit price per EACH for CONCRETE FLAT SLAB TOP of the existing manhole diameter.

X0324741 HDP PIPE 8"

Description: This work shall consist of furnishing all equipment, material and labor necessary to properly install the proposed 8 inch high density polyethylene (HDP) pipe through the existing 10" DIP water main under the existing Chicago Central and Pacific RR Tracks as indicated on the plans.

The work shall also include all necessary connections and fittings to complete the connection between the HDP pipe and the proposed 8" D.I.P. located on both sides of the RR track crossing.

All excavation, removal, disposal, and backfill associated with the installation of the proposed HDP pipe shall be included in the payment of this item.

The work shall be performed in accordance with the Standard Specifications for Water & Sewer Main Construction in Illinois, latest edition, Section 561 of the "Standard Specifications", City of Rockford Water Distribution System Design & Specifications, Chapter 2, Section 12, and the details provided in the plans.

Shop drawings and manufacturer's literature shall be submitted to the Engineer for approval.

Material: Piping installed through the existing water main under the Chicago Central & Pacific RR shall be HDP as indicated in the plans and other sections of these specifications.

1. Pipe: The polyethylene pipe and fittings shall be made from resins exhibiting a cell classification of PE 345444C or greater as defined in ASTM D3350 with an established hydrostatic-design-basis of 1600 psi for water at 73.4°F. The resin shall be listed by the PPI (Plastic Pipe Institute) in its pipe-grade registry Technical Report (TR) 4, "Listing of Plastic Pipe Compounds". Pipe OD Sizes shall be available ductile iron pipe sizes (DIPS), Performance Pipe or ISCO Industries. All pipes shall be suitable for use as a fluid pressure conduit. Peak flow water velocity of 5 ft/sec shall be used in the hydraulics engineering design. Pipe shall be HDP DR 11. The wall thickness shall follow the Dimension Ratio (DR) system prescribed in AWWA C906 The HDP pipe shall have an interior diameter no less than the piping that it is connected to. Laying lengths are 40 ft. or 50 ft. standard. Pipe shall either be blue in color or be blue striped for potable water application. Both pipe and fittings must be NSF listed by the manufacturer with the pipe bearing the NSF 61 logo or mark and pressure rating.

2. Joints: The pipe is to be joined by heat fusion except for transitions to other materials. For transition to ductile iron pipe, a fused HDP mechanical joint adapter shall be used.

Heat fusion of joints shall be thermal butt fusion, saddle fusion, or socket fusion in accordance with manufacturer recommended procedures and ASTM D-2161. At the point of fusion, the outside diameter and minimum wall thickness of the fitting shall match the outside diameter and minimum wall thickness specifications of ASTM D-1248 for the same size pipe. Pipe joining shall be performed outside the excavation. Joints of the pipe sections shall be smooth on the inside and internal projection beads shall not be greater than 3/16 inch. The outside bead created from fusion joining shall be removed.

The tensile strength at yield of the butt-fusion joints shall not be less than the pipe. A specimen of the pipe cut across the butt-fusion joints shall be tested in accordance with ASTM D-638. The manufacturer shall provide fusion training. The contractor and the onsite joint inspector shall be trained by the manufacturer or manufacturer's authorized representative. The fusion equipment and operator shall be required to demonstrate successful field experience. The fusion unit shall be field tested and the fusion operator shall have pipe size experience of the same size pipe on this project for five years or longer.

3. Fittings: All fitting shall be provided as indicated on the plans. HDP Fittings shall be of the same material and class as the pipe and shall be manufactured by the manufacturer of the pipe. HDP elbows, tees, and wyes shall be manufactured by mitered fabrication. The manufacturer shall have a written specification for all standard mitered fittings, which establishes Quality Control criteria and tolerances. The manufacturer may be required to demonstrate its ability to produce product required by this specification.

Mechanical joint adapter fittings (MJ Adapter) shall be used to transition from ductile iron to HDP. The fitting shall be HDP and stronger than the pipe in that when it is subjected to tensile stress the pipe will pull apart before the fitting will pull out and the pipe will blow before the fitting will rupture under pressure. The MJ Adapter shall have a pre-installed stainless steel stiffener, in accordance with Plastic Pipe Institute (PPI) recommendations, to neutralize point-loading, ACQ, creep and loss of gasket seal due to diameter contraction. The stiffener shall be engineered sufficiently thick to avoid radial buckling due to gasket pressure. Flanges shall be follower type of ductile iron or stainless steel, 150 psi pressure rated. Both pipe and fittings must be NSF listed by the manufacturer with the pipe bearing the NSF 61 logo or mark and pressure rating.

The MJ Adapter requires longer bolts and shall be sold with the modified longer bolt kit to avoid construction crew delays or improper installation with too short bolts.

All fittings for pressure rated fittings shall be rated according to the manufacturer's written specifications, and clearly labeled on the fittings as such.

Buried Pipe Anchors for HDP Pipe. The Contractor will be required to install buried pipe anchors for the HDP piping system when the water main approaches a mechanical joint. Buried pipe anchors shall be as per the manufacturer and shall consist of an appropriate HDP restraint anchor securely attached to the water main, which shall be adequately encased in concrete at a point in close proximity to the mechanical joint.

4. Installation: The installation shall conform to the requirements of the manufacturer, the AWWA Standard, and as indicated on the plans and specified herein.
5. Casing spacers and end seals: Spacers and end seals shall be as specified by the City of Rockford.
6. Marking and Certification: Each length of HDP shall be clearly marked with the Manufacturer's Name, Tradename or Trademark, Nominal pipe size, Pipe Stiffness, Production Code/Extrusion Code, Material Cell Class Designation and ASTM number.

The pipe manufacturer shall provide certification that the stress regression testing has been performed on the specific product. The said certification shall include a stress live curve per ASTM D-2837. The stress regression testing shall have been performed in accordance with ASTM D-2837, and the manufacturer shall provide a product supplying a minimum Hydrostatic Design Basis of 1,600 psi as determined by ASTM D-2837. This certification shall also state that the pipe was manufactured from one specific resin in compliance with these specifications. The certificate shall state the specific resin used and its source.

Construction Requirements: Piping shall be installed by jacking the proposed HDP pipe through the existing 10" water main as indicated in the plans and other sections of these specifications.

1. Depths and size of all existing utilities must be confirmed by the CONTRACTOR prior to the crossing to avoid conflicts. Equipment shall be utilized that does not require the conventional bore and receiving pits due to space constraints. Proper connection to the piping at each end shall be done by standard excavation. The CONTRACTOR shall be responsible to remove all excess material and dispose of appropriately off-site upon completion. All erosion control facilities shall be provided to contain any solids from migrating beyond the project site. If the CONTRACTOR utilizes a subcontractor for this work, they shall provide proof of adequate comprehensive general liability insurance covering underground collapse and explosion and experience to the ENGINEER and OWNER for prior approval. The CONTRACTOR shall be required to provide all necessary water in accordance with other applicable sections of these specifications.
2. In all cases the manufacturer's recommendations and procedures shall be followed regarding the installation of their pipe material by horizontal jacking.
3. No additional payments will be made if rock is encountered or if soil conditions require additional construction time and equipment. Proper equipment and methods shall be used in rock and soil bores to insure proper grades, elevations and separations.
4. The requirements of all applicable local and state authorities shall be followed by the CONTRACTOR.

The contractor shall coordinate this work with the proper authorities prior to beginning construction under the Chicago Central & Pacific RR. Any delay in performing the work associated with railroad operations or procedures for performing work under an active RR shall not be considered for additional compensation.

Method of Measurement: Measurement for this work will be for the HDP PIPE and construction in place, measured horizontally, per FOOT except that the length measured shall not exceed the length shown on the plans or authorized in writing by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per FOOT, measured horizontally, for HDP PIPE, of the class and type specified; of the diameters specified and of the particular kind of material installed.

This item shall include excavation, granular bedding, haunching, installation of the HDP water main, all fittings including D.I.P. to HDP fittings, thrust blocking, restraint devices, tracer wires, testing and chlorination of the water main, backfill and compaction of the trench and all incidental items required for a complete and operational water main. Payment shall be full compensation for all materials, labor, equipment and incidentals to complete the items as detailed on the plans and as specified by the Engineer.

CONDUIT INSTALLED, 1-1/2" PVC

Description: This work shall consist of furnishing all equipment, material and labor necessary to properly install the proposed 1-1/2 inch diameter conduit through the existing storm sewer pipe under the existing Chicago Central and Pacific RR Tracks as indicated on the plans.

The work shall be completed in accordance with Section 810 of the "Standard Specifications", plan details, and the following:

General Requirements: The work shall also include all necessary connections, splices, or fittings necessary to complete the connection between the trenched conduit and the proposed conduit installed through the existing storm sewer pipe on both sides of the RR track crossing.

All excavation, removal, disposal, and backfill associated with the installation of the proposed conduit shall be included in the payment of this item.

This work shall include the cleaning and removal of all debris regardless of nature from existing storm sewer prior to the installation of the proposed conduit. This work can be accomplished by hand, power or mechanical methods. All debris shall be captured, removed and disposed of off-site at a legal dumping site. The contractor shall not, however, be allowed to "flush" the debris downstream.

The proposed 1-1/2 conduit shall be installed with duct spacers every five feet in accordance with the details provided in the plans. The contractor must coordinate with duct spacer manufacturer on the installation methods to prevent the conduits from rotating during installation. Duct spacers must be installed with non-metallic straps and hold down bars. The costs associated with the installation of all material and hardware required to install the duct spacers shall be included in the contract unit cost for CONDUIT INSTALLED 1-1/2" PVC.

Filling the existing storm sewer with controlled low-strength material shall be installed surrounding the proposed conduit and completed in accordance with Section 593 of the "Standard Specifications". The cost associated with this work shall be included in the contract unit cost for CONDUIT INSTALLED 1-1/2" PVC.

The contractor shall coordinate this work with the proper authorities prior to beginning construction under the Chicago Central & Pacific RR. Any delay in performing the work associated with railroad operations or procedures for performing work under an active RR shall not be considered for additional compensation.

Basis of Payment: Basis of payment shall be at the contract unit price per FOOT for CONDUIT INSTALLED 1-1/2" PVC.

X0326414 STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 8 INCH

Description: This work shall conform to Section 420 of the Standard Specifications and shall be constructed in accordance with the details shown herein and as directed by the Engineer.

General Requirements: Pavement shall be textured with a stamping tool capable of producing a "brick paver-like" effect on its surface. Integrally colored concrete materials and ingredients from Davis Colors or Solomon Colors are to be used to contrast the pavement with the adjacent concrete pavement as shown in the detail. Davis Color (#677) or Solomon Color (#170) is the color that shall be used. 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, which facilitates the release of the tool. Finally a clear seal from Davis Colors or Brickform (Division of Solomon Colors, Inc.) shall be applied after the concrete has cured. The clear seal prevents discoloration by sealing in the color as well as protects the concrete. Davis Colors: W -1000 Clear Seal or Brickform: Gem Cure & Seal is the sealant that shall be used.

The Contractor shall be required to make a field sample for approval of color and stamping quality. Only when acceptance of the sample is made by the Engineer, may the Contractor proceed with placing the concrete crosswalk. The field sample(s) shall be included in the contract unit cost.

Installation shall include the installation of No. 6 epoxy-coated tie bars @ 24" centers for load transfer along the longitudinal joints.

Installation) shall include the installation of 1.5" dowel bars @ 12" centers, for load transfer along the transverse joints.

All transverse and longitudinal joints shall be sealed with poured joint sealant.

The Contractor shall do this work one block at a time to minimize the inconvenience to the adjacent businesses.

Basis of Payment: The contract unit price per SQUARE FOOT shall be full compensation for all labor, materials, coloring ingredients, stamping methods and protective sealant. This work shall also include excavation and final grading as shown in the details and as directed by the Engineer. This item shall be paid for at the contract unit price per SQUARE FOOT for STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 8 INCH

X0326891 TEMPORARY ACCESS ROAD (SPECIAL)

Description: This work shall consist of constructing Access Road located on City owned property along the east bank of the Rock River. A nominal 1-ft deep by 20-ft. wide excavation shall be made into the top of the existing ground, as indicated on the plans and typical sections. The excavation shall be backfilled with CA-6 Aggregate to provide a granular base to support the proposed construction traffic. In conjunction with the crushed stone, and geotextile fabric shall be installed. In addition, PVC pipes shall be installed to promote positive drainage of the crushed stone backfill across the haul road. Details of the materials and construction requirements are provided below.

This work shall also consist of providing all labor, materials, equipment, tools, and incidentals necessary to remove trackwork complete as directed by the Engineer. The work includes but is not limited to removal of ballast, ties, rail, insulated joints (plugs), tie plates, spikes, anchors, bolts, nuts, washers and other track material.

Materials:

Aggregates All aggregates used shall be in accordance with Section 1004 of the Standard Specifications.

PVC Pipe and Perforated PVC Pipe The PVC pipe and perforated PVC pipe specified for underdrains and underdrain outlets shall meet the requirements in Article 1040.03.

Geotextile Fabric All geotextile fabric for ground stabilization shall be in accordance with Section 1080 of the Standard Specifications.

Construction Requirements:

Remove turnouts and track as shown on plans.

The Engineer shall determine which track materials (both timber and/or metal) are salvageable and which are not salvageable and will so mark the material in the field.

The non-salvageable material shall become the property of the Contractor and shall be hauled off the site and legally disposed of by the Contractor. Non-salvageable material includes scrap crossties, scrap switch ties, track bolts, rail anchors and track spikes.

The salvageable material will remain the property of the railroad. The Contractor shall stockpile salvageable material at a location as directed by the Engineer. Salvageable material includes usable cross ties, usable switch ties, rail, joint bars, and tie plates.

Track removal will be included in the contract unit price for TEMPORARY ACCESS ROAD (SPECIAL) which shall include the entire cost of all labor, materials, superintendence, equipment required and disposal of all track material for removal of track as outlined herein. Measurement shall be the number of feet of track removed, as measured lineally along the centerline of track, as measured by the Engineer. Separate measurement and payment will not be made for legal disposal by the Contractor of non-salvageable materials or for the transporting, stockpiling and loading of salvageable materials.

As the nominal 1-ft. by 20-ft. excavation is made, 1-ft. deep by 1-ft. wide internal drainage features (slots) shall be made along the outside edges of the excavation.

Once the excavation is made to the proper grade:

1. A 60-mil, heavy duty, textured (on both sides) geomembrane shall be installed over the bottom and sides of the exposed subgrade.
2. A 10-ounce nonwoven geotextile shall then be placed directly over the entire Geomembrane.
3. 4-in. diameter, perforated PVC pipe (approximately 3/8-in. diameter perforations)

- shall be installed in the drainage features on both sides of the excavation, as detailed on the project plans and typical sections.
4. The 1-ft. by 1-ft. drainage features shall be backfilled with crushed CA 6 aggregate.
 5. 12 in. of CA 6, shall be placed in a single lift over the geotextile fabric.

The construction activities shall be performed in accordance with the current IDOT Standard Specifications for Road and Bridge Construction except as noted in this special provision.

No construction traffic is permitted to be in the excavation including the equipment used to perform the excavation until the underdrains, geomembrane, geotextile and the 12 in. of crushed CA 6 Aggregate is in place.

Once a stable subgrade is established, the geomembrane shall be installed as the excavation is advanced. The geomembrane shall be placed smoothly over the subgrade without folds or wrinkles. Joints in the geomembrane shall have a minimum 4-ft. overlap, unless the manufacturer requires a greater overlap. Double-sided mastic tape shall be used on all joints, unless specified otherwise by the manufacturer. Joints shall be overlapped with the downslope section beneath the upslope section. Water-tight seals shall be provided at all penetrations through the geomembrane, such as the PVC drain pipes. No section of the excavated subgrade shall be left open overnight without the geomembrane being installed.

Once the geomembrane is in place, the geotextile shall be installed directly over the geomembrane. The geotextile shall be placed smoothly over the geomembrane without folds or wrinkles. Joints in the geotextile shall have a minimum 2-ft. overlap, unless the manufacturer requires a greater overlap. Joints shall be overlapped with the downslope section beneath the upslope section. Joints in the geotextile should not be within 5 ft. horizontally of the joints in the geomembrane.

Once the geotextile is in place, the PVC drains shall be installed. The PVC pipe and perforated PVC pipe shall be installed per the requirements in Article 601 except as noted in this special provision. Crushed CA 6 Aggregate shall be used to backfill around the PVC pipe, filling the 1-ft. by 1-ft. drainage features up to the level of the adjacent excavation, resulting in a flat, 20-ft. wide surface at a nominal depth of 1 ft. below the original ground surface. Outlets for the PVC underdrains shall include an outlet for the underdrains and shall be considered included in the payment for TEMPORARY ACCESS ROAD (SPECIAL).

Construction traffic shall not be allowed directly in the excavation or onto the geomembrane or geotextile. Low pressure equipment will be required on the 12 in. layer of crushed stone CA 6 backfill. This layer of crushed stone shall be placed in a single lift. It may be spread with a low pressure bulldozer or tracked skid steer, but twisting and turning shall be avoided. If dump trucks are to back over the installed 12 in. of crushed limestone CA 6, then the trucks shall be half-loaded to maintain a maximum axle load of 10 kips.

Once the full 12 in. of crushed CA 6 aggregate has been placed and spread smooth, a 10-ton, smooth drum roller shall be used to compact the exposed stone surface. The roller shall be operated in static mode, with no vibration.

Wheel loads shall not be allowed on the outer 2 ft. of the aggregate during and following the construction of the access road to reduce the potential for damage.

General: The Contractor is advised that a ComEd 69 KV transmission line parallels the Access Road. The Contractor will be required to comply with requirements set forth by ComEd and the Engineer including radial clearance requirements associated with the 69 KV transmission line when constructing or utilizing the Access Road.

Method of Measurement: Measurement for TEMPORARY ACCESS ROAD (SPECIAL) shall be made per SQUARE YARD at the surface and any material required outside the planned edge of the aggregate surface will be incidental to the TEMPORARY ACCESS ROAD (SPECIAL) pay item.

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Winnebago County
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Basis of Payment: This work shall be paid for at the contract unit price per SQUARE YARD for TEMPORARY ACCESS ROAD (SPECIAL). The SQUARE YARD price for TEMPORARY ACCESS ROAD (SPECIAL) shall include all equipment, labor, and materials necessary to construct the Access Road as described in this special provision.

X2010510 CLEARING AND GRUBBING

Description: This work shall consist of removal and disposal, off-site, of all shrubs, bushes, trees, saplings, grass, weeds, stumps, railroad debris and all other items, regardless of nature, not to be incorporated into the proposed work. Except as modified herein, the work shall conform to the applicable portions of Section 201 of the "Standard Specifications".

Removal shall be performed within the footprint of the project improvements, and include but not limited to clearing & grubbing of all landscape and organic materials, miscellaneous pavement in the way of the work, debris and other manmade improvements not covered elsewhere in these specifications.

General Requirements:

The Contractor shall submit a Phasing Plan for the work. The Phasing Plan must agree with the Staging Drawings provided, unless otherwise directed by the Engineer. The Contractor shall remove and dispose of materials off-site. Disposal shall be made at a legal disposal site. The Contractor shall provide written authorization to the Engineer for the use of that location.

Construction Requirements:

The Contractor shall consider the suggested construction phasing plan in the execution of the work. The work shall be performed in accordance with an approved construction phasing plan coordinated with the Engineer. Work under this specification shall not interfere with operations of the Railroad, including but not limited to train movements, roadway access, or maintenance operations by the Railroad.

This work shall conform to the applicable the requirements of Section 201 of the Standard Specifications except all work will be paid for under this single LUMP SUM item.

Method of Measurement and Basis of Payment:

Clearing and Grubbing will not be measured separately, but will be paid for at the contract LUMP SUM price for CLEARING AND GRUBBING. Payment shall include all labor, materials, equipment and tools necessary to complete the work as herein specified, at locations shown on the plans and as directed by the Engineer.

X2070304 POROUS GRANULAR EMBANKMENT, SPECIAL

Description: This work shall consist of removing, transporting and disposing of unsuitable material; and furnishing and placing the excavated area with a porous granular embankment material when preparing the subgrade beneath the 12" sub-base granular material.

Materials: The aggregate shall be according to Article 1004.05 of the "Standard Specifications" except as follows:

Only Crushed Stone, Crushed Blast Furnace Slag, or Crushed Concrete meeting the requirements in the table will be permitted.

Sieve Size	Percent Passing
6"*	97 +/- 3
4"	90 +/- 10
2"	45 +/- 25
#200	5 +/- 5

* For undercut less than 6", sieve size may be 4".

Steel slag and other expansive materials will not be permitted.

Equipment: A vibratory roller according to Article 1101.01(g) of the "Standard Specifications" shall be used to roll each lift of material.

General: The work shall be performed according to Section 207 of the "Standard Specifications" and the following:

A vibratory roller shall be used to roll each lift of material to obtain the desired keying or interlock and necessary compaction. The Engineer will verify that adequate keying has been obtained.

At all locations throughout the project limits an attempt shall be made to prepare the subgrade in accordance with Article 301.03 of the "Standard Specifications". If the Engineer then determines that stabilization cannot be obtained, undercutting to the maximum depth indicated and replacement with porous granular embankment, special and geotechnical fabric shall be accomplished.

Undercut and PGE placement in addition to the plan thickness will be done as field conditions warrant. No adjustment in unit price will be allowed for an increase or decrease in quantities from the estimated quantities shown in the plans.

At all locations the actual extent of removal and replacement shall be determined by the Engineer in the field at the time of construction. Undercuts deeper than the maximums indicated above shall be justified based upon cone penetrometer testing. In all cases, the undercut shall extend to one foot outside the edges of the bituminous pavement (or the backs of the curbs in curb and gutter sections) and come up at a 1:1 slope to the existing ground surface as shown on the undercut standard drawing.

Method of Measurement: Porous Granular Embankment, Special will be measured for payment in CUBIC YARDS according to Article 311.08(b) of the "Standard Specifications".

Basis of Payment: This work will be paid for at the contract unit price per CUBIC YARD for POROUS GRANULAR EMBANKMENT, SPECIAL.

X2800500 INLET PROTECTION, SPECIAL

Description: This work shall consist of supplying, installing, and maintaining, removing, and disposing of the inlet protection as part of the projects temporary erosion control system.

Material: The Inlet protection system is comprised of a corrosion resistant steel frame and a replaceable geotextile sediment bag attached to the frame with a stainless steel locking band. The sediment bag hangs suspended from the rigid frame at a distance below the grate that shall allow full water flow into the drainage structure if the bag is completely filled with sediment.

The Inlet protection frame includes lifting handles in addition to the standard overflow feature. A removal tool engages the lifting bars or handles to allow manual removal of the assembly without machine assistance. The frame suspension system is adjustable in 1/2" increments up to 5" per side on rectangular designs should the casting or drainage structure have imperfections.

The 2-ply Sediment Bags have a typical flow rate of 145 gpm and are furnished with either Woven Monofilament or NonWoven geotextile filter fabric meeting the following specifications:

<i>Material Property</i>	<i>Test Method</i>	<i>Value (min average roll value)</i>	
> Inner Filter Bag Specs (2 ft³ min vol)		<u>Non-Woven</u>	<u>Woven Monofilament</u>
Grab Tensile	ASTM D 4632	100 lbs	200 lbs
Puncture Strength	ASTM D 4833	65 lbs	90 lbs
Trapezoidal Tear	ASTM D 4533	45 lbs	75 lbs
UV Resistance	ASTM D 4355	70% at 500 hrs	90 %
App Open Size (AOS)	ASTM D 4751	70 sieve (.212)	40 sieve (.425)
Permittivity	ASTM D 4491	2.0 /sec	2.1/sec
Water Flow Rate	ASTM D 4491	145 gpm/sqft	145 gpm/sqft
> Polyester Outer Reinforcement Bag Specifications			
Weight	ASTM D 3776	4.55 oz/sqyd +/- 15%	
Thickness	ASTM D 1777	.040 +/- .005	

Identification of Drainage Structures: The Installer (Contractor) shall inspect the plans and/or worksite to determine the quantity of each drainage structure casting type. The foundry casting number or the exact grate size and clear opening size will provide the information necessary to identify the required Inlet protection part number.

Installation: Remove the grate from the casting or concrete drainage structure. Clean the ledge (lip) of the casting frame or drainage structure to ensure it is free of stone and dirt. Drop in the Inlet protection through the clear opening and be sure the suspension hangers rest firmly on the inside ledge (lip) of the casting. Replace the grate and confirm it is elevated approximately 1/8", which is the thickness of the steel hangers.

For Curb Box Inlet Filters: Insert the Inlet protection as described above, pull the rear curb guard flap up and over the open curb box until tight, align magnets to ensure firm attachment to the top portion of the curb box casting. If the curb back opening is not magnetic, slide a typical rock sak or 2 x 4 through the 2-ply rear curb box flap to create a dam which will direct runoff into the sediment bag.

Maintenance: The Inlet protection should be inspected after each major rain event (1/2" or more) and emptied if the sediment bag is more than half filled with sediment and debris, or as directed by the

Engineer. Remove the grate, engage the lifting bars or handles with the Inlet protection removal tool, and lift the Inlet protection from the drainage structure. Machine assistance is not required. Dispose of the sediment or debris as directed by the Engineer. Remove any caked on silt from the sediment bag and reverse flush the bag for optimal filtration. Replace the bag if the inner filter membrane is torn. If properly maintained, the sediment bag should last up to 4 years in the field.

When replacing a Sediment Bag, remove the bag by loosening or cutting off the clamping band. Take the new sediment bag, which is equipped with a stainless steel worm drive clamping band, and use a screw driver or nut driver to tighten the bag around the frame channel. Ensure the bag is secure and that there is no slack around the perimeter of the band. For Oil absorbent bags, simply replace the oil boom or pouch when saturated.

Method of Measurement and Basis of Payment: The number of Inlet protection systems installed will constitute the quantity paid at the contract price. This includes labor and materials necessary to install the units. The Contractor shall leave the Inlet protection systems in place until directed to remove them from the drainage structures. At this time the Owner of the Inlet protection systems, as determined by the contract, shall claim them or release them.

Maintenance/Cleaning of the Inlet protection systems shall be included in the contract price for this item.

This work will be measured for payment as individual items and the unit of measurement will be EACH regardless of the size or type of inlet being protected.

Basis of Payment: This work will be paid for at the contract unit price per EACH for INLET PROTECTION, SPECIAL.

X4403800 MEDIAN SURFACE REMOVAL

Description: This work shall consist of the complete full-depth removal of existing hot-mix asphalt or concrete pavement located between concrete curb and gutter medians shown on the plans.

General: The work shall be performed according to Section 440 of the "Standard Specifications"

All concrete curb and gutter removal within the limits of the existing medians shall be included in cost for COMBINATION CURB AND GUTTER REMOVAL.

Complete full depth removal shall also include any reinforcement, fabric, or associated appurtenances at no additional cost to MEDIAN SURFACE REMOVAL.

The Contractor shall remove and dispose of materials off-site. Disposal shall be made at a legal disposal site. The Contractor shall provide written authorization to the Engineer for the use of that location.

Basis of Payment: MEDIAN SURFACE REMOVAL shall be measured and paid for at the contract unit cost per SQUARE FOOT, area between the back of curb.

X5011100 FOUNDATION REMOVAL

Description: This work shall consist of removal and disposal, off-site, of all foundations and underground obstructions, and all other building related items, regardless of nature, not to be incorporated into the proposed work. Except as modified herein, the work shall conform to the applicable portions of Sections 201 and 501 of the Standard Specifications.

Removal shall be performed within the footprint of the project improvements, and include but not limited to the removal of concrete building foundation and building remnants.

General Requirements:

The Contractor shall submit a Phasing Plan for the work. The Phasing Plan must agree with the Staging Drawings provided, unless otherwise directed by the Engineer.

The Contractor shall determine existing conditions with respect to underground building and service utilities by researching, inspecting and investigating the site, adjacent areas, and utility companies' records, required for the execution of the work. Prior to beginning any demolition operations, Contractor shall determine the connect/disconnect status of utility service and make all necessary arrangements.

This work shall include the removal of a foundation (approximately 6' x 10') to the required depth. The Contractor shall remove and dispose of materials off-site. Disposal shall be made at a legal disposal site. The Contractor shall provide written authorization to the Engineer for the use of that location. This work shall include the backfilling of any resultant holes or depressions.

Other contractors, the Railroad, or utility companies may be performing work adjacent to the locations where clearing is to be carried out. Contractor is responsible to coordinate all necessary construction activities with the work of others in coordination with the Engineer.

Construction Requirements:

The Contractor shall consider the suggested construction phasing plan in the execution of the work. The work shall be performed in accordance with an approved construction phasing plan coordinated with the Engineer.

Work under this specification shall not interfere with operations of the Railroad, including but not limited to train movements, roadway access, or maintenance operations by the Railroad. Additionally the Contractor shall follow the requirements below:

1. The use of explosives is prohibited.
2. Railroad, vehicular and pedestrian traffic shall be protected.
3. Existing structures and trees to remain shall be protected.
4. Existing utilities to remain shall be protected.

The existing concrete building foundation shall be removed to an elevation at least 1-foot below the top of subgrade, in accordance with the requirements of Section 501 of the Standard Specifications. Any voids created by the removal of the foundations shall be backfilled with subbase granular material, type B. This shall not be paid separately, but shall be considered incidental to Concrete Building Foundation Removal.

Method of Measurement and Basis of Payment:

Concrete foundation removal will not be measured separately, but will be paid for at the contract price per EACH for FOUNDATION REMOVAL of the depth specified. Payment shall be for all labor, materials, equipment and tools necessary to complete the work as herein specified, at locations shown on the plans and as directed by the Engineer.

X5091725 BICYCLE RAILING, SPECIAL

Description: This work shall consist of furnishing materials, labor and equipment required to install ornamental bicycle railing.

Materials: Materials shall be according to the following:

1. Wire Rope shall be ASTM A-492 and ASTM A-555, Type 316 stainless steel. It shall be 7x7 wire rope, 3/16" diameter, with a breaking load, including safety factor, of 4000 pounds.
2. Steel Posts for Railings shall comply with Article 1006. 34(a) of the Standard Specifications for Road and Bridge Construction.
3. Horizontal Stainless Steel Rails shall be ASTM A-924 with a minimum yield strength of 45 ksi. They shall be Standard Steel Pipe, Schedule 40, of the diameter indicated on the Drawings.
4. Fittings shall be selected by the manufacturer to suit the application and breaking strength requirements of the wire rope. They shall be fabricated from AISI Type 316 and 316L stainless steel complying with ASTM F-1145. Provide sizes and types as required to meet project design conditions specified and indicated on Drawings and reviewed shop drawings, including:
 - a. Shop applied threaded swaged rope ends.
 - b. Anchoring systems, including bolts and washers for manufacturer selected threaded swaged rope ends.
5. Threaded Anchor Rods shall comply with Article 1006. 09 of the Standard Specifications for Road and Bridge Construction.

General: This work shall be according to the details shown on the plans and lines and grades shall not follow any defects in the structure. When the structure is on a grade, rail posts shall be vertical, except posts for ornamental railings on concrete parapets shall be normal to the theoretical grade. Top of railings shall be parallel to grade line. High spots shall be ground and low spots shimmed. All welds facing pedestrian areas shall be ground smooth in the shop. The rails shall be straight and true to line, without kinks, bends, or warps, and straightened as necessary before shipment.

Submittals:

1. Product Data: Provide manufacturer's standard catalog data for specified products demonstrating compliance with referenced standards. Provide list of fittings being provided with descriptions, load capabilities, and either photographs or drawings for each type.
2. Shop Drawings: Submit Shop Drawings for fabrication and installation to the Engineer according to Article 505.03 of the Standard Specifications for Road and Bridge Construction. Include the following:
 - a. Plans, Elevations and Detail Sections.
 - b. Indicate materials, methods, finishes, fittings, fasteners, anchorages and accessory items.
 - c. Provide setting diagrams and templates for anchorages, sleeves, and bolts to be installed by others.
 - d. Where materials or fabrications are indicated to comply with design loadings, include material and safety factor properties, and other information needed for structural analysis.
3. Verification Samples: Two samples representing actual products and finishes as follows:
 - a. Wire rope with fitting, minimum size 12 inches long.
 - b. Typical fittings, including threaded swaged terminal and hex-headed self-tapping screws.
 - c. Stainless steel rails, minimum size 12 inches long.
4. Installation Instructions: Manufacturer's printed installation instructions.

5. Operation and Maintenance Data: Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
6. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

Steel Railings: Fabrication, inspection, storage and erections of steel railing shall be according to Section 505 of the Standard Specifications for Road and Bridge Construction, except that galvanized railings and accessories shall be stored according to Article 1006.34(d).

1. Three galvanized or ASTM A-304 stainless steel shims per post, one at 1/8 inch, two at 1/16 inch, shall be provided for 25 percent of the posts. Shims shall be similar to base plates in size and holes.
2. All structural steel shapes and plates shall be galvanized and powder coated with zinc enriched epoxy primer powder coat of 2-4 mils and ultra polyester finish.TGIC powder coat of 2-4 mils. Finish color shall be a brushed aluminum.
3. At the Contractor option, either cast in place anchor devices or drilled and set anchor rods may be used to attach the posts to the concrete. Drilling and setting of anchor rods shall be according to Article 509.06 of the Standard Specifications for Road and Bridge Construction.
4. Pipe Handrail shall be Stainless Steel standard pipe (Schedule 40). Either welded or seamless pipe may be used. Rail panel lengths shall not exceed 4'-0" center to center of posts. No railing shall be continuous for more than 40 ft. without expansion joints. Provision for expansion shall also be made in any panel crossing and expansion joint in the structure.
5. Connections of railings to posts shall be by the use of fittings or welding. One type of connection shall be used for railings throughout a structure. Welded joints shall be continuous, and weld surfaces shall be ground smooth. The use of couplings or unions will not be permitted.
6. When connections are made with fittings, rails shall be continuous through fittings at intermediate posts where expansion is not provided, and pinned or welded to the fittings. Rails shall be threaded or welded into fittings at end and corner posts, and shall have slip connections at points where expansion is provided.
7. The pipe handrail shall be fastened to the support by means as shown on the Drawings with four anchors each.

All posts, rails, splices, anchorage devices and plates that are not stainless steel shall be galvanized according to AASHTO M 111. Vent holes for galvanizing shall be placed in the posts and rails at locations that will not allow the accumulation of moisture in the members. Field drilled holes shall be spot painted with one coat of aluminum epoxy mastic paint and powder coating shall be touched up before erection. All bolts, nuts, and anchors shall be galvanized according to AASHTO M 232, except stainless steel hardware shall be uncoated.

Manufacturer Qualifications: Company specializing in manufacturer of stainless steel wire rope, fittings, and other stainless steel components with 10 years minimum successful experience.

Installer Qualifications: Experienced in performing work of this section that has specialized in installation of work similar to that required for this project.

Preinstallation Meetings: Conduct meetings including Contractor, Engineer, fabricator, installer and other subcontractors whose work involves cable railing system to verify project requirements, framing and support conditions, mounting surfaces and manufacturer's installation.

Handle and store products according to manufacturer's recommendations. Leave products wrapped or otherwise protected and under clean and dry storage conditions until required for installation.

Verify actual openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrications schedule with construction progress to avoid construction delays.

Fabricate stainless steel in accordance with AISI Steel Product Manual and the manufacturer's requirements. Shop fabricate to designs indicated on Drawings and to meet performance requirements specified. Shop fabricate fittings, interfacing parts and assemblies so that filed cutting adjustments are not necessary. Coordinate requirements, dimensions and spacings of wire rope railing system to ensure required factory drilled holes in supporting framework are correctly located. Make exposed joints butt, flush and hairline.

Edges of holes in supporting posts shall be deburred and smoothed in order to minimize future deterioration of the wire rope.

Before beginning installation, verify that field conditions are acceptable for installation of cable railing systems in accordance with manufacturer's installation instructions. Supply items required to be cast into concrete with setting templates, appropriate to information shown on the Drawings and consistent with other sections of the Standard Specifications for Road and Bridge Construction and the Special Provisions.

Verify supporting posts and framework for stainless steel wire rope railings are prepared for attachment of anchors, fittings and wire rope and transfer of calculated loads. If conditions are the responsibility of another installer, notify Engineer of unsatisfactory preparation before proceeding.

Installation: Install wire rope cable system in accordance with manufacturer's instruction and the approved shop drawings. Tension in the wire rope cables shall be 1000 pounds at 50°F. Provide anchorage devices and fittings to secure to in-place construction. Install wire rope cable system plumb, level, square, and rigid without kinks or sags. Anchor wire rope railing system to mounting surfaces as indicated on the drawings. Separate dissimilar materials with bushings, grommets or washers to prevent electrolytic corrosion. Use manufacturer's supplied cable hardware. Ensure cables are clean, parallel to each other, and without kinks or sags. Tension cable with hand or hydraulic equipment so that no slack is visible. After final adjustment, provide tamper resistant lock tight materials on all fittings.

Adjusting and Cleaning: Adjust wire rope tension and connecting hardware. Remove temporary coverings and protection of adjacent work areas. Clean installed products in accordance with manufacturer's instructions before owner's acceptance. Do not use abrasive cleaners. Remove from project site and legally dispose of construction debris associated with this work.

Protection: Protect installed products until completion of project. Touch-up, repair or replace damaged products before Substantial Completion. Protect products and finished surfaces from damage during construction. Replace defective or damaged components as directed by Engineer. Repair damaged factory-applied finish as directed by Engineer.

Method of Measurement: This work will be measure for payment in place in feet. The length measured will be the overall length along the top longitudinal railing member through all posts and gaps.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for BICYCLE RAILING, SPECIAL installed in place.

X5091755 PARAPET RAILING, SPECIAL

Description: This work shall consist of furnishing materials, labor and equipment required to install ornamental parapet railing.

Materials: Materials shall be according to the following:

1. Wire Rope shall be ASTM A-492 and ASTM A-555, Type 316 stainless steel. It shall be 7x7 wire rope, 3/16" diameter, with a breaking load, including safety factor, of 4000 pounds.
2. Steel Posts for Railings shall comply with Article 1006.34(a) of the Standard Specifications for Road and Bridge Construction.
3. Horizontal Stainless Steel Rails shall be ASTM A-924 with a minimum yield strength of 45 ksi. They shall be Standard Steel Pipe, Schedule 40, of the diameter indicated on the Drawings.
4. Fittings shall be selected by the manufacturer to suit the application and breaking strength requirements of the wire rope. They shall be fabricated from AISI Type 316 and 316L stainless steel complying with ASTM F-1145. Provide sizes and types as required to meet project design conditions specified and indicated on Drawings and reviewed shop drawings, including:
 - a. Shop applied threaded swaged rope ends.
 - b. Anchoring systems, including bolts and washers for manufacturer selected threaded swaged rope ends.
5. Threaded Anchor Rods shall comply with Article 1006.09 of the Standard Specifications for Road and Bridge Construction.

General: This work shall be according to the details shown on the plans and lines and grades shall not follow any defects in the structure. When the structure is on a grade, rail posts shall be vertical, except posts for ornamental railings on concrete parapets shall be normal to the theoretical grade. Top of railings shall be parallel to grade line. High spots shall be ground and low spots shimmed.

All welds facing pedestrian areas shall be ground smooth in the shop. The rails shall be straight and true to line, without kinks, bends, or warps, and straightened as necessary before shipment.

Submittals:

1. Product Data: Provide manufacturer's standard catalog data for specified products demonstrating compliance with referenced standards. Provide list of fittings being provided with descriptions, load capabilities, and either photographs or drawings for each type.
2. Shop Drawings: Submit Shop Drawings for fabrication and installation to the Engineer according to Article 505.03 of the Standard Specification for Road and Bridge Construction. Include the following:
 - a. Plans, Elevations and Detail Sections.
 - b. Indicate materials, methods, finishes, fittings, fasteners, anchorages and accessory items.
 - c. Provide setting diagrams and templates for anchorages, sleeves, and bolts to be installed by others.
 - d. Where materials or fabrications are indicated to comply with design loadings, include material and safety factor properties, and other information needed for structural analysis.
3. Verification Samples: Two samples representing actual products and finishes as follows:
 - a. Wire rope with fitting, minimum size 12 inches long.
 - b. Typical fittings, including threaded swaged terminal and hex-headed self-tapping screws.

- c. Stainless steel rails, minimum size 12 inches long.
4. Installation Instructions: Manufacturer's printed installation instructions.
5. Operation and Maintenance Data: Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
6. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

Steel Railings: Fabrication, inspection, storage and erections of steel railing shall be according to Section 505 of the Standard Specifications for Road and Bridge Construction, except that galvanized railings and accessories shall be stored according to Article 1006.34(d).

1. Three galvanized or ASTM A-304 stainless steel shims per post, one at 1/8 inch, two at 1/16 inch, shall be provided for 25 percent of the posts. Shims shall be similar to base plates in size and holes.
2. All structural steel shapes and plates shall be galvanized and powder coated with zinc enriched epoxy primer powder coat of 2-4 mils and ultra polyester finish TGIC powder coat of 2-4 mils. Finish color shall be a brushed aluminum.
3. At the Contractor option, either cast in place anchor devices or drilled and set anchor rods may be used to attach the posts to the concrete. Drilling and setting of anchor rods shall be according to Article 509.06 of the Standard Specifications for Road and Bridge Construction.
4. Pipe Handrail shall be Stainless Steel standard pipe (Schedule 40). Either welded or seamless pipe may be used. Rail panel lengths shall not exceed 4'-0" center to center of posts. No railing shall be continuous for more than 40 ft. without expansion joints. Provision for expansion shall also be made in any panel crossing and expansion joint in the structure.
5. Connections of railings to posts shall be by the use of fittings or welding. One type of connection shall be used for railings throughout a structure. Welded joints shall be continuous, and weld surfaces shall be ground smooth. The use of couplings or unions will not be permitted.
6. When connections are made with fittings, rails shall be continuous through fittings at intermediate posts where expansion is not provided, and pinned or welded to the fittings. Rails shall be threaded or welded into fittings at end and corner posts, and shall have slip connections at points where expansion is provided.
7. The pipe handrail shall be fastened to the support by means as shown on the Drawings with four anchors each.

All posts, rails, splices, anchorage devices and plates that are not stainless steel shall be galvanized according to AASHTO M 111. Vent holes for galvanizing shall be placed in the posts and rails at locations that will not allow the accumulation of moisture in the members. Field drilled holes shall be spot painted with one coat of aluminum epoxy mastic paint and powder coating shall be touched up before erection. All bolts, nuts, and anchors shall be galvanized according to AASHTO M 232, except stainless steel hardware shall be uncoated.

Manufacturer Qualifications: Company specializing in manufacturer of stainless steel wire rope, fittings, and other stainless steel components with 10 years minimum successful experience.

Installer Qualifications: Experienced in performing work of this section that has specialized in installation of work similar to that required for this project.

Preinstallation Meetings: Conduct meetings including Contractor, Engineer, fabricator, installer and other subcontractors whose work involves cable railing system to verify project requirements, framing and support conditions, mounting surfaces and manufacturer's installation. Handle and store products according to manufacturer's recommendations. Leave products wrapped or otherwise protected and under clean and dry storage conditions until required for installation.

Verify actual openings by field measurements before fabrication; show recorded measurements on shop drawings. Coordinate field measurements and fabrications schedule with construction progress to avoid construction delays.

Fabricate stainless steel in accordance with AISI Steel Product Manual and the manufacturer's requirements. Shop fabricate to designs indicated on Drawings and to meet performance requirements specified. Shop fabricate fittings, interfacing parts and assemblies so that filed cutting adjustments are not necessary. Coordinate requirements, dimensions and spacings of wire rope railing system to ensure required factory drilled holes in supporting framework are correctly located. Make exposed joints butt, flush and hairline.

Edges of holes in supporting posts shall be deburred and smoothed in order to minimize future deterioration of the wire rope.

Before beginning installation, verify that field conditions are acceptable for installation of cable railing systems in accordance with manufacturer's installation instructions.

Supply items required to be cast into concrete with setting templates, appropriate to information shown on the Drawings and consistent with other sections of the Standard Specifications for Road and Bridge Construction and the Special Provisions.

Verify supporting posts and framework for stainless steel wire rope railings are prepared for attachment of anchors, fittings and wire rope and transfer of calculated loads. If conditions are the responsibility of another installer, notify Engineer of unsatisfactory preparation before proceeding.

Installation: Install wire rope cable system in accordance with manufacturer's instruction and the approved shop drawings. Tension in the wire rope cables shall be 1000 pounds at 50°F. Provide anchorage devices and fittings to secure to in-place construction. Install wire rope cable system plumb, level, square, and rigid without kings or sags. Anchor wire rope railing system to mounting surfaces as indicated on the drawings. Separate dissimilar materials with bushings, grommets or washers to prevent electrolytic corrosion. Use manufacturer's supplied cable hardware. Ensure cables are clean, parallel to each other, and without kinks or sags. Tension cable with hand or hydraulic equipment so that no slack is visible. After final adjustment, provide tamper resistant locktight materials on all fittings.

Adjusting and Cleaning: Adjust wire rope tension and connecting hardware. Remove temporary coverings and protection of adjacent work areas. Clean installed products in accordance with manufacturer's instructions before owner's acceptance. Do not use abrasive cleaners. Remove from project site and legally dispose of construction debris associated with this work.

Protection: Protect installed products until completion of project. Touch-up, repair or replace damaged products before Substantial Completion. Protect products and finished surfaces from damage during construction. Replace defective or damaged components as directed by Engineer. Repair damaged factory-applied finish as directed by Engineer.

Method of Measurement: This work will be measure for payment in place in feet. The length measured will be the overall length along the top longitudinal railing member through all posts and gaps. Stainless steel pipes to be cast into the concrete parapets shall be measured prior to placement of concrete, and included with PARAPET RAILING, SPECIAL for payment. This measurement shall include 6" maximum embedment on each end of the steel pipe segment.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for PARAPET RAILING, SPECIAL installed in place.

X51500110 NAME PLATES (SPECIAL)

Description: This work shall consist of furnishing and installation of commemorative bridge plaques as shown in the plans and described herein.

Materials:

- A. All materials shall be consistent with the requirements listed in Article 515.02 of the Standard Specifications.
- B. Aluminum Castings: ASTM B 26/B 26M, of alloy and temper recommended by the sign manufacturer for casting process used and for use and finish indicated.

Submittals:

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: Show fabrication and installation details for signs.
 - 1. Show sign mounting heights, locations of supplementary supports to be provided by others, and accessories.
 - 2. Provide message list, typestyles, graphic elements and layout for each sign.
- C. Samples for Verification: For each of the following products and for the full range of color, texture, and sign material indicated, of sizes indicated:
 - 1. Plaque Casting: 6 inches square, including border.
 - 2. Dimensional Characters: Full-size Samples of each type of dimensional character (letter, number, and graphic element).
 - 3. Accessories: Manufacturer's full-size unit.
- D. Qualification Data: For installer and fabricator
- E. Maintenance Data: For signs to include in maintenance manuals.
- F. Warranty: Special warranty specified in this Section.

General:

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - 1. Advance Corporation; Braille-Tac Division.
 - 2. A. R. K. Ramos.
 - 3. Gemini Incorporated.
 - 4. Matthews International Corporation; Bronze Division.
 - 5. Metal Arts; Div. of L&H Mfg. Co.
 - 6. Mills Manufacturing Company.
 - 7. Nelson-Harkins Industries.
 - 8. Southwell Company (The).
- B. Cast Plaques: Provide castings free of pits, scale, sand holes, and other defects, as follows:
 - 1. Plaque Material: Aluminum
 - 2. Background Texture: Matte
 - 3. Border Style: Square, Polished
 - 4. Mounting: Concealed Studs
 - 5. Thickness: ½ Inch
 - 6. Plaque Size: As shown in the plans
 - 7. Photo & Text Relief: Provided by the owner.
- C. Warranty:

Specialty Warranty: Manufacturer's standard form in which the manufacture agrees to repair or replace components of signs that fail in materials or workmanship within the specified warranty period.

1. Failures include, but are not limited to, the following:
 - a. Deterioration of metal finishes beyond normal weathering.
 - b. Deterioration of embedded graphic image.

D. Accessories:

1. Anchors and Inserts: Provided nonferrous-metal or hot-dip galvanized anchors and inserts for exterior installations and elsewhere as required for corrosion resistance. Use toothed steel or lead expansion-bolt devices for drilled-in-place anchors. Furnish inserts, as required, to be set into concrete or masonry work.

E. Fabrication:

Provide manufacture's standard signs of configurations indicated.

1. Welded Connections: Comply with AWS standards for recommended practices in shop welding. Provide welds behind finished surfaces without distortion or discolorization of exposed side. Clean exposed welded surfaces or welding flux and dress exposed and contact surfaces.
2. Mill joints to tight, hairline fit. Form joints exposed to weather to exclude water penetration.
3. Preassemble signs in the shop to greatest extent possible. Disassemble signs only as necessary for shipping and handling limitations. Clearly mark units for reassembly and installation, in location not exposed to view after final assembly.
4. Conceal fasteners if possible; otherwise, locate fasteners where they will be inconspicuous.

F. Finishes:

1. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
2. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
3. Appearance for Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range or approved samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved samples and are assembled or installed to minimize contrast.

Installation:

- A. Cast-Metal Plaques: Mount plaques using standard fastening methods to comply with manufacturer's written instructions for type of wall surface indicated.
 1. Concealed Mounting: Mount plaques by inserting threaded studs into tapped lugs on back of plaque. Set in predrilled holes by inserting threaded studs into tapped lugs on back of plaque. Set in predrilled holes filled with sealant.
 2. Face Mounting: Mount plaques using exposed fasteners with rosettes attached through face of plaque into wall surface.

B. Cleaning and Protection:

1. After installation, clean soiled sign surfaces according to manufacturer's written instructions. Protect signs from damage until acceptance by the Engineer.

Basis of Payment: NAME PLATES (SPECIAL) shall be measured and paid for at the contract unit cost for EACH plaque fabricated and installed.

X5539700 STORM SEWERS TO BE CLEANED

Description: This work shall consist of cleaning and removal of all debris regardless of nature from existing storm sewers as shown on the plans and specified herein.

General: This work can be accomplished by hand, power or mechanical methods. All debris shall be captured, removed and disposed of off-site at a legal dumping site. The contractor shall not, however, be allowed to "flush" the debris downstream.

Method of Measurement: This work will be measured per FOOT along the centerline of the storm sewer that is cleaned.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for STORM SEWERS TO BE CLEANED regardless of the type and size. Payment shall include all labor, materials, equipment and tools necessary to complete the work as herein specified, as shown on the plans and as directed by the Engineer. Hauling away collected material and debris will not be paid for separately, but shall be included in the cost of this item.

FAU Route 5077 (Morgan Street)
Section 99-00493-00-BR
Winnebago County
Contract No. 85529

X6024242 INLETS, SPECIAL, NO. 1

X6024244 INLETS, SPECIAL, NO. 2

Description: This work shall be constructed in accordance with Section 602 of the Standard Specifications and the City of Rockford Engineering Division standard details shown in the plans.

Method of Measurement: Measurement for this work will be per EACH of the various types specified.

Basis of Payment: Payment for this work will be paid for at the contract unit price per EACH for the various types specified of INLETS, SPECIAL

MODIFIED JUNCTION CHAMBER

Description: This work shall consist of reconstructing the existing sanitary sewer junction vault with a new pre-cast concrete lid and installing sanitary manhole risers to the elevations and grades depicted in the plans in accordance with RRWRD SANITARY SEWER WORK REQUIREMENT standards and specifications.

The work shall be performed according to Section 602 and 504 of the "Standard Specifications"

General: The work shall also include the removal and disposal of an existing 24 inch storm sewer that passes through the existing junction and shall include the necessary vault repairs to plug the voids in the sidewalls left from the removal of the existing storm sewer pipe.

The reconstruction will require Class SI Concrete or non-shrink grout to level the sidewalls of the existing junction chamber. No additional payment or compensation will be made for any unforeseen conditions or additional repairs necessary to the existing junction chamber during construction.

All reinforcement and items associated with the connection of the proposed pre-cast flat top to the existing junction chamber sidewalls will be included in this item. All work shall be performed in accordance with the details provided on the plans and

Manhole raisers shall be installed in accordance with Section 602 of the Standard Specifications and RRWRD specifications and standard details provided in the plans. 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 and shall be included in the cost of this item.

The Contractor shall contact the Rock River Water Reclamation District, who will provide replacement frames and grates for each adjusted manhole. Existing frames and grates shall not be reused unless approved by Rock River Water Reclamation District. The cost of loading, transporting and unloading frames and grates to an on-site storage location for pick-up by the Rock River water Reclamation District shall be included in the cost of this item.

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.

This work can be accomplished by hand, power or mechanical methods. All debris shall be captured, removed and disposed of off-site at a legal dumping site. The contractor shall not, however, be allowed to "flush" the debris downstream.

Basis of Payment: This work will be paid for at the contract unit price per EACH for MODIFIED JUNCTION CHAMBER. Payment shall include all labor, materials, equipment and tools necessary to complete the work as herein specified, as shown on the plans and as directed by the Engineer.

X6026050 SANITARY MANHOLES TO BE ADJUSTED

Description: 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.

General: 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 upon final removal and storage. Existing frames and grates shall not be reused unless approved by Rock River Water Reclamation District. The cost of loading, transporting, unloading and moving frames and grates to on-site storage locations for pick-up by 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.

X6026051 SANITARY MANHOLES TO BE RECONSTRUCTED

Description: This work shall consist of reconstructing 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 reconstructed shall conform to the requirements of Section 602 of the Standard Specifications.

General: 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 reconstructed manhole upon final removal and storage. Existing frames and grates shall not be reused unless approved by Rock River Water Reclamation District. The cost of loading, transporting, unloading and moving frames and grates to on-site storage locations for pick-up by the Rock River water Reclamation District shall be included in the cost of SANITARY MANHOLES TO BE RECONSTRUCTED.

Trench backfill requirements shall be completed in accordance with Article 208.03 and shall be included in the cost for SANITARY MANHOLES TO BE RECONSTRUCTED.

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 RECONSTRUCTED.

X6026054 SANITARY MANHOLES TO BE REMOVED

Description: This work shall consist of excavating, removal and off-site disposal of 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.

Trench backfill requirements shall be completed in accordance with Article 208.03 and shall be included in the cost for SANITARY MANHOLES TO BE RECONSTRUCTED

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

X6062700 CONCRETE GUTTER, TYPE A (SPECIAL)

Description: This work shall consist of constructing proposed concrete gutter across alleys or private drives as shown on the plans.

Materials: In accordance with Article 606.02.

General: The top of curb shall be depressed according to the details shown in the plans and in accordance with Article 606.07 of the Standard Specifications.

Method of Measurement: In accordance with Article 606.14.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for CONCRETE GUTTER, TYPE A (SPECIAL).

X6660445 RIGHT-OF-WAY AND PROPERTY CORNERS

Description: This work shall consist of furnishing and installing proposed right-of-way and property corners.

Materials: For the intersection of property lines with proposed right-of-way lines and permanent easement lines, a 5/8" X 30" rebar with a plastic cap bearing the surveyor's license number shall be used.

General: Upon completion of the construction operations, the Contractor and Engineer shall locate and inventory the right-of-way and property corners. A written report of any missing right-of-way and property corners shall be submitted to the Resident Engineer.

An Illinois Professional Land Surveyor, with a Department prequalification in "Special Services – Land Survey", shall be obtained by the Contractor to set the right-of-way and property corners.

The right of way and property corners shall be set after the construction work is complete, and there is no possibility of disturbance of the marker. Corners shall be set in compliance with the "Minimum Standards of Practice" for a Boundary Survey as prescribed under the "Rules for the Administration of the Illinois Professional Land Surveyor's Act of 1989" as set forth by the Illinois Department of Professional Regulation, amended at 28 Ill. Reg. 15297, effective November 10, 2004.

Method of Measurement: Resetting of right-of-way and property corners that are disturbed through no fault of the Contractor will be measured for payment as each. Resetting of corners that are not protected and carefully preserved according to Article 107.20 of the Standard Specifications will not be measured for payment.

Basis of Payment: This work will be paid for at the contract unit price per EACH for RIGHT-OF-WAY AND PROPERTY CORNERS.

X6700410 ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)

Description: This work shall consist of furnishing and maintaining in good condition, for the shared use of the Engineer and Contractor, a weatherproof building at a location approved by the Engineer. All keys to the building shall be turned over to the Engineer.

General: This item shall be according to Article 670.02 of the "Standard Specifications", and the following:

The existing building at 1117 Buchanan Street, Rockford, IL 61101 shall be utilized as the temporary construction field office for Contractor and City Engineer representatives. The building is partially completed office space with rough in plumbing for a couple of bathrooms and one working bathroom in the shop section. The building has been purchased by the City of Rockford and will be available for inspection prior to bidding. The building will be available for the Engineer's office by January 25, 2011. The remainder of the office will be available to the Contractor no later than July 1, 2011.

The Contractor will be responsible for all utility hook-up and monthly bills to maintain the field office electric, water, sewer, internet, and phone service for the duration of the contract.

The field office and the required equipment, supplies and services shall meet the approval of the Engineer and shall include the following items in addition to the equipment referenced in Article 670.02.

4. Dry-erase board with markers.
5. Internet broadband connection.
6. One copy/print/scan machine capable of color scanning, reproducing prints up to 11"x17" size. (Maintenance Package Included)
7. A cabinet stand for the copier.
8. 8-1/2" x 11" White Paper (Replenished as needed)
9. 11" x 17" White Paper (Replenished as needed)
10. The telephone answering machine specified in Article 670.02 shall meet the following minimum specifications:
 - (a) Time/Day Indication - A computerized voice records the date and time that each message is received.
 - (b) Beeperless Remote - Any remote touch-tone phone can be used to review all messages by the use of an access code.
 - (c) Digital System - Pre-recorded and received messages are managed on separate cassettes.
 - (d) Conversation Record - The operator can record any phone call.
 - (e) Remote Turn-On - Any remote touch-tone phone can be used to turn on the answering machine by the use of an access code.
 - (f) Full Message - The Caller is advised if the memory is insufficient to record the call.
 - (g) Battery Back-Up - The settings and messages are protected from power failures.
 - (h) Two-Line Capacity - Projects that have a second phone line through the provision of a 670.05 Engineer's Field Laboratory shall provide a single phone answering machine that services both lines.

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

FAU Route 5077 (Morgan Street)
Section 99-00493-00-BR
Winnebago County
Contract No. 85529

Basis of Payment: This item will be paid for at the contract unit price per **CALANDAR MONTH** for **ENGINEER'S FIELD OFFICE, TYPE A (SPECIAL)**.

X7010216 TRAFFIC CONTROL AND PROTECTION. (SPECIAL)

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:

701006	701301	701311	701427	701501	701502
701606	701701	701801	701901	720011	729001
BLR 21	BLR 22				

Details:

Maintenance of Traffic Details

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.

Signs:

No bracing shall be allowed on post-mounted signs.

Signs shall be mounted on steel posts using standard 720011, 728001, 729001, or on 4"x4" wood posts per Section 730 of the Standard Specifications for Road and Bridge Construction. Other "break away" connections can be used if accepted by the FHWA and a corresponding letter is provided to the Engineer.

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.

"UNEVEN LANES" W8-11(O)48 signs shall be installed at 1 mile intervals or as directed by the Engineer.

"LOW SHOULDER" W8-9(O)48 signs shall be installed at 2 mile intervals or 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.

When the Contractor elects to cover conflicting or inappropriate signing, the materials used shall totally block out the reflectivity of the sign and shall cover the entire sign. The method used for covering the signing shall meet with the approval of the Engineer.

The Contractor shall coordinate all traffic control work on this project with any adjoining or overlapping project activities, including the railroad track construction. The coordination will include any barricade placements or additional signing necessary to provide a uniform traffic detour pattern. When directed by

the Engineer, the Contractor shall remove all traffic control devices that he/she furnished, installed and maintained under the contract. Such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until the Engineer specifically authorizes their relocation or removal.

The Contractor shall ensure that all the traffic control devices he/she installs are operational, functional and effective 24 hours a day, 7 days a week, including holidays.

The Contractor will plan his/her work so that there will be no open holes, trenches, hazards or obstructions in the work zone that are not protected or covered during non-work hours. Any delays or inconveniences incurred by the Contractor while complying with these requirements shall be considered incidental to the contract, and no additional compensation will be allowed.

The primary concern of the City of Rockford is to maintain a safe travel way for the public and a safe environment for the worker in the construction zone.

The traffic control deficiency charge shall be for the full amount per day for each day the deficiency existed.

Devices:

For any drop off within 8 feet of the pavement edge that exceeds 6 inches, the Type II barricades equipped with mono-directional steady burn lights shall be placed at a spacing of 50 feet center to center. Barricades that must be placed in excavated areas shall have leg extensions installed so that the top of the barricade is in compliance with the height requirements of IDOT Standard 701901.

Lights:

Steady burn mono-directional lights are required on devices delineating a widening trench.

Flaggers:

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

The remaining intersections and the following major commercial driveways shall be regulated with one flagger. Major commercial driveways for this project shall be the gas station entrance located along the west side of the north leg of Seminary Street, and the intersection of Seminary Street and Bremer. All flaggers, signs and devices to complete this work shall be included in the cost per Lump Sum for Traffic Control and Protection, Special.

A reduction in the number of flaggers from that shown on the contract may be permitted when the road is closed to through traffic and it is necessary to provide access for local traffic. (Local Traffic Only ATD = 150) If the average daily traffic is 400 or more, or is not shown in the contract, the Contractor shall furnish flaggers and traffic control devices according to the contract. When the road is closed to through traffic, but open to local traffic and the average daily traffic, as shown in plans is less than 400, but more than 100, one flagger will be required for each separate operation where two-way traffic is maintained over one lane and no flaggers will be required where at least one unobstructed lane of traffic is maintained, in each direction on multilane pavements. When the average daily traffic is less than 100, no flaggers will be required unless the Contractor's operation encroaches on the open traffic lane, during which time one flagger shall be provided at the Contractor's expense. If the average daily traffic volume is less than 400, the Engineer may require additional flaggers to protect hazardous conditions and such additional flaggers will be paid for according to Article 109.04.

Pavement Marking:

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

The temporary traffic configuration, allowing only local residential traffic, results in a low-volume road (ADT<2500 and it is exempt from the requirements regarding no-passing zone pavement markings.

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.

BLR 21 & 22

The Contractor shall notify the Traffic Operations Section of the Bureau of Operations by fax (815/284-5489) and the Bureau of Project Implementation (815/284-5348) in writing by means of fax (to the numbers provided) and also by letter to the District Office.

Signing and devices required to close the road and signing to detour the traffic, according to the Traffic Control details and contained herein, shall be the responsibility of the Contractor. No detour shall be erected on Friday, Saturday or Sunday

Road Closure – Culvert Replacements, Closures within Closures:

The road closure shall be completed using Type III barricades in compliance with Standards 701901, and signing according to Traffic Control for Road Closure detail. Two flashers shall be installed above each Type III barricade. The "ROAD CLOSED" (R11-2) or "ROAD CLOSED TO THRU TRAFFIC" (R11-4) signs shall be placed as shown in Standard 701901. Flashers shall be installed above all warning signs involving a night time road closure. If a portion of the road is completely closed between a sideroad and any entrances, the roadway will be kept open to local access in the other direction between that closure and the next road.

The Contractor shall be required to notify the Bureau of Project Implementation and affected residents prior to a complete closure.

Maintenance of Traffic:

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. It will show which locations will be completely closed, and which locations will be constructed utilizing alternative staging operations. This traffic plan will need to be approved by the Engineer before the roadway is closed to traffic.

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.

The roads shall be closed during construction using Traffic Control and Protection Standard BLR-21 & BLR 22.

The mainline shall be closed for reconstruction using the detour from Illinois Route 2 (Main Street) to Illinois Rte 251 (Kishwaukee Street).

Placing and removing pavement marking shall be completed using Traffic Control and Protection Standard 701306, 701311 or 701701.

Basis of Payment:

This work will be paid for at the contract unit price per LUMP SUM for TRAFFIC CONTROL AND PROTECTION, (SPECIAL). The payment will be in full for all labor, materials, transportation, and

incidentals necessary to furnish, install, maintain, replace, relocate and remove all traffic control devices indicated in the plans and specifications.

The salvage value of the materials removed shall be reflected in the bid price for this item.

Any delays or inconveniences incurred by the Contractor while complying with these requirements shall be considered incidental to TRAFFIC CONTROL AND PROTECTION, (SPECIAL) and no additional compensation will be allowed.

Any traffic control devices required by the Engineer to implement the Traffic Control Plan as shown in the plans and specifications of the contract shall be considered incidental to the pay item TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

If the Engineer requires additional work involving a substantial change of location and/or work which differs in design and/or work requiring a change in the type of construction, as stated in Article 104.02(d) of the "Standard Specifications" the standards and/or the designs, other than those required in the plans, will be made available to the Contractor at least one week in advance of the change in traffic control. Payment for any additional traffic control required for the reasons listed above will be in accordance with Article 109.04 of the "Standard Specifications".

Revisions in the phasing of construction or maintenance operations, requested by the Contractor, may require traffic control to be installed in accordance with standards and/or designs other than those included in the plans. The Contractor shall submit revisions or modifications to the traffic control plan shown in the contract to the Engineer for approval. No additional payment will be made for a Contractor requested modification.

In the event that the City of Rockford or Railroad Company cancels or alters any portion of the contract that result in the elimination or incompleteness of any portion of the work, payment for partially completed work will be made in accordance with Article 104.02 of the "Standard Specifications".

XX008455 INLET BOX, SPECIAL

Description: This work shall be constructed in accordance with Section 602 of the Standard Specifications and the City of Rockford Engineering Division standard details shown in the plans.

Method of Measurement: Measurement for this work will be per each of the various types specified.

Basis of Payment: Payment for this work will be paid for at the contract unit price per EACH for the various types specified of INLET BOX, SPECIAL

XX005488 STEEL CASING BORED AND JACKED 48"

Description: This item shall be constructed in accordance with Section 20-2.19 of the Standard Specifications for Water and Sewer Main Construction in Illinois.

General: Contractor shall furnish and install a 48" diameter steel casing pipe under the Chicago Central & Pacific (CC&P) railroad track as shown on the plans. This work shall include all excavation and push pit regardless of soil classifications. All work shall conform to the requirements of these specifications, and the Chicago Central & Pacific Railroad company for work on their right-of-way.

Casing pipe shall be seamless or spiral weld steel conforming to ASTM Specifications, Designation A-53 of A-139, Grade B.

A tolerance of one inch in one hundred feet shall be maintained on specified line and grade. Casing pipe shall have a wall thickness of 0.344 inches.

The casing pipe shall be installed by auguring and pushing or jacking as deemed necessary by the Contractor. All working operations must be subordinate to the free and unobstructed use of the roadway without delay or danger to life, equipment or property.

Cost of all excavation, regardless of soil classifications and backfilling for the installation of the casing pipe will be included in the unit price bid for the casing pipe.

The ends of the casing pipe shall be sealed in a manner satisfactory with the Engineer. The storm sewer shall be pre-cast concrete and shall be installed in the casing pipe with casing spacers that will adequately support the pipe in the casing pipe. Spacers shall be installed in accordance with manufacturer's recommendations.

Basis of Payment: This work will be paid for at the contract unit price bid per FOOT for STEEL CASING BORED AND JACKED 48" and shall include the casing spacers and sealing ends of the casing pipe.

**XX006652 STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN
SURFACE 4 INCH (SPECIAL)**

Description: This work shall conform to Section 420 of the Standard Specifications and shall be constructed in accordance with the details shown herein and as directed by the Engineer.

General: Medians shall be textured with a stamping tool capable of producing a "brick paver-like" effect on its surface. Integrally colored concrete materials and ingredients from Davis Colors or Solomon Colors are to be used to contrast the medians with the adjacent concrete pavement as shown in the detail. Davis Color (# 160) or Solomon Color (#170) is the color that shall be used. 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, which facilitates the release of the tool. Finally a clear seal from Davis Colors or Brickform (Division of Solomon Color) shall be applied after the concrete has cured. The clear seal prevents discoloration by sealing in the color as well as protects the concrete. Davis Colors: W -1000 Clear Seal or Brickform: Gem Cure & Seal is the sealant that shall be used.

The Contractor shall be required to make a field sample for approval or color and stamping quality. Only when acceptance of the sample is made by the Engineer, may the Contractor proceed with placing the concrete crosswalk. The cost associated with producing the field sample(s) shall be included in the contract unit cost for this item.

Welded wire fabric reinforcement shall be used. Welded wire fabric may be smooth or deformed and shall be equal to or better than 6" x 6" D8.0/D8.0 and meet the requirements of Article 1006.10 (c) of the Standard Specifications.

The Contractor shall do this work one block at a time to minimize the inconvenience to the adjacent businesses.

Basis of Payment: The contract unit price per SQUARE FOOT shall be full compensation for all labor, materials, coloring ingredients, stamping methods and protective sealant. Backfilling and any other related items to install the medians complete and accepted as shown in the details and as directed by the Engineer. This item shall be paid for at the contract unit price per SQUARE FOOT for STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL)

Z0051398 REMOVE EXISTING SIGN POST

Description: This work shall consist of removing, transporting, and disposing of any existing sign posts and assemblies at the locations shown on the plans or as directed by the Engineer in accordance with Section 724 of the Standard Specifications.

General: The Contractor shall remove and salvage all signs shown for removal for the City.

The existing sign posts shall be completely removed, leaving no supports protruding from the surface of the ground.

The following items from the existing structure shall be removed, loaded, transported, unloaded and moved to an on-site storage location by the Contractor. All items shall become property of the City of Rockford.

The Contractor shall notify the following person, a minimum of two (2) weeks prior to the final removal of the salvage items:

Mr. Mark Stockman
Street Superintendant
1-815-987-5371

Method of Measurement: REMOVE EXISTING SIGN POST will be measured for all sign posts associated for EACH sign.

Basis of Payment: This work will be paid for at the contract unit price for EACH existing sign's post and assembly as REMOVE EXISTING SIGN POST.

STEEL FABRICATED PARAPET WALL INSERT

Description: This work shall consist of fabricating, furnishing, and installing a removable parapet wall section for access to the existing sanitary sewer manhole lid located under the proposed parapet wall footprint as shown on the details in the plans and in accordance with Section 505 of the "Standard Specifications".

Materials: The fabricated steel plate shall be in accordance with Section 1006 of the "Standard Specifications".

Basis of Payment: This item will be measured for payment at the contract unit cost per EACH of STEEL FABRICATED PARAPET WALL INSERT.

Z0062456 TEMPORARY PAVEMENT

Description: This work shall consist of constructing, maintaining, and removing temporary pavement at the locations shown on the plans or as directed by the Engineer.

Materials: The hot-mix asphalt materials shall be according to Section 1030 of the "Standard Specifications".

General: Temporary pavement shall consist of 8" of Hot-Mix Asphalt Base Course constructed and compacted according to Section 355 of the "Standard Specifications". The temporary pavement shall be placed and compacted in a minimum of two lifts on a prepared subgrade.

The hot-mix asphalt mixture shall be as shown on the plans.

Article 355.08 of the "Standard Specifications", shall not apply.

The removal of temporary pavement shall be according to Section 440 of the "Standard Specifications". The removed pavement shall be disposed of outside the right-of-way according to Article 202.03 of the "Standard Specifications".

Method of Measurement: Temporary Pavement will be measured for payment in place, and the area computed in SQUARE YARDS.

Basis of Payment: This work will be paid for at the contract unit price per SQUARE YARD for TEMPORARY PAVEMENT. The unit price shall include both the placement and removal of the hot-mix asphalt material.



Route	<u>FAU Route 5077 (Morgan St/College Avenue)</u>	Marked Rte.	<u>Morgan Street & College Avenue</u>
Section	<u>99-00493-00-BR</u>	Project No.	<u>BRM-5099(65)</u>
County	<u>Winnebago</u>	Contract No.	<u>85529</u>

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.

Andrew Smith
Print Name
Certified Professional in Erosion and Sediment Control
Title
Crawford Murphy & Tilly, Inc.
Agency

Andrew Smith Jr. - CPESC
Signature
2/4/11
Date

I. Site Description:

- A. Provide a description of the project location (include latitude and longitude):

The project involves the reconstruction of Morgan Street and College Avenue from Main Street to Kishwaukee Street and includes the Morgan Street bridge. The total project length is approximately 0.67 miles. The approximate coordinates for Rockford, IL are Latitude 42°16'16" N with a Longitude of 89°05'38" W.

- B. Provide a description of the construction activity which is the subject of this plan:

Construction includes earth excavation, embankment, storm sewers, culverts, manholes, inlets, various pavement items, bridge demolition, bridge construction, striping, signing, landscaping, and other miscellaneous items of construction.

- C. Provide the estimated duration of this project:

The estimated duration of the project is 32 months.

- D. The total area of the construction site is estimated to be 17.12 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 16.89 acres.

- E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

The estimated weighted runoff coefficient for the site after construction is 0.60.

- F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

Information describing the soil types found within the project boundaries is (contained in the Soils Report for the project, which is hereby on file with the City of Rockford Department of Public Works).

- G. Identify any hydric soils onsite, and provide an estimate of the number of acres that will likely be disturbed:

Hydric soils onsite and the estimate of the number of acres that will be disturbed is contained in the soils report for the project, which can be found on file at Rockford City Hall, Department of Public works.

- H. Provide a description of potentially erosive areas associated with this project:

Potentially erosive areas can be found in the Soils Report for the Project which is on file at Rockford City Hall.

- I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

The nature and purpose of soil disturbing activities are to grade the area inside the R.O.W. to meet the proposed road profile, construct the proposed bridge cone on the west bank of Rock River, place the two proposed drainage outlets, construct proposed multi-use path on the east bank of the Rock River, and any construction of roadside drainage features.

Information describing the erosive factors at the site is contained in the Soils Report for the project, which is hereby on file with the City of Rockford Department of Public Works.

- J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

- K. Identify who owns the drainage system (municipality or agency) this project will drain into:

The City of Rockford, Department of Public Works owns the drainage system. The Project will continue to drain into Kent Creek and the Rock River.

- L. The following is a list of receiving water(s) and the ultimate receiving water(s), and aerial extent of wetland acreage at the site. The location of the receiving waters can be found on the erosion and sediment control plans:

The receiving waters for the runoff on this project are Kent Creek and Rock River.

- M. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

All areas of the site that are to be protected or remain undisturbed are shown in the erosion control plans.

- N. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- Floodplain (Kent Creek and Rock River)
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed Receiving Waters
- Receiving Waters with Total Maximum Daily Load (TMDL)
- Applicable Federal, Tribal, State or Local Programs
- Other

1. 303(d) Listed Receiving Waters (fill out this section if checked above):

- a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

- b. A description of how Erosion and Sediment Control Practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a 25-year, 24-hour rainfall event, if the receiving water is listed as impaired for sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation):

- c. If pollutants other than sediment are identified as causing the impairment, provide a description of how Pollution Prevention BMPs will be incorporated into the site design to prevent their discharge.
- d. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:
- e. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

2. TMDL (fill out this section if checked above)

- a. The name(s) of the listed water body:
- b. Provide a description of the Erosion and Sediment Control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:
- c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

O. The following pollutants of concern will be associated with this construction project:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soil Sediment | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Concrete | <input checked="" type="checkbox"/> Antifreeze / Coolants |
| <input checked="" type="checkbox"/> Concrete Truck Waste | <input checked="" type="checkbox"/> Waste water from cleaning construction equipment |
| <input checked="" type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Solid Waste Debris | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Paints | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Solvents | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Fertilizers / Pesticides | <input type="checkbox"/> Other (specify) |

ii. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the contractor will be responsible for its implementation as indicated. The contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the permit. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls

1. **Stabilized 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 but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(A)(1)(a) and II(A)(3), 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 7 days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of 14 or more calendar days.

Where the initiation of stabilization measures by the 7th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

The following Stabilization Practices will be used for this project:

- | | |
|---|--|
| <input type="checkbox"/> Preservation of Mature Vegetation | <input checked="" type="checkbox"/> Erosion Control Blanket / Mulching |
| <input type="checkbox"/> Vegetated Buffer Strips | <input checked="" type="checkbox"/> Sodding |
| <input checked="" type="checkbox"/> Protection of Trees | <input checked="" type="checkbox"/> Geotextiles |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7) | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Mulching | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Permanent Seeding | <input type="checkbox"/> Other (specify) |

Describe how the Stabilization Practices listed above will be utilized during construction:

Protection of Trees - This item shall consist of "tree trunk protection" as shown on the plans or directed by the Engineer and in accordance with article 201.05 of the Illinois Department of Transportation's Standard Specifications for Road and Bridge.

Temporary Erosion Control Seeding - This item will be applied to all bare areas every 7 days to minimize the amount of exposed surface areas.

Permanent Seeding - Seeding Class 2A will be installed per IDOT Specifications.

Erosion Control Blanket/Mulching - Erosion control blankets will be installed over fill slopes and high velocity areas that have been brought to final grade and seeded to protect slopes from erosion and allow seeds to germinate.

Sodding - Sodding, salt tolerant, will be placed according to the landscaping plans and is to be installed per IDOT Specifications.

Describe how the Stabilization Practices listed above will be utilized after construction activities have been completed:

Protection of Trees - Once construction is complete in the area of the trees that are protected, the temporary protection will be removed.

Temporary Erosion Control Seeding - Temporary erosion control seeding will not be used as a permanent erosion control measure. Permanent seeding and sodding will be placed in accordance with the landscaping plans as means of permanent erosion control measures.

Permanent Seeding - Seeding Class 2A will be utilized as a permanent erosion control method and shall be placed as shown in the landscaping plans.

***Erosion Control Blanket/Mulching - Erosion control blankets will remain until the permanent seeding has germinated.

Sodding - Sodding, salt tolerant, is a permanent erosion control practice and will be placed as shown on the landscaping plan sheets.

2. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, and rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following Structural Practices will be used for this project:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Rock Outlet Protection |
| <input checked="" type="checkbox"/> Temporary Ditch Check | <input checked="" type="checkbox"/> Riprap |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions |
| <input type="checkbox"/> Sediment Trap | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Temporary Pipe Slope Drain | <input type="checkbox"/> Retaining Walls |
| <input type="checkbox"/> Temporary Sediment Basin | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Temporary Stream Crossing | <input type="checkbox"/> Concrete Revetment Mats |

- | | |
|--|--|
| <input type="checkbox"/> Stabilized Construction Exits | <input type="checkbox"/> Level Spreaders |
| <input type="checkbox"/> Turf Reinforcement Mats | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (specify) |

Describe how the Structural Practices listed above will be utilized during construction:

Perimeter Erosion Barrier - Silt fence will be placed along the bank contours of various locations in an effort to contain the silt and runoff from leaving the site. All structural practices are shown on the Erosion Control Plans for details.

Temporary Ditch Checks - Ditch checks will be placed at the location of the proposed multi-use path on the east bank, until the path is constructed.

Storm Drain Inlet Protection - Inlet and pipe protection will be provided for storm sewer inlets and open manholes. Sediment filters will be placed in all inlets and manholes during construction and will be cleaned on a regular basis.

Riprap - Stone riprap with filter fabric will be used as protection at the outlet end of all culvert end sections to prevent scouring at the end of outlets and minimize downstream erosion.

Describe how the Structural Practices listed above will be utilized after construction activities have been completed:

Perimeter Erosion Barrier - Silt fence that is placed during construction will be removed after the upslope areas have been permanently stabilized.

Temporary Ditch Checks - Ditch checks will be removed once the multi-use path is constructed.

Storm Drain Inlet Protection - Inlet and pipe protection will be removed upon completion of construction activities.

Riprap - Stone riprap with filter fabric is a permanent erosion control item and will remain in place after project construction is complete.

3. **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.

- a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the Illinois Department of Transportation Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

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

Description of Storm Water Management Controls:

The Phase II drainage design performed by CMT has determined that no storm water detention is required for proposed storm sewer outlets to be constructed for this project.

4. **Approved State or Local Laws:** The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under 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:

All management practices, controls, and other provisions provided in this plan are in accordance with IDOT Standard Specifications for Road and Bridge Construction, the Illinois Urban Manual, and City of Rockford Specifications and Standard Drawings.

5. **Contractor Required Submittals**

- a. Contractor is to provide a Construction Schedule containing an adequate level of detail to show major activities with implementation of Pollution Prevention BMPs, including the following items:

- Approximate duration of the project, including each stage of the project
- Rainy season, dry season, and winter shutdown dates
- Temporary stabilization measures to be employed by contract phases
- Mobilization timeframe
- Mass clearing and grubbing/roadside clearing dates
- Deployment of Erosion Control Practices
- Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
- Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
- Paving, saw-cutting, and any other pavement related operations
- Major planned stockpiling operations
- Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
- Permanent stabilization activities for each area of the project

- b. Contractor is to provide a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
- Stockpile Management – Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal – Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
- Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.

III. Maintenance:

The Resident Engineer will provide maintenance guides to the contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan.

The Illinois Urban Manual (Current Edition – 2010)

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using the Department's Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inch or greater or equivalent snowfall.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within 24 hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Noncompliance" (ION) report for the identified violation within 5 days of the incident. The Resident Engineer 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 Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attn: Compliance Assurance Section
1021 North Grand East
Post Office Box 19276
Springfield, Illinois 62794-9276

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the contractor and/or penalties under the NPDES permit which could be passed on to the contractor.



The Resident Engineer is to make copies of this form and every contractor and sub-contractor will be required to complete their own separate form.

Route	<u>FAU Route 5077 (Morgan St. /College Ave.</u>	Marked Rte.	<u>Morgan Street & College Avenue</u>
Section	<u>99-00493-00-BR</u>	Project No.	<u>BRM-5099(65)</u>
County	<u>Winnebago</u>	Contract No.	<u>85529</u>

This certification statement is part of the Storm Water Pollution Prevention Plan for the project described above, in accordance with General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the 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.

In addition, I have read and understand all of the information and requirements stated in the Storm Water Pollution Prevention Plan for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the ILR10 and Storm Water Pollution Prevention Plan and will provide timely updates to these documents as necessary.

- Contractor
- Sub-Contractor

Print Name

Title

Name of Firm

Street Address

Signature

Date

Telephone

City/State/ZIP



FACT SHEET NO. 6(IL)

US Army Corps
of Engineers
Rock Island District

NATIONWIDE PERMITS IN ILLINOIS

EFFECTIVE DATE: MARCH 19, 2007

On March 12, 2007, the Corps of Engineers published in the Federal Register (72 FR 11092), the Final Rule for the Nationwide Permits Program under the Rivers and Harbors Act of 1899; the Clean Water Act; and the Marine Protection, Research and Sanctuaries Act. These rules became effective on March 19, 2007.

The Nationwide Permit Program is an integral part of the Corps' Regulatory Program. The Nationwide Permits are a form of general permits issued by the Chief of Engineers and are intended to apply throughout the entire United States and its territories. A listing of the nationwide permits and general conditions is included herein. We encourage prospective permit applicants to consider the advantages of nationwide permit authorization during the preliminary design of their projects. Assistance and further information regarding all aspects of the Corps of Engineers Regulatory Program may be obtained by contacting the appropriate Corps of Engineers District at the address and/or telephone number listed on the last page of this Fact Sheet.

To ensure projects authorized by a Nationwide Permit will result in minimal adverse effects to the aquatic environment, the following Regional Conditions were developed for projects proposed within the state of Illinois except for Chicago District (See NOTE below):

1. Bank stabilization projects involving armoring of the streambank with riprap or the construction of retaining walls within High Value Subwatersheds exceeding 250 feet will require a PCN to the Corps of Engineers in accordance with General Condition No. 27.
2. A proposed activity to be authorized under Nationwide Permits 12 or 14 within the Cache River Wetlands Areas (Alexander and Pulaski Counties), Kaskaskia River (Clinton, St. Clair, and Washington Counties), or Wabash River (Gallatin and White Counties) will require a PCN to the Corps of Engineers in accordance with General Condition No. 27.
3. Stormwater management facilities shall not be located within an intermittent stream, except for NWPs 21, 49, or 50.
4. For newly constructed channels through areas that are unvegetated, native grass filter strips, or a riparian buffer with native trees or shrubs a minimum of 25 feet wide from the top of bank must be planted along both sides of the new channel.
5. For a single family residence authorized under Nationwide Permit No. 29, the permanent loss of waters of the United States (including jurisdictional wetlands) must not exceed 1/4 acre.
6. For NWP 46, the discharge of dredged or fill material into ditches and canals that would sever the jurisdiction of an upstream water of the United States from a downstream water of the United States is not allowed.

NOTE: The Chicago District has suspended many of the Nationwide Permits and established regional permits for work in McHenry, Kane, Lake, DuPage, Will and Cook Counties in Illinois. Information regarding Chicago District requirements can be accessed through their website at <http://www.lrc.usace.army.mil/co-r/>. If you have any questions regarding the Chicago District proposal, please contact Mr. Paul Leffler, Project Manager, by telephone at 312/846-5529, or e-mail paul.m.leffler@usace.army.mil.

Permits, issued by the Corps of Engineers, under the authority of Section 404 of the Clean Water Act may not be issued until the state (where the discharge will occur) certifies, under Section 401 of the Act, that the discharge will comply with the water quality standards of the State.

DENIED NATIONWIDE PERMITS

The Illinois Environmental Protection Agency (IEPA) did not issue a generic water quality certification for the following nationwide permits which are listed by subject only:

15. U.S. Coast Guard Approved Bridges
16. Return Water From Upland Contained Disposal Areas
17. Hydropower Projects
18. Minor Discharges
19. Minor Dredging
21. Surface Coal Mining Activities
23. Approved Categorical Exclusions
25. Structural Discharges
29. Residential Development

30. Moist Soil Management for Wildlife
31. Maintenance of Existing Flood Control Facilities
32. Completed Enforcement Actions
34. Cranberry Production Activities
37. Emergency Watershed Protection and Rehabilitation
39. Commercial and Institutional Developments
40. Agricultural Activities
42. Recreational Facilities
43. Stormwater Management Facilities
44. Mining Activities
48. Commercial Shellfish Aquaculture Activities
49. Coal Remining Activities
50. Underground Coal Mining Activities

Since Nationwide Permits 18, 19, 21, 23, 29, 31, 32, 37, 39, 44, 48, 49, and 50 are applicable under both Section 10 and 404, the State Section 401 certification is only required for discharges of pollutants under these nationwide permits. Section 10 work not involving discharges of dredged or fill material continues to be authorized under these nationwide permits.

Authorization for discharges covered by all the above nationwide permits is denied without prejudice. Applicants wishing to conduct such discharges must first obtain either an individual water quality certification or waiver from:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

If the state certifying agency fails to act on an application for water quality certification within 60 days after receipt, the certification requirement is presumed to be waived. The applicant must furnish the District Engineer (at the appropriate address listed on the last page of the Fact Sheet) with a copy of the certification or proof of waiver. The discharge may proceed upon receipt of the District Engineer's determination that the discharge qualifies for authorization under this nationwide permit. Details of this procedure are contained in 33 CFR 330.4, a copy of which is available upon request.

Nationwide Permits 3, 7, 8, 12, 13, 14, 17, 18, 21, 22, 27, 29, 31, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 49, and 50 require that the permittee notify the District Engineer at least 45 days prior to performing the discharge under certain circumstances. Specific instructions for these notifications are contained in General Condition 27, a copy of which is included.

Nationwide Permits and Conditions

The following is a list of the nationwide permits, authorized by the Chief of Engineers, and published in the Federal Register (72 FR 11092) and (72 FR 26082). Permittees wishing to conduct activities under the nationwide permits must comply with the conditions published in Section C. The Nationwide Permit General Conditions found in Section C have been reprinted at the end of this Fact Sheet. The parenthetical references (Section 10, Section 404) following each nationwide permit indicate the specific authorities under which that permit is issued.

B. Nationwide Permits

1. Aids to Navigation. The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard (see 33 CFR, chapter I, subchapter C, part 66). (Section 10)

2. Structures in Artificial Canals. Structures constructed in artificial canals within principally residential developments where the connection of the canal to a navigable water of the United States has been previously authorized (see 33 CFR 322.5(g)). (Section 10)

3. Maintenance. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable, structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris in the vicinity of and within existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and the placement of new or additional riprap to protect the structure. The removal of sediment is limited to the minimum necessary to restore the waterway in the immediate vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend further than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated

sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an upland area unless otherwise specifically approved by the district engineer under separate authorization. The placement of riprap must be the minimum necessary to protect the structure or to ensure the safety of the structure. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the district engineer.

(c) This NWP also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation or beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). Where maintenance dredging is proposed, the pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Sections 10 and 404)

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 3. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 3 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 3, Maintenance.

1. The applicant shall not cause:
 - A. violation of applicable provisions of the Illinois Environmental Protection Act;
 - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - D. interference with water use practices near public recreation areas or water supply intakes.
 2. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
 3. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
 4. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
 5. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant for Nationwide 3 shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant for Nationwide 3 shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
 6. The applicant for Nationwide 3 shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
 7. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
 8. The applicant for Nationwide 3 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.
4. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities.
Fish and wildlife harvesting devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, duck blinds, and clam and oyster digging, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). This NWP does not authorize artificial reefs or impoundments and semi-impoundments of waters of the United States for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks. (Sections 10 and 404)

5. Scientific Measurement Devices. Devices, whose purpose is to measure and record scientific data, such as staff gages, tide gages, water recording devices, water quality testing and improvement devices, and similar structures. Small weirs and flumes constructed primarily to record water quantity and velocity are also authorized provided the discharge is limited to 25 cubic yards. (Sections 10 and 404)

6. Survey Activities. Survey activities, such as core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, exploratory trenching, soil surveys, sampling, and historic resources surveys. For the purposes of this NWP, the term "exploratory trenching" means mechanical land clearing of the upper soil profile to expose bedrock or substrate, for the purpose of mapping or sampling the exposed material. The area in which the exploratory trench is dug must be restored to its pre-construction elevation upon completion of the work. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. This NWP authorizes the construction of temporary pads, provided the discharge does not exceed 25 cubic yards. Discharges and structures associated with the recovery of historic resources are not authorized by this NWP. Drilling and the discharge of excavated material from test wells for oil and gas exploration are not authorized by this NWP; the plugging of such wells is authorized. Fill placed for roads and other similar activities is not authorized by this NWP. The NWP does not authorize any permanent structures. The discharge of drilling mud and cuttings may require a permit under Section 402 of the Clean Water Act. (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 6. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 6 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 6, Survey Activities.

1. The applicant shall not cause:
 - A. violation of applicable provisions of the Illinois Environmental Protection Act;
 - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - D. interference with water use practices near public recreation areas or water supply intakes.
2. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
3. Material resulting from trench excavation within surface waters of the State may be temporarily sidecast adjacent to the trench excavation provided that:
 - A. Sidecast material is not placed within a creek, stream, river or other flowing water body such that material dispersion could occur;
 - B. Side cast material is not placed within ponds or other water bodies other than wetlands; and
 - C. Sidecast material is not placed within a wetland for a period longer than twenty (20) calendar days. Such sidecast material shall either be removed from the site, or used as backfill (refer to Condition 4 and 5).
4. Backfill used within trenches passing through surface water of the State, except wetland areas, shall be clean coarse aggregate, gravel or other material which will not cause siltation. Excavated material may be used only if:
 - A. Particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using a #230 U.S. sieve; or
 - B. Excavation and backfilling are done under dry conditions.
5. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
6. Temporary work pads shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
7. The applicant for Nationwide 6 that uses temporary work pads in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.

7. Outfall Structures and Associated Intake Structures. Activities related to the construction or modification of outfall structures and associated intake structures, where the effluent from the outfall is authorized, conditionally authorized, or specifically exempted by, or that are otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System Program (Section 402 of the Clean Water Act). The construction of intake structures is not authorized by this NWP, unless they are directly associated with an authorized outfall structure.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Sections 10 and 404)

8. Oil and Gas Structures on the Outer Continental Shelf. Structures for the exploration, production, and transportation of oil, gas, and minerals on the outer continental shelf within areas leased for such purposes by the Department of the Interior, Minerals Management Service. Such structures shall not be placed within the limits of any designated shipping safety fairway or traffic separation scheme, except temporary anchors that comply with the fairway regulations in 33 CFR 322.5(l). The district engineer will review such proposals to ensure compliance with the provisions of the fairway regulations in 33 CFR 322.5(l). Any Corps review under this NWP will be limited to the effects on navigation and national security in accordance with 33 CFR 322.5(f). Such structures will not be placed in established danger zones or restricted areas as designated in 33 CFR part 334, nor will such structures be permitted in EPA or Corps designated dredged material disposal areas.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Section 10)

9. Structures in Fleeting and Anchorage Areas. Structures, buoys, floats and other devices placed within anchorage or fleeting areas to facilitate moorage of vessels where the U.S. Coast Guard has established such areas for that purpose. (Section 10)

10. Mooring Buoys. Non-commercial, single-boat, mooring buoys. (Section 10)

11. Temporary Recreational Structures. Temporary buoys, markers, small floating docks, and similar structures placed for recreational use during specific events such as water skiing competitions and boat races or seasonal use, provided that such structures are removed within 30 days after use has been discontinued. At Corps of Engineers reservoirs, the reservoir manager must approve each buoy or marker individually. (Section 10)

12. Utility Line Activities. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2 acre of waters of the United States.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in pre-construction contours. A "utility line" is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line" does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2 acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the total discharge from a single and complete project does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if any of the following criteria are met: (1) the activity involves mechanized land clearing in a forested wetland for the utility line right-of-way; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 27.) (Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters), copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 12. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 12 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 12, Utility Line Activities.

1. Case-specific water quality certification from the Illinois EPA will be required for activities in the following waters:
 - A. Chicago Sanitary and Ship Canal
 - B. Calumet-Sag Channel
 - C. Little Calumet River
 - D. Grand Calumet River
 - E. Calumet River
 - F. South Branch of the Chicago River (including the South Fork)
 - G. North Branch of the Chicago River (including the East and West Forks and the Skokie Lagoons)
 - H. Chicago River (Main Stem)
 - I. Lake Calumet
 - J. Des Plaines River
 - K. Fox River (including the Fox Chain of Lakes)
 - L. Saline River (in Hardin County)
 - M. Richland Creek (in St. Clair and Monroe Counties)
 - N. Lake Michigan
 - O. Rock River (in Winnebago County)
 - P. Illinois River upstream of mile 229.6 (Illinois Route 178 bridge)
 - Q. Illinois River between mile 140.0 and 182.0
 - R. Pettibone Creek (in Lake County)
 - S. DuPage River (including the East and West Branches)
 - T. Salt Creek (Des Plaines River Watershed)
 - U. Waukegan River (including the South Branch)
 - V. All Public and Food Processing Water Supplies with surface intake facilities. The Illinois EPA's Bureau of Water, Watershed Management Section at 217/782-3362 may be contacted for information on these water supplies.

2. Section 401 is hereby issued for all other waters, with the following conditions:

- A. The applicant for Nationwide Permit 12 shall not cause:
 - i. violation of applicable provisions of the Illinois Environmental Protection Act;
 - ii. water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - iii. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - iv. interference with water use practices near public recreation areas or water supply intakes.

B. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.

C. Material resulting from trench excavation within surface waters of the State may be temporarily sidecast adjacent to the trench excavation provided that:

- i. Sidecast material is not placed within a creek, stream, river or other flowing water body such that material dispersion could occur;
- ii. Side cast material is not placed within ponds or other water bodies other than wetlands; and
- iii. Sidecast material is not placed within a wetland for a period longer than twenty (20) calendar days. Such sidecast material shall either be removed from the site (refer to Condition 2.F), or used as backfill (refer to Condition 2.D and 2.E).

D. Backfill used within trenches passing through surface water of the State, except wetland areas, shall be clean coarse aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place.

Excavated material may be used only if:

- i. Particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using a #230 U.S. sieve; or
- ii. Excavation and backfilling are done under dry conditions.

E. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.

F. All material excavated which is not being used as backfill as stipulated in Condition 2.D and 2.E shall be stored or disposed in self-contained areas with no discharge to waters of the State. Material shall be disposed of appropriately under the regulations at 35 Il. Adm. Code Subtitle G.

G. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant for Nationwide 12 shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant for Nationwide 12 shall be responsible for obtaining an NPDES Storm Water Permit required by the federal Clean Water Act prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.

H. The applicant for Nationwide 12 shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).

I. The use of directional drilling to install utility pipelines below surface waters of the State is hereby certified provided that:

- i. All pits and other construction necessary for the directional drilling process are located outside of surface waters of the State;
- ii. All drilling fluids shall be adequately contained such that they cannot make their way to surface waters of the State. Such fluids shall be treated as stipulated in Condition 2.F; and
- iii. Erosion and sediment control is provided in accordance with Conditions 2.B, 2.G, and 2.H.

J. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Material excavated or dredged from the surface water or wetland shall not be used to construct the temporary facility. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.

K. The applicant for Nationwide 12 that uses temporary work pads, cofferdams, access roads or other temporary fills in order to perform work in creeks, streams, or rivers for construction activities shall maintain flow in the these waters during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.

L. Permanent access roads shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Material excavated or dredged from the surface water or wetland shall not be used to construct the access road in waters of the state. The applicant for Nationwide 12 that constructs access roads shall maintain flow in creeks, streams and rivers by installing culverts, bridges or other such techniques.

M. Case specific water quality certification from the Illinois EPA will be required for projects that involve dredge and fill activities in bogs, fens or forested wetlands defined as follows:

- i. A bog is a low nutrient peatland, usually in a glacial depression, that is acidic in the surface stratum and often dominated at least in part by the genus *Sphagnum*. P.
- ii. A fen is a peatland, herbaceous (including calcareous floating mats) or

- wooded, with calcareous groundwater flow.
- iii. A forested wetland is a wetland dominated by native woody vegetation with at least one of the following species or genera present: *carya spp.*, *cephalanthus occidentalis*, *Cornus alternifolia*, *Fraxinus nigra*, *Juglans cinerea*, *Nyssa sylvatica*, *Quercus spp.*, *Thuja occidentalis*, *Betula nigra*, *Betula alleghaniensis*, *Betula papyrifera*, *Fagus grandifolia*.

13. Bank Stabilization. Bank stabilization activities necessary for erosion prevention, provided the activity meets all of the following criteria:

- (a) No material is placed in excess of the minimum needed for erosion protection;
- (b) The activity is no more than 500 feet in length along the bank, unless this criterion is waived in writing by the district engineer;
- (c) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line, unless this criterion is waived in writing by the district engineer;
- (d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless this criterion is waived in writing by the district engineer;
- (e) No material is of the type, or is placed in any location, or in any manner, to impair surface water flow into or out of any water of the United States;
- (f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and;
- (g) The activity is not a stream channelization activity.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) involves discharges into special aquatic sites; (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot along the bank below the plane of the ordinary high water mark or the high tide line. (See general condition 27.) (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 13. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 13 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 13, Bank Stabilization.

1. The bank stabilization activities shall not exceed 500 linear feet.
2. Asphalt, bituminous material and concrete with protruding material such as reinforcing bars or mesh shall not be:
 - A. used for backfill;
 - B. placed on shorelines/streambanks; or
 - C. placed in waters of the State.
3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
4. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
5. The applicant shall consider installing bioengineering practices in lieu of structural practices of bank stabilization to minimize impacts to the lake, pond, river or stream and enhance aquatic habitat. Bioengineering techniques may include, but are not limited to:
 - A. adequately sized riprap or A-Jack structures keyed into the toe of the slope with native plantings on the banks above;
 - B. vegetated geogrids;
 - C. coconut fiber (coir) logs;
 - D. live, woody vegetative cuttings, fascines or stumps;
 - E. brush layering; and
 - F. soil lifts.

14. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train

stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) the loss of waters of the United States exceeds 1/10 acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 14. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 14 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 14, Linear Transportation Projects.

1. The affected area of the stream channel shall not exceed 100 linear feet, as measured along the stream corridor.
2. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
3. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
4. The applicant shall not cause:
 - A. violation of applicable provisions of the Illinois Environmental Protection Act;
 - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - D. interference with water use practices near public recreation areas or water supply intakes.
5. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
6. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
7. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
8. The applicant for Nationwide Permit 14 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.
9. Case specific water quality certification from the Illinois EPA will be required for projects that involve dredge and fill activities in bogs, fens or forested wetlands defined as follows:
 - A. A bog is a low nutrient peatland, usually in a glacial depression, that is acidic in the surface stratum and often dominated at least in part by the genus *Sphagnum*. P.
 - B. A fen is a peatland, herbaceous (including calcareous floating mats) or wooded, with calcareous groundwater flow.
 - C. A forested wetland is a wetland dominated by native woody vegetation with at least one of the following species or genera present: *carya spp.*, *cephalanthus occidentalis*, *Cornus alternifolia*, *Fraxinus nigra*, *Juglans cinerea*, *Nyssa sylvatica*, *Quercus spp.*, *Thuja occidentalis*, *Betula nigra*, *Betula alleghaniensis*, *Betula papyrifera*, *Fagus grandifolia*.
- *** 15. U.S. Coast Guard Approved Bridges. Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the United States, including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills, provided such discharges have been authorized by the U.S. Coast Guard as part of the bridge permit. Causeways and approach fills are not included in this NWP and will require a separate section 404 permit. (Section 404)
- *** 16. Return Water From Upland Contained Disposal Areas. Return water from an upland contained dredged material disposal area. The return water from a contained disposal area is administratively defined as a discharge of dredged material by 33 CFR 323.2(d), even though the

disposal itself occurs on the upland and does not require a section 404 permit. This NWP satisfies the technical requirement for a section 404 permit for the return water where the quality of the return water is controlled by the state through the section 401 certification procedures. The dredging activity may require a section 404 permit (33 CFR 323.2(d)), and will require a section 10 permit if located in navigable waters of the United States. (Section 404)

*** 17. Hydropower Projects. Discharges of dredged or fill material associated with hydropower projects having: (a) Less than 5000 kW of total generating capacity at existing reservoirs, where the project, including the fill, is licensed by the Federal Energy Regulatory Commission (FERC) under the Federal Power Act of 1920, as amended; or (b) a licensing exemption granted by the FERC pursuant to Section 408 of the Energy Security Act of 1980 (16 U.S.C. 2705 and 2708) and Section 30 of the Federal Power Act, as amended.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Section 404)

*** 18. Minor Discharges. Minor discharges of dredged or fill material into all waters of the United States, provided the activity meets all of the following criteria:

(a) The quantity of discharged material and the volume of area excavated do not exceed 25 cubic yards below the plane of the ordinary high water mark or the high tide line;

(b) The discharge will not cause the loss of more than 1/10 acre of waters of the United States; and

(c) The discharge is not placed for the purpose of a stream diversion.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The discharge or the volume of area excavated exceeds 10 cubic yards below the plane of the ordinary high water mark or the high tide line, or (2) the discharge is in a special aquatic site, including wetlands. (See general condition 27.) (Sections 10 and 404).

*** 19. Minor Dredging. Dredging of no more than 25 cubic yards below the plane of the ordinary high water mark or the mean high water mark from navigable waters of the United States (i.e., section 10 waters). This NWP does not authorize the dredging or degradation through siltation of coral reefs, sites that support submerged aquatic vegetation (including sites where submerged aquatic vegetation is documented to exist but may not be present in a given year), anadromous fish spawning areas, or wetlands, or the connection of canals or other artificial waterways to navigable waters of the United States (see 33 CFR 322.5(g)). (Sections 10 and 404)

20. Oil Spill Cleanup. Activities required for the containment and cleanup of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR part 300) provided that the work is done in accordance with the Spill Control and Countermeasure Plan required by 40 CFR 112.3 and any existing state contingency plan and provided that the Regional Response Team (if one exists in the area) concurs with the proposed containment and cleanup action. This NWP also authorizes activities required for the cleanup of oil releases in waters of the United States from electrical equipment that are governed by EPA's polychlorinated biphenyl spill response regulations at 40 CFR Part 761. (Sections 10 and 404)

*** 21. Surface Coal Mining Operations. Discharges of dredged or fill material into waters of the United States associated with surface coal mining and reclamation operations provided the activities are already authorized, or are currently being processed as part of an integrated permit processing procedure, by the Department of Interior (DOI), Office of Surface Mining (OSM), or by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977.

Notification: The permittee must submit a pre-construction notification to the district engineer and receive written authorization prior to commencing the activity. (See general condition 27.) (Sections 10 and 404)

22. Removal of Vessels. Temporary structures or minor discharges of dredged or fill material required for the removal of wrecked, abandoned, or disabled vessels, or the removal of man-made obstructions to navigation. This NWP does not authorize maintenance dredging, shoal removal, or riverbank snagging.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The vessel is listed or eligible for listing in the National Register of Historic Places; or (2) the activity is conducted in a special aquatic site, including coral reefs and wetlands. (See general condition 27.) If condition 1 above is triggered, the permittee cannot commence the activity until informed by the district engineer that compliance with the "Historic Properties" general condition is completed. (Sections 10 and 404)

Note 1: If a removed vessel is disposed of in waters of the United States, a permit from the U.S. EPA may be required (see 40 CFR 229.3). If a Department of the Army permit is required for vessel disposal in waters of the United States, separate authorization will be required.

Note 2: Compliance with general condition 17, Endangered Species, and general condition 18, Historic Properties, is required for all NWPs. The concern with historic properties is emphasized in the notification requirements for this NWP because of the likelihood that submerged vessels may be historic properties.

*** 23. Approved Categorical Exclusions. Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where:

(a) That agency or department has determined, pursuant to the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (40 CFR part 1500 et seq.), that the activity is categorically excluded from environmental documentation, because it is included within a category of actions which neither individually nor cumulatively

have a significant effect on the human environment; and

(b) The Office of the Chief of Engineers (Attn: CECW-CO) has concurred with that agency's or department's determination that the activity is categorically excluded and approved the activity for authorization under NWP 23.

The Office of the Chief of Engineers may require additional conditions, including pre-construction notification, for authorization of an agency's categorical exclusions under this NWP.

Notification: Certain categorical exclusions approved for authorization under this NWP require the permittee to submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). The activities that require pre-construction notification are listed in the appropriate Regulatory Guidance Letters. (Sections 10 and 404)

Note: The agency or department may submit an application for an activity believed to be categorically excluded to the Office of the Chief of Engineers (Attn: CECW-CO). Prior to approval for authorization under this NWP of any agency's activity, the Office of the Chief of Engineers will solicit public comment. As of the date of issuance of this NWP, agencies with approved categorical exclusions are the: Bureau of Reclamation, Federal Highway Administration, and U.S. Coast Guard. Activities approved for authorization under this NWP as of the date of this notice are found in Corps Regulatory Guidance Letter 05-07, which is available at: <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/rxlsindx.htm>. Any future approved categorical exclusions will be announced in Regulatory Guidance Letters and posted on this same web site.

24. Indian Tribe or State Administered Section 404 Programs. Any activity permitted by a state or Indian Tribe administering its own section 404 permit program pursuant to 33 U.S.C. 1344(g)-(1) is permitted pursuant to Section 10 of the Rivers and Harbors Act of 1899. (Section 10)

Note 1: As of the date of the promulgation of this NWP, only New Jersey and Michigan administer their own section 404 permit programs.

Note 2: Those activities that do not involve an Indian Tribe or State section 404 permit are not included in this NWP, but certain structures will be exempted by Section 154 of Pub. L. 94-587, 90 Stat. 2917 (33 U.S.C. 591) (see 33 CFR 322.4(b)).

*** 25. Structural Discharges. Discharges of material such as concrete, sand, rock, etc., into tightly sealed forms or cells where the material will be used as a structural member for standard pile supported structures, such as bridges, transmission line footings, and walkways, or for general navigation, such as mooring cells, including the excavation of bottom material from within the form prior to the discharge of concrete, sand, rock, etc. This NWP does not authorize filled structural members that would support buildings, building pads, homes, house pads, parking areas, storage areas and other such structures. The structure itself may require a section 10 permit if located in navigable waters of the United States. (Section 404)

26. [Reserved]

27. Aquatic Habitat Restoration, Establishment, and Enhancement Activities. Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas and the restoration and enhancement of non-tidal streams and other non-tidal open waters, provided those activities result in net increases in aquatic resource functions and services.

To the extent that a Corps permit is required, activities authorized by this NWP include, but are not limited to: the removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels and drainage ditches; the removal of existing drainage structures; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

This NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands and streams, on the project site provided there are net increases in aquatic resource functions and services.

Except for the relocation of non-tidal waters on the project site, this NWP does not authorize the conversion of a stream or natural wetlands to another aquatic habitat type (e.g., stream to wetland or vice versa) or uplands. This NWP does not authorize stream channelization. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments.

Reversion. For enhancement, restoration, and establishment activities conducted: (1) In accordance with the terms and conditions of a binding wetland enhancement, restoration, or establishment agreement between the landowner and the U.S. Fish and Wildlife Service (FWS), the Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), the National Marine Fisheries Service (NMFS), the National Ocean Service (NOS), or their designated state cooperating agencies; (2) as voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (3) on reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the OSM or the applicable state agency, this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or establishment activities). The reversion must occur within five years after expiration of a limited term wetland restoration or establishment agreement or permit, and is authorized in these

circumstances even if the discharge occurs after this NWP expires. The five-year reversion limit does not apply to agreements without time limits reached between the landowner and the FWS, NRCS, FSA, NMFS, NOS, or an appropriate state cooperating agency. This NWP also authorizes discharges of dredged or fill material in waters of the United States for the reversion of wetlands that were restored, enhanced, or established on prior-converted cropland that has not been abandoned or on uplands, in accordance with a binding agreement between the landowner and NRCS, FSA, FWS, or their designated state cooperating agencies (even though the restoration, enhancement, or establishment activity did not require a section 404 permit). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before conducting any reversion activity the permittee or the appropriate Federal or state agency must notify the district engineer and include the documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements are applicable to that type of land at the time. The requirement that the activity result in a net increase in aquatic resource functions and services does not apply to reversion activities meeting the above conditions. Except for the activities described above, this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion.

Reporting: For those activities that do not require pre-construction notification, the permittee must submit to the district engineer a copy of: (1) The binding wetland enhancement, restoration, or establishment agreement, or a project description, including project plans and location map; (2) the NRCS or USDA Technical Service Provider documentation for the voluntary wetland restoration, enhancement, or establishment action; or (3) the SMCRA permit issued by OSM or the applicable state agency. These documents must be submitted to the district engineer at least 30 days prior to commencing activities in waters of the United States authorized by this NWP.

Notification. The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27), except for the following activities:

(1) Activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding wetland enhancement, restoration, or establishment agreement between the landowner and the U.S. FWS, NRCS, FSA, NMFS, NOS, or their designated state cooperating agencies;

(2) Voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards;

or
(3) The reclamation of surface coal mine lands, in accordance with an SMCRA permit issued by the OSM or the applicable state agency.

However, the permittee must submit a copy of the appropriate documentation:
(Sections 10 and 404)

Note: This NWP can be used to authorize compensatory mitigation projects, including mitigation banks and in-lieu fee programs. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition, since compensatory mitigation is generally intended to be permanent.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 27. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 27 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 27, Aquatic Habitat Restoration, Establishment, and Enhancement Activities. All activities conducted under NWP 27 shall be in accordance with the provisions of 35 Ill. Adm. Code 405.108. Work in reclaimed surface coal mine areas are required to obtain prior authorization from the Illinois EPA for any activities that result in the use of acid-producing mine refuse.

28. Modifications of Existing Marinas. Reconfiguration of existing docking facilities within an authorized marina area. No dredging, additional slips, dock spaces, or expansion of any kind within waters of the United States is authorized by this NWP. (Section 10)

***** 29. Residential Developments.** Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of a single residence, a multiple unit residential development, or a residential subdivision. This NWP authorizes the construction of building foundations and building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds this 300 linear foot limit is waived in writing by the district engineer. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Subdivisions: For residential subdivisions, the aggregate total loss of waters of United States authorized by this NWP cannot exceed 1/2 acre. This includes any loss of waters of the United States associated with development of individual subdivision lots.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Sections 10 and 404)

***** 30. Moist Soil Management for Wildlife.** Discharges of dredged or fill material into non-tidal waters of the United States and maintenance activities that are associated with moist soil

management for wildlife for the purpose of continuing ongoing, site-specific, wildlife management activities where soil manipulation is used to manage habitat and feeding areas for wildlife. Such activities include, but are not limited to, plowing or discing to impede succession, preparing seed beds, or establishing fire breaks. Sufficient riparian areas must be maintained adjacent to all open water bodies, including streams to preclude water quality degradation due to erosion and sedimentation. This NWP does not authorize the construction of new dikes, roads, water control structures, or similar features associated with the management areas. The activity must not result in a net loss of aquatic resource functions and services. This NWP does not authorize the conversion of wetlands to uplands, impoundments, or other open water bodies. (Section 404)

Note: The repair, maintenance, or replacement of existing water control structures or the repair or maintenance of dikes may be authorized by NWP 3. Some such activities may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

*** 31. Maintenance of Existing Flood Control Facilities. Discharges of dredged or fill material resulting from activities associated with the maintenance of existing flood control facilities, including debris basins, retention/detention basins, levees, and channels that: (i) were previously authorized by the Corps by individual permit, general permit, by 33 CFR 330.3, or did not require a permit at the time they were constructed, or (ii) were constructed by the Corps and transferred to a non-Federal sponsor for operation and maintenance. Activities authorized by this NWP are limited to those resulting from maintenance activities that are conducted within the "maintenance baseline," as described in the definition below. Discharges of dredged or fill materials associated with maintenance activities in flood control facilities in any watercourse that have previously been determined to be within the maintenance baseline are authorized under this NWP. This NWP does not authorize the removal of sediment and associated vegetation from natural water courses except when these activities have been included in the maintenance baseline. All dredged material must be placed in an upland site or an authorized disposal site in waters of the United States, and proper siltation controls must be used.

Maintenance Baseline: The maintenance baseline is a description of the physical characteristics (e.g., depth, width, length, location, configuration, or design flood capacity, etc.) of a flood control project within which maintenance activities are normally authorized by NWP 31, subject to any case-specific conditions required by the district engineer. The district engineer will approve the maintenance baseline based on the approved or constructed capacity of the flood control facility, whichever is smaller, including any areas where there are no constructed channels, but which are part of the facility. The prospective permittee will provide documentation of the physical characteristics of the flood control facility (which will normally consist of as-built or approved drawings) and documentation of the approved and constructed design capacities of the flood control facility. If no evidence of the constructed capacity exists, the approved capacity will be used. The documentation will also include best management practices to ensure that the impacts to the aquatic environment are minimal, especially in maintenance areas where there are no constructed channels. (The Corps may request maintenance records in areas where there has not been recent maintenance.) Revocation or modification of the final determination of the maintenance baseline can only be done in accordance with 33 CFR 330.5. Except in emergencies as described below, this NWP cannot be used until the district engineer approves the maintenance baseline and determines the need for mitigation and any regional or activity-specific conditions. Once determined, the maintenance baseline will remain valid for any subsequent reissuance of this NWP. This NWP does not authorize maintenance of a flood control facility that has been abandoned. A flood control facility will be considered abandoned if it has operated at a significantly reduced capacity without needed maintenance being accomplished in a timely manner.

Mitigation: The district engineer will determine any required mitigation one-time only for impacts associated with maintenance work at the same time that the maintenance baseline is approved. Such one-time mitigation will be required when necessary to ensure that adverse environmental impacts are no more than minimal, both individually and cumulatively. Such mitigation will only be required once for any specific reach of a flood control project. However, if one-time mitigation is required for impacts associated with maintenance activities, the district engineer will not delay needed maintenance, provided the district engineer and the permittee establish a schedule for identification, approval, development, construction and completion of any such required mitigation. Once the one-time mitigation described above has been completed, or a determination made that mitigation is not required, no further mitigation will be required for maintenance activities within the maintenance baseline. In determining appropriate mitigation, the district engineer will give special consideration to natural water courses that have been included in the maintenance baseline and require compensatory mitigation and/or best management practices as appropriate.

Emergency Situations: In emergency situations, this NWP may be used to authorize maintenance activities in flood control facilities for which no maintenance baseline has been approved. Emergency situations are those which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if action is not taken before a maintenance baseline can be approved. In such situations, the determination of mitigation requirements, if any, may be deferred until the emergency has been resolved. Once the emergency has ended, a maintenance baseline must be established expeditiously, and mitigation, including mitigation for maintenance conducted during the emergency, must be required as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer before any maintenance work is conducted (see general condition 27). The pre-construction notification may be for activity-specific maintenance or for maintenance of the entire flood control facility by submitting a five-year (or less) maintenance plan. The pre-construction notification must include a description of the maintenance baseline and the dredged material disposal site. (Sections 10 and 404)

*** 32. Completed Enforcement Actions. Any structure, work, or discharge of dredged or fill material remaining in place or undertaken for mitigation, restoration, or environmental benefit in compliance with either:

(i) The terms of a final written Corps non-judicial settlement agreement resolving a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899; or the terms of an EPA 309(a) order on consent resolving a violation of Section 404 of the Clean Water Act, provided that:

(a) The unauthorized activity affected no more than 5 acres of non-tidal waters or 1 acre of tidal waters;

(b) The settlement agreement provides for environmental benefits, to an equal or greater degree, than the environmental detriments caused by the unauthorized activity that is authorized by this NWP; and

(c) The district engineer issues a verification letter authorizing the activity subject to the terms and conditions of this NWP and the settlement agreement, including a specified completion date; or

(ii) The terms of a final Federal court decision, consent decree, or settlement agreement resulting from an enforcement action brought by the United States under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899; or

(iii) The terms of a final court decision, consent decree, settlement agreement, or non-judicial settlement agreement resulting from a natural resource damage claim brought by a trustee or trustees for natural resources (as defined by the National Contingency Plan at 40 CFR subpart G) under Section 311 of the Clean Water Act, Section 107 of the Comprehensive Environmental Response, Compensation and Liability Act, Section 312 of the National Marine Sanctuaries Act, Section 1002 of the Oil Pollution Act of 1990, or the Park System Resource Protection Act at 16 U.S.C. 19jj, to the extent that a Corps permit is required.

Compliance is a condition of the NWP itself. Any authorization under this NWP is automatically revoked if the permittee does not comply with the terms of this NWP or the terms of the court decision, consent decree, or judicial/non-judicial settlement agreement. This NWP does not apply to any activities occurring after the date of the decision, decree, or agreement that are not for the purpose of mitigation, restoration, or environmental benefit. Before reaching any settlement agreement, the Corps will ensure compliance with the provisions of 33 CFR part 326 and 33 CFR 330.6(d)(2) and (e). (Sections 10 and 404)

33. Temporary Construction, Access, and Dewatering. Temporary structures, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard. This NWP also authorizes temporary structures, work, and discharges, including cofferdams, necessary for construction activities not otherwise subject to the Corps or U.S. Coast Guard permit requirements. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if the district engineer determines that it will not cause more than minimal adverse effects on aquatic resources. Following completion of construction, temporary fill must be entirely removed to upland areas, dredged material must be returned to its original location, and the affected areas must be restored to pre-construction elevations. The affected areas must also be revegetated, as appropriate. This permit does not authorize the use of cofferdams to dewater wetlands or other aquatic areas to change their use. Structures left in place after construction is completed require a section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322.)

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). The pre-construction notification must include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 33. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 33 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 33, Temporary Construction, Access and Dewatering.

1. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
2. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
3. The applicant shall not cause:
 - A. violation of applicable provisions of the Illinois Environmental Protection Act;
 - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - D. interference with water use practices near public recreation areas or water supply intakes.
4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by

certified mail to the Agency's Division of Water Pollution Control, Permit Section.

5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).

6. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthfill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.

7. The applicant for Nationwide Permit 33 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.

*** 34. Cranberry Production Activities. Discharges of dredged or fill material for dikes, berms, pumps, water control structures or leveling of cranberry beds associated with expansion, enhancement, or modification activities at existing cranberry production operations. The cumulative total acreage of disturbance per cranberry production operation, including but not limited to, filling, flooding, ditching, or clearing, must not exceed 10 acres of waters of the United States, including wetlands. The activity must not result in a net loss of wetland acreage. This NWP does not authorize any discharge of dredged or fill material related to other cranberry production activities such as warehouses, processing facilities, or parking areas. For the purposes of this NWP, the cumulative total of 10 acres will be measured over the period that this NWP is valid.

Notification: The permittee must submit a pre-construction notification to the district engineer once during the period that this NWP is valid, and the NWP will then authorize discharges of dredge or fill material at an existing operation for the permit term, provided the 10-acre limit is not exceeded. (See general condition 27.) (Section 404)

35. Maintenance Dredging of Existing Basins. Excavation and removal of accumulated sediment for maintenance of existing marina basins, access channels to marinas or boat slips, and boat slips to previously authorized depths or controlling depths for ingress/egress, whichever is less, provided the dredged material is deposited at an upland site and proper siltation controls are used. (Section 10)

36. Boat Ramps. Activities required for the construction of boat ramps, provided the activity meets all of the following criteria:

(a) The discharge into waters of the United States does not exceed 50 cubic yards of concrete, rock, crushed stone or gravel into forms, or in the form of pre-cast concrete planks or slabs, unless the 50 cubic yard limit is waived in writing by the district engineer;

(b) The boat ramp does not exceed 20 feet in width, unless this criterion is waived in writing by the district engineer;

(c) The base material is crushed stone, gravel or other suitable material;

(d) The excavation is limited to the area necessary for site preparation and all excavated material is removed to the upland; and,

(e) No material is placed in special aquatic sites, including wetlands.

The use of unsuitable material that is structurally unstable is not authorized. If dredging in navigable waters of the United States is necessary to provide access to the boat ramp, the dredging may be authorized by another NWP, a regional general permit, or an individual permit.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The discharge into waters of the United States exceeds 50 cubic yards, or (2) the boat ramp exceeds 20 feet in width. (See general condition 27.) (Sections 10 and 404)

*** 37. Emergency Watershed Protection and Rehabilitation. Work done by or funded by:

(a) The Natural Resources Conservation Service for a situation requiring immediate action under its emergency Watershed Protection Program (7 CFR part 624);

(b) The U.S. Forest Service under its Burned-Area Emergency Rehabilitation Handbook (FSH 509.13);

(c) The Department of the Interior for wildland fire management burned area emergency stabilization and rehabilitation (DOI Manual part 620, Ch. 3);

(d) The Office of Surface Mining, or states with approved programs, for abandoned mine land reclamation activities under Title IV of the Surface Mining Control and Reclamation Act (30 CFR Subchapter R), where the activity does not involve coal extraction; or

(e) The Farm Service Agency under its Emergency Conservation Program (7 CFR part 701).

In general, the prospective permittee should wait until the district engineer issues an NWP verification before proceeding with the watershed protection and rehabilitation activity. However, in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur, the emergency watershed protection and rehabilitation activity may proceed immediately and the district engineer will consider the information in the pre-construction notification any comments received as a result of agency coordination to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 27). (Sections 10 and 404)

38. Cleanup of Hazardous and Toxic Waste. Specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Court ordered remedial action plans or related settlements are also authorized by this NWP. This NWP does not authorize the establishment of new disposal sites or the expansion of existing sites

used for the disposal of hazardous or toxic waste.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Sections 10 and 404)

Note: Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site by authority of CERCLA as approved or required by EPA, are not required to obtain permits under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 38. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 38 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 38, Cleanup of Hazardous and Toxic Waste.

1. The applicant shall not cause:

- A. violation of applicable provisions of the Illinois Environmental Protection Act;
- B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
- C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
- D. interference with water use practices near public recreation areas or water supply intakes.

2. In addition to any actions required of the NWP applicant with respect to the "Notification" General Condition 27, the applicant shall notify the Illinois EPA, Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL), for all cleanup activities under BOL jurisdiction or for which authorization or approval is sought from BOL for no further remedial action.

3. This certification for Nationwide Permit 38 is not valid for activities that do not require or will not receive authorization or approval from the BOL.

*** 39. Commercial and Institutional Developments. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of commercial and institutional building foundations and building pads and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include, but are not limited to, roads, parking lots, garages, yards, utility lines, storm water management facilities, and recreation facilities such as playgrounds and playing fields. Examples of commercial developments include retail stores, industrial facilities, restaurants, business parks, and shopping centers. Examples of institutional developments include schools, fire stations, government office buildings, judicial buildings, public works buildings, libraries, hospitals, and places of worship. The construction of new golf courses, new ski areas, or oil and gas wells is not authorized by this NWP.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed; unless for intermittent and ephemeral stream beds this 300 linear foot limit is waived in writing by the district engineer. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Sections 10 and 404)

*** 40. Agricultural Activities. Discharges of dredged or fill material into non-tidal waters of the United States for agricultural activities, including the construction of building pads for farm buildings. Authorized activities include the installation, placement, or construction of drainage tiles, ditches, or levees; mechanized land clearing; land leveling; the relocation of existing serviceable drainage ditches constructed in waters of the United States; and similar activities.

This NWP also authorizes the construction of farm ponds in non-tidal waters of the United States, excluding perennial streams, provided the farm pond is used solely for agricultural purposes. This NWP does not authorize the construction of aquaculture ponds.

This NWP also authorizes discharges of dredged or fill material into non-tidal waters of the United States to relocate existing serviceable drainage ditches constructed in non-tidal streams.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. This NWP does not authorize the relocation of greater than 300 linear feet of existing serviceable drainage ditches constructed in non-tidal streams, unless for drainage ditches constructed in intermittent and ephemeral streams, this 300 linear foot limit is waived in writing by the district engineer.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Section 404)

Note: Some discharges for agricultural activities may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4). This NWP authorizes the construction of farm ponds that do not qualify for the Clean Water Act Section 404(f)(1)(C) exemption because of the recapture provision at Section 404(f)(2).

41. Reshaping Existing Drainage Ditches. Discharges of dredged or fill material into non-tidal waters of the United States, excluding non-tidal wetlands adjacent to tidal waters, to modify the cross-sectional configuration of currently serviceable drainage ditches constructed in waters of the United States, for the purpose of improving water quality by regrading the drainage

ditch with gentler slopes, which can reduce erosion, increase growth of vegetation, and increase uptake of nutrients and other substances by vegetation. The reshaping of the ditch cannot increase drainage capacity beyond the original as-built capacity nor can it expand the area drained by the ditch as originally constructed (i.e., the capacity of the ditch must be the same as originally constructed and it cannot drain additional wetlands or other waters of the United States). Compensatory mitigation is not required because the work is designed to improve water quality.

This NWP does not authorize the relocation of drainage ditches constructed in waters of the United States; the location of the centerline of the reshaped drainage ditch must be approximately the same as the location of the centerline of the original drainage ditch. This NWP does not authorize stream channelization or stream relocation projects.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity, if more than 500 linear feet of drainage ditch will be reshaped. (See general condition 27.) (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 41. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 41 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 41, Reshaping Existing Drainage Ditches.

1. The applicant shall not cause:
 - A. violation of applicable provisions of the Illinois Environmental Protection Act;
 - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - D. interference with water use practices near public recreation areas or water supply intakes.
2. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
6. The applicant is advised that the following permit(s) must be obtained from the Agency: permits to construct sanitary sewers, water mains and related facilities prior to construction.
7. The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, straw bales, etc.) to prevent transport of sediment and materials to the adjoining wetlands and/or streams.

*** 42. Recreational Facilities. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of recreational facilities. Examples of recreational facilities that may be authorized by this NWP include playing fields (e.g., football fields, baseball fields), basketball courts, tennis courts, hiking trails, bike paths, golf courses, ski areas, horse paths, nature centers, and campgrounds (excluding recreational vehicle parks). This NWP also authorizes the construction or expansion of small support facilities, such as maintenance and storage buildings and stables that are directly related to the recreational activity, but it does not authorize the construction of hotels, restaurants, racetracks, stadiums, arenas, or similar facilities.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds this 300 linear foot limit is waived in writing by the district engineer. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Section 404)

*** 43. Stormwater Management Facilities. Discharges of dredged or fill material into non-tidal waters of the United States for the construction and maintenance of stormwater management facilities, including the excavation of stormwater ponds/facilities, detention basins, and

retention basins; the installation and maintenance of water control structures, outfall structures and emergency spillways; and the maintenance dredging of existing stormwater management ponds/facilities and detention and retention basins.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds this 300 linear foot limit is waived in writing by the district engineer. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. This NWP does not authorize discharges of dredged or fill material for the construction of new stormwater management facilities in perennial streams.

Notification: For the construction of new stormwater management facilities, or the expansion of existing stormwater management facilities, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) Maintenance activities do not require pre-construction notification if they are limited to restoring the original design capacities of the stormwater management facility. (Section 404)

*** 44. Mining Activities. Discharges of dredged or fill material into non-tidal waters of the United States for mining activities, except for coal mining activities. The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) If reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre-construction notification. (Sections 10 and 404)

45. Repair of Uplands Damaged by Discrete Events. This NWP authorizes discharges of dredged or fill material, including dredging or excavation, into all waters of the United States for activities associated with the restoration of upland areas damaged by storms, floods, or other discrete events. This NWP authorizes bank stabilization to protect the restored uplands. The restoration of the damaged areas, including any bank stabilization, must not exceed the contours, or ordinary high water mark, that existed before the damage occurred. The district engineer retains the right to determine the extent of the pre-existing conditions and the extent of any restoration work authorized by this NWP. The work must commence, or be under contract to commence, within two years of the date of damage, unless this condition is waived in writing by the district engineer. This NWP cannot be used to reclaim lands lost to normal erosion processes over an extended period.

Minor dredging is limited to the amount necessary to restore the damaged upland area and should not significantly alter the pre-existing bottom contours of the waterbody.

Notification: The permittee must submit a pre-construction notification to the district engineer (see general condition 27) within 12-months of the date of the damage. The pre-construction notification should include documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration. (Sections 10 and 404)

Note: Uplands lost as a result of a storm, flood, or other discrete event can be replaced without a section 404 permit, if the uplands are restored to the ordinary high water mark (in non-tidal waters) or high tide line (in tidal waters). (See also 33 CFR 328.5.)

46. Discharges in Ditches. Discharges of dredged or fill material into non-tidal ditches that are: (1) constructed in uplands, (2) receive water from an area determined to be a water of the United States prior to the construction of the ditch, (3) divert water to an area determined to be a water of the United States prior to the construction of the ditch, and (4) are determined to be waters of the United States. The discharge must not cause the loss of greater than one acre of waters of the United States.

This NWP does not authorize discharges of dredged or fill material into ditches constructed in streams or other waters of the United States, or in streams that have been relocated in uplands. This NWP does not authorize discharges of dredged or fill material that increase the capacity of the ditch and drain those areas determined to be waters of the United States prior to construction of the ditch.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 27.) (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 46. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 46 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401. Water Quality Certification Conditions for Nationwide Permit 46, Discharges into Ditches.

1. The applicant shall not cause:
 - A. violation of applicable provisions of the Illinois Environmental Protection Act;
 - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - D. interference with water use practices near public recreation areas or water supply intakes.
2. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes,

regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.

4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.

5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).

6. The applicant is advised that the following permit(s) must be obtained from the Agency: permits to construct sanitary sewers, water mains and related facilities prior to construction.

7. The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, straw bales, etc.) to prevent transport of sediment and materials to the adjoining wetlands and/or streams.

8. The applicant shall not sever the connection between upstream and downstream surface waters of the State by the discharge of dredged or fill material into ditches and canals.

47. Pipeline Safety Program Designated Time Sensitive Inspections and Repairs. Activities required for the inspection, repair, rehabilitation, or replacement of any currently serviceable structure or fill for pipelines that have been identified by the Pipeline and Hazardous Materials Safety Administration's Pipeline Safety Program (PHP) within the U.S. Department of Transportation as time-sensitive (see 49 CFR parts 192 and 195) and additional maintenance activities done in conjunction with the time-sensitive inspection and repair activities. All activities must meet the following criteria:

(a) Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable when temporary structures, work and discharges, including cofferdams, are necessary for construction activities or access fills or dewatering of construction sites;

(b) Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided that the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect);

(c) Temporary fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate;

(d) In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench so that there is no change in preconstruction contours;

(e) To the maximum extent practicable, the restoration of open waters must be to the pre-construction course, condition, capacity, and location of the waterbody;

(f) Any exposed slopes and stream banks must be stabilized immediately upon completion of the project;

(g) Additional maintenance activities done in conjunction with the time-sensitive inspection or repair must not result in additional losses of waters of the United States; and,

(h) The permittee is a participant in the Pipeline Repair and Environmental Guidance System (PREGS).

Reporting: The permittee must submit a post construction report to the PHP within seven days after completing the work. The report must be submitted electronically to PHP via PREGS. The report must contain the following information: project sites located in waters of the United States, temporary access routes, stream dewatering sites, temporary fills and temporary structures identified on a map of the pipeline corridor; photographs of the pre- and post-construction work areas located in waters of the United States; and a list of best management practices employed for each pipeline segment shown on the map. (Sections 10 and 404)

Note: Division engineers may modify this NWP by adding regional conditions to protect the aquatic environment, as long as those regional conditions do not require pre-construction notification or other actions that would delay time sensitive inspections and repairs. Examples of appropriate regional conditions include best management practices.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 47. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 47 WILL BE SUBJECT TO THE IEPA CONDITIONS IN ADDITION TO THE CONDITIONS PUBLISHED IN SECTION C.

Section 401 Water Quality Certification Conditions for Nationwide Permit 47, Pipeline Safety Program Designated Time Sensitive Inspections and Repairs.

1. Case-specific water quality certification from the Illinois EPA will be required for the discharge of dredged materials in the following waters:

- A. Chicago Sanitary and Ship Canal
- B. Calumet-Sag Channel
- C. Little Calumet River
- D. Grand Calumet River
- E. Calumet River
- F. South Branch of the Chicago River (including the South Fork)
- G. North Branch of the Chicago River (including the East and West Forks and the Skokie Lagoons)
- H. Chicago River (Main Stem)
- I. Lake Calumet
- J. Des Plaines River
- K. Fox River (including the Fox Chain of Lakes)
- L. Saline River (in Hardin County)
- M. Richland Creek (in St. Clair and Monroe Counties)
- N. Lake Michigan
- O. Rock River (in Winnebago County)
- P. Illinois River upstream of mile 229.6 (Illinois Route 178 bridge)
- Q. Illinois River between mile 140.0 and 182.0
- R. Pettibone Creek (in Lake County)
- S. DuPage River (including the East and West Branches)
- T. Salt Creek (Des Plaines River Watershed)
- U. Waukegan River (including the South Branch)
- V. All Public and Food Processing Water Supplies with surface intake facilities. The Illinois EPA's Bureau of Water, Watershed Management Section can be contacted at 217/782-3362 for further information on these water supplies.

2. Section 401 is hereby issued for all other waters and for projects in the waters identified in Condition 1 that do not involve discharge of dredged materials, with the following conditions:

- A. The applicant shall not cause:
 - i. violation of applicable provisions of the Illinois Environmental Protection Act;
 - ii. water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - iii. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
 - iv. interference with water use practices near public recreation areas or water supply intakes.
- B. The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- C. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of staked straw bales, sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit required by the Clean Water Act prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- D. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2002).
- E. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- F. All material excavated which is not being used as backfill as stipulated in Condition 2.F and 2.G shall be stored or disposed in self-contained areas with no discharge to waters of the State. Material shall be disposed of appropriately under the regulations at 35 Il. Adm. Code Subtitle G.
- G. The use of directional drilling to install utility pipelines below surface waters of the State is hereby certified provided that:
 - i. All pits and other construction necessary for the directional drilling process are located outside of surface waters of the State;
 - ii. All drilling fluids shall be adequately contained such that they cannot make their way to surface waters of the State. Such fluids shall be treated as stipulated in Condition 2.H; and
 - iii. Erosion and sediment control is provided in accordance with Conditions 2.B, 2.C, and 2.D.

H. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Material dredged or excavated from the surface water or wetland shall not be used to construct the temporary facility. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.

I. The applicant for Nationwide 47 that uses temporary work pads, cofferdams, access roads or other temporary fills in order to perform work in creeks, streams, or rivers for construction activities shall maintain flow in the these waters during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.

*** 48. Existing Commercial Shellfish Aquaculture Activities. This NWP authorizes the installation of buoys, floats, racks, trays, nets, lines, tubes, containers, and other structures necessary for the continued operation of the existing commercial aquaculture activity. This NWP also authorizes discharges of dredged or fill material necessary for shellfish seeding, rearing, cultivating, transplanting, and harvesting activities. Rafts and other floating structures must be securely anchored and clearly marked.

This NWP does not authorize new operations or the expansion of the project area for an existing commercial shellfish aquaculture activity. This NWP does not authorize the cultivation of new species (i.e., species not previously cultivated in the waterbody). This NWP does not authorize attendant features such as docks, piers, boat ramps, stockpiles, staging areas, or the deposition of shell material back into waters of the United States as waste.

Reporting: For those activities that do not require pre-construction notification, the permittee must submit a report to the district engineer that includes the following information: (1) the size of the project area for the commercial shellfish aquaculture activity (in acres); (2) the location of the activity; (3) a brief description of the culture method and harvesting method(s); (4) the name(s) of the cultivated species; and (5) whether canopy predator nets are being used. This is a subset of the information that would be required for pre-construction notification. This report may be provided by letter or using an optional reporting form provided by the Corps. Only one report needs to be submitted during the period this NWP is valid, as long as there are no changes to the operation that require pre-construction notification. The report must be submitted to the district engineer within 90 days of the effective date of this NWP.

Notification: The permittee must submit a pre-construction notification to the district engineer if: (1) the project area is greater than 100 acres; or (2) there is any reconfiguration of the aquaculture activity, such as relocating existing operations into portions of the project area not previously used for aquaculture activities; or (3) there is a change in species being cultivated; or (4) there is a change in culture methods (e.g., from bottom culture to off-bottom culture); or (5) dredge harvesting, tilling, or harrowing is conducted in areas inhabited by submerged aquatic vegetation. (See general condition 27.) (Sections 10 and 404)

Note: The permittee should notify the applicable U.S. Coast Guard office regarding the project.

*** 49. Coal Remining Activities. Discharges of dredged or fill material into non-tidal waters of the United States associated with the remining and reclamation of lands that were previously mined for coal, provided the activities are already authorized, or are currently being processed as part of an integrated permit processing procedure, by the Department of Interior (DOI) Office of Surface Mining (OSM), or by states with approved programs under Title IV or Title V of the Surface Mining Control and Reclamation Act of 1977. Areas previously mined include reclaimed mine sites, abandoned mine land areas, or lands under bond forfeiture contracts. The permittee must clearly demonstrate to the district engineer that the reclamation plan will result in a net increase in aquatic resource functions. As part of the project, the permittee may conduct coal mining activities in an adjacent area, provided the newly mined area is less than 40 percent of the area being remined plus any unmined area necessary for the reclamation of the remined area.

Notification: The permittee must submit a pre-construction notification to the district engineer and receive written authorization prior to commencing the activity. (See general condition 27.) (Sections 10 and 404)

*** 50. Underground Coal Mining Activities. Discharges of dredged or fill material into non-tidal waters of the United States associated with underground coal mining and reclamation operations provided the activities are authorized, or are currently being processed as part of an integrated permit processing procedure, by the Department of Interior (DOI), Office of Surface Mining (OSM), or by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977.

This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. This NWP does not authorize coal preparation and processing activities outside of the mine site.

Notification: The permittee must submit a pre-construction notification to the district engineer and receive written authorization prior to commencing the activity. (See general condition 27.) If reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre-construction notification. (Sections 10 and 404)

Note: Coal preparation and processing activities outside of the mine site may be authorized by NWP 21.

C. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as appropriate, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.
(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP's 4 and 48.
6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety.
15. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
16. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

17. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees shall notify the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed.

(d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.

(e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide Web pages at <http://www.fws.gov/> and <http://www.noaa.gov/fisheries.html> respectively.

18. Historic Properties: (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

(d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA Section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed.

(e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, explaining the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

19. Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the district engineer after notice and opportunity for public comment. The district engineer may also designate additional critical resource waters after notice and opportunity for comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWRPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, and 50 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWRPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 27, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWRPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.

NOTE: An interactive map with a Resource Layer entitled Critical Resource Waters is available at <http://www.rmms.uiuc.edu/website/rmms/> in addition to the reference map at the end of this Fact Sheet.

20. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10 acre and require pre-construction notification, unless the district engineer determines in writing that some other form of mitigation would be more environmentally appropriate and provides a project-specific waiver of this requirement. For wetland losses of 1/10 acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.

(d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream restoration, to ensure that the activity results in minimal adverse effects on the aquatic environment.

(e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWRPs. For example, if an NWP has an acreage limit of 1/2 acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2 acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWRPs.

(f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(g) Permittees may propose the use of mitigation banks, in-lieu fee arrangements or separate activity-specific compensatory mitigation. In all cases, the mitigation provisions will specify the party responsible for accomplishing and/or complying with the mitigation plan.

(h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.

21. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

22. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

23. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

24. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

25. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:
"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

(Transferee)

(Date)

26. Compliance Certification. Each permittee who received an NWP verification from the Corps must submit a signed certification regarding the completed work and any required mitigation. The certification form must be forwarded by the Corps with the NWP verification letter and will include:

- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general or specific conditions;
- (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
- (c) The signature of the permittee certifying the completion of the work and mitigation.

27. Pre-Construction Notification. (a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, as a general rule, will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) Forty-five calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 17 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 18 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) is completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee cannot begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

- (1) Name, address and telephone numbers of the prospective permittee;
- (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided result in a quicker decision.);

(4) The PCN must include a delineation of special aquatic sites and other waters of the United States on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters of the United States, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, where appropriate;

(5) If the proposed activity will result in the loss of greater than 1/10 acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b) (1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWP and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

(2) For all NWP 48 activities requiring pre-construction notification and for other NWP activities requiring pre-construction notification to the district engineer that result in the loss of greater than 1/2-acre of waters of the United States, the district engineer will immediately provide (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy of the PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(4) Applicants are encouraged to provide the Corps multiple copies of pre-construction notifications to expedite agency coordination.

(5) For NWP 48 activities that require reporting, the district engineer will provide a copy of each report within 10 calendar days of receipt to the appropriate regional office of the NMFS.

(e) District Engineer's Decision: In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If the proposed activity requires a PCN and will result in a loss of greater than 1/10 acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any conditions the district engineer deems necessary. The district engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (1) That the project

does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan.

28. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

D. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.
5. NWPs do not authorize interference with any existing or proposed Federal project.

E. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration, establishment (creation), enhancement, or preservation of aquatic resources for the purpose of compensating for unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the

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linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NFPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

Perennial stream: A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects waterbodies with their adjacent uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 20.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete project: The term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete project must have

independent utility (see definition). For linear projects, a "single and complete project" is all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NHPs, a waterbody is a jurisdictional water of the United States that, during a year with normal patterns of precipitation, has water flowing or standing above ground to the extent that an ordinary high water mark (OHWM) or other indicators of jurisdiction can be determined, as well as any wetland area (see 33 CFR 328.3(b)). If a jurisdictional wetland is adjacent--meaning bordering, contiguous, or neighboring--to a jurisdictional waterbody displaying an OHWM or other indicators of jurisdiction, that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

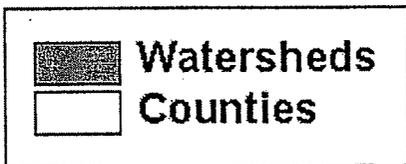
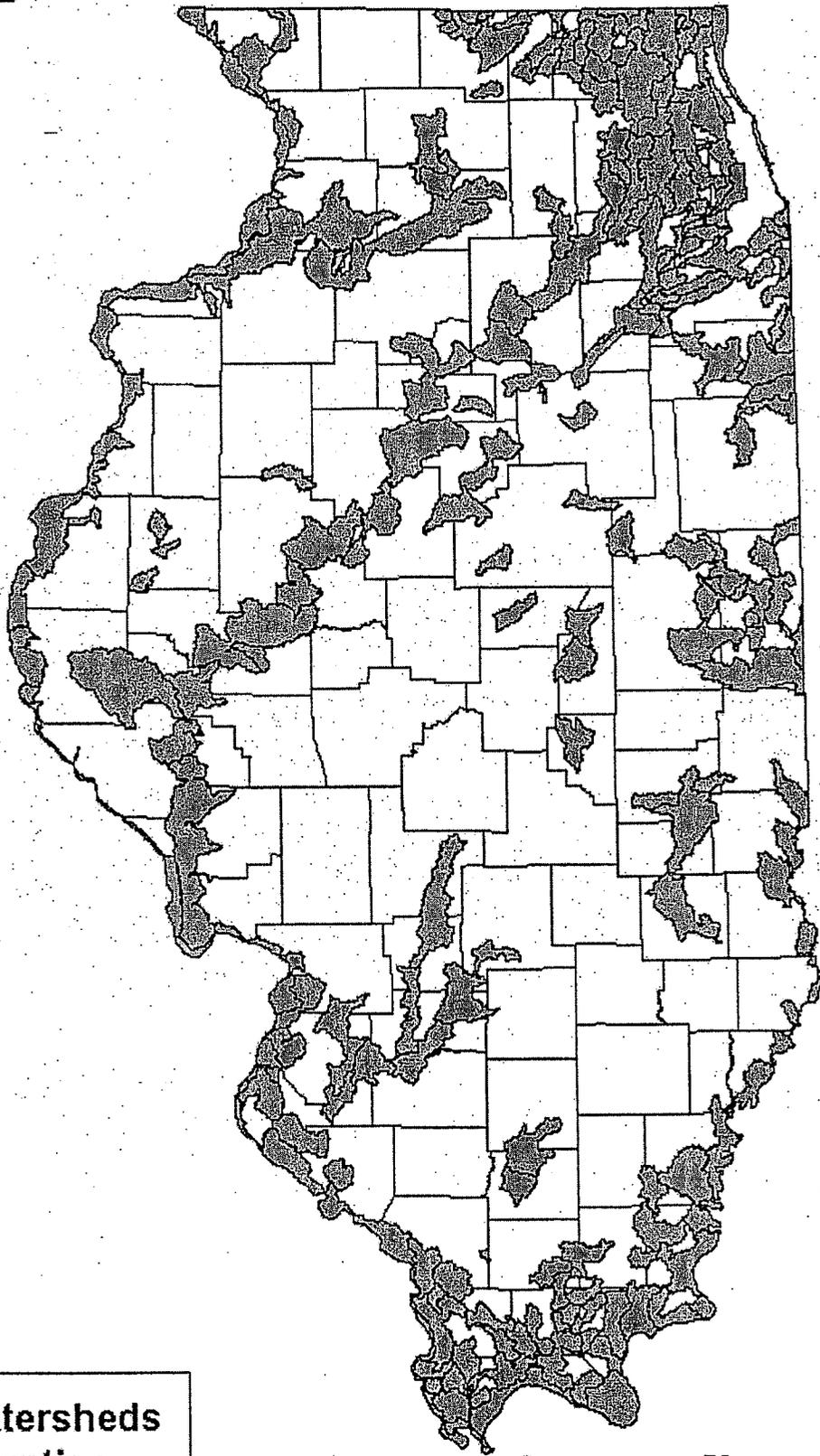
*** Nationwide permit where Illinois Environmental Protection Agency has denied Section 401 Water Quality Certification.

PCN - Pre-Construction Notification

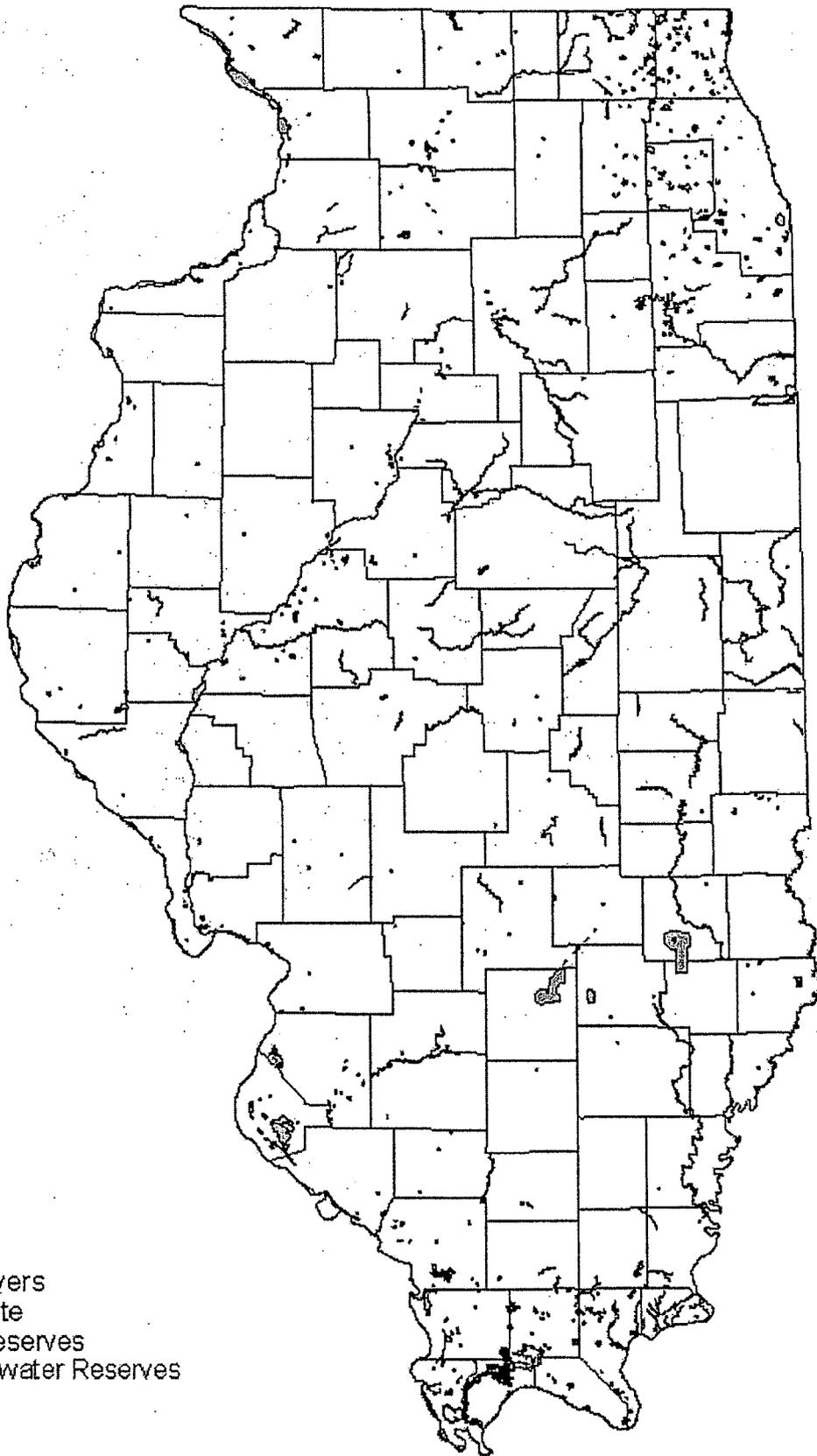
High Value Subwatersheds - The state of Illinois has defined these areas through a combination of factors. Various sources of information were used to analyze and rank subwatersheds. Federal Threatened and Endangered Species, percentage of wetlands in the watershed, Natural Areas Inventory, and Biological Stream Categorization were factors used for High Value designation.

NOTE: An interactive map with a Resource Layer entitled Watersheds, High Value CORPS is available at <http://www.rmms.uiuc.edu/website/rmms/> in addition to the reference map at the end of this Fact Sheet.

High Value Subwatersheds



Critical Resource Waters



-  Scenic Rivers
-  Ramsar site
-  Nature preserves
-  Land and water Reserves
-  INAI sites
-  Counties

REGULATORY JURISDICTIONAL BOUNDARIES

US ARMY CORPS OF ENGINEERS
 ROCK ISLAND DISTRICT
 CLOCKTOWER BUILDING
 P.O. BOX 2004
 ROCK ISLAND, IL 61204-2004
 309-794-5373

NORTHEASTERN ILLINOIS REGULATORY
 PROGRAMS SECTION
 ILLINOIS DEPARTMENT OF NATURAL
 RESOURCES, REGION II OFFICE
 2050 WEST STEARNS ROAD
 BARTLETT, ILLINOIS 60103
 847-608-3100 x2025

US ARMY CORPS OF ENGINEERS
 CHICAGO DISTRICT
 111 NORTH CANAL
 CHICAGO, IL 60606-7206
 312-846-5530

ILLINOIS DEPT. OF NATURAL RESOURCES
 OFFICE OF WATER RESOURCES
 ONE NATURAL RESOURCES WAY
 SPRINGFIELD, IL 62701-1271
 217-782-3863

ILLINOIS DEPT. OF NATURAL RESOURCES
 OFFICE OF WATER RESOURCES
 LAKE MICHIGAN MANAGEMENT SECTION
 ROOM 1415
 36 S. WABASH
 CHICAGO, IL 60603
 312-793-3123

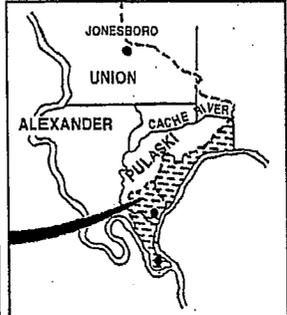
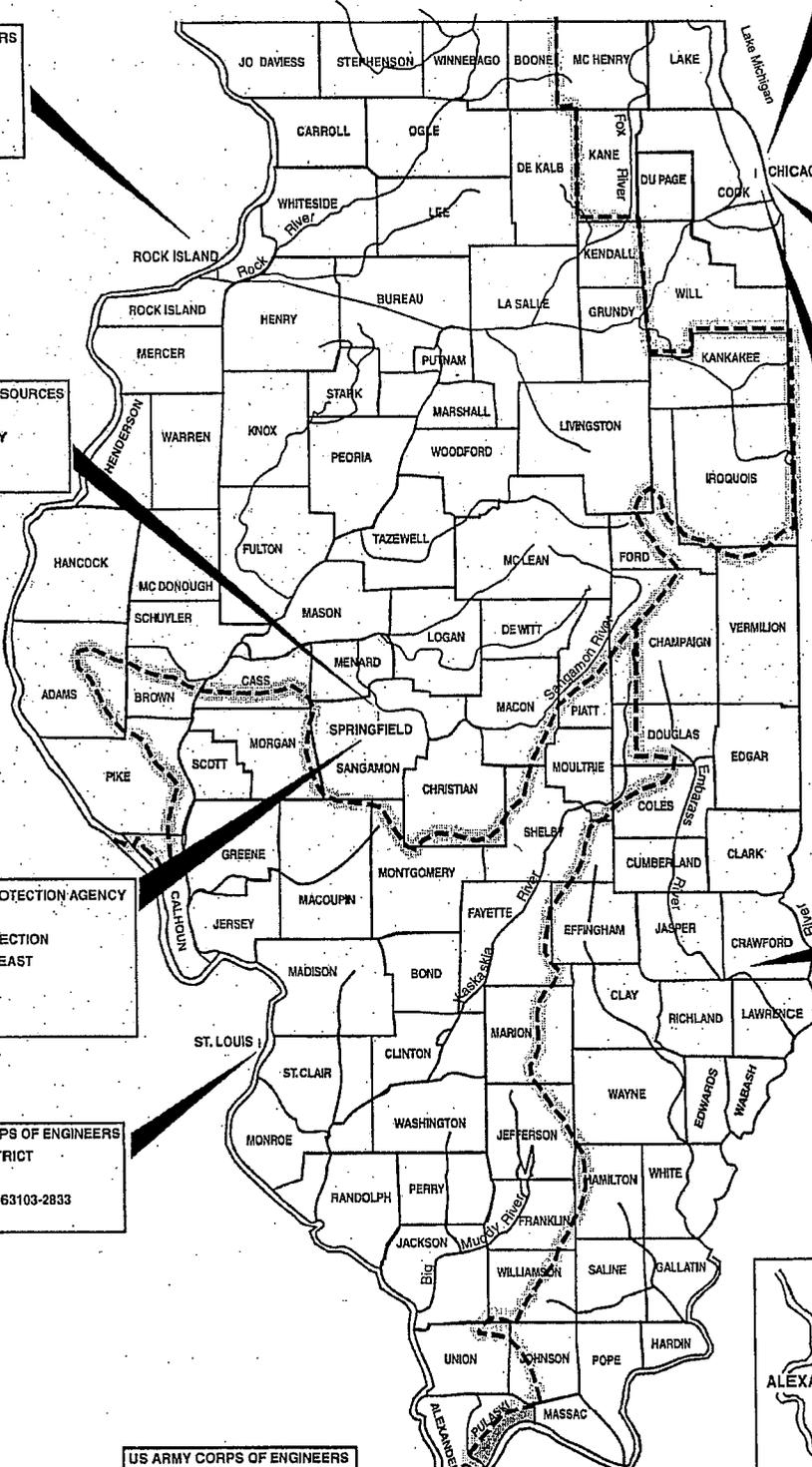
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
 BUREAU OF WATER
 WATERSHED MANAGEMENT SECTION
 1021 NORTH GRAND AVENUE EAST
 POST OFFICE BOX 19276
 SPRINGFIELD, IL 62794-9276
 217-782-3362

US ARMY CORPS OF ENGINEERS
 LOUISVILLE DISTRICT
 P.O. BOX 59
 LOUISVILLE, KY 40201-0059
 502-315-6662

US ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT
 1222 SPRUCE
 ST. LOUIS, MO 63103-2833
 314-331-8575

US ARMY CORPS OF ENGINEERS
 MEMPHIS DISTRICT
 167 NORTH MAIN
 B-202
 MEMPHIS, TN 38103-1894
 901-544-0732

NOTE FOR CERTAIN PORTIONS OF
 LOWER ALEXANDER AND PULASKI
 COUNTIES, CONTACT THE MEMPHIS
 DISTRICT FOR INFORMATION



HIGH LOAD MULTI-ROTATIONAL BEARINGS

Effective: October 13, 1988

Revised: October 4, 2010

Description. This work shall consist of furnishing and installing High Load Multi-Rotational type bearing assemblies at the locations shown on the plans.

High Load Multi-Rotational (HLMR) bearings shall be one of the following at the Contractors option unless otherwise restricted on the plans:

- a) Pot Bearings. These bearings shall be manufactured so that the rotational capability is provided by an assembly having a rubber disc of proper thickness, confined in a manner so it behaves like a fluid. The disc shall be installed, with a snug fit, into a steel cylinder and confined by a tight fitting piston. The outside diameter of the piston shall be no more than 0.03 in. (750 microns) less than the inside diameter of the cylinder at the interface level of the piston and rubber disc. The sides of the piston shall be beveled. PTFE sheets shall be attached to the top and bottom of the rubber disc to facilitate rotation of the rubber disc. Suitable brass sealing rings shall be provided to prevent any extrusion between piston and cylinder.
- b) Shear Inhibited Disc Type Bearing. The Structural Element shall be restricted from shear by the pin and ring design and need not be completely confined as with the Pot Bearing design. The disc shall be a molded monolithic Polyether Urethane compound.

These bearings shall be further subdivided into one or more of the following types:

- 1) Fixed. These allow rotation in any direction but are fixed against translation.
- 2) Guided Expansion. These allow rotation in any direction but translation only in limited directions.
- 3) Non-Guided Expansion. These allow rotation and translation in any direction.

The HLMR bearings shall be of the type specified and designed for the loads shown on the plans. The design of the top and bottom bearing plates are based on detail assumptions which are not applicable to all suppliers and may require modifications depending on the supplier chosen by the Contractor. The overall depth dimension for the HLMR bearings shall be as specified on the plans. The horizontal dimensions shall be limited to the available bearing seat area. Any modifications required to accommodate the bearings chosen shall be submitted to the Engineer for approval prior to ordering materials. Modifications required shall be made at no additional cost to the State. Inverted pot bearing configurations will not be permitted.

The Contractor shall comply with all manufacturer's material, fabrication and installation requirements specified.

All bearings shall be supplied by prequalified manufacturers. The Department will maintain a list of prequalified manufacturers.

Submittals. Shop drawings shall be submitted to the Engineer for approval according to Article 105.04 of the Standard Specifications. In addition the Contractor shall furnish certified copies of the bearing manufacturer's test reports on the physical properties of the component materials for the bearings to be furnished and a certification by the bearing manufacturer stating the bearing assemblies furnished conform to all the requirements shown on the plans and as herein specified. Submittals with insufficient test data and supporting certifications will be rejected.

Materials. The materials for the HLMR bearing assemblies shall be according to the following:

- (a) Elastomeric Materials. The rubber disc for Pot bearings shall be according to Article 1083.02(a) of the Standard Specifications.
- (b) Polytetrafluoroethylene (PTFE) Material. The PTFE material shall be according to Article 1083.02(b) of the Standard Specifications.
- (c) Stainless Steel Sheets: The stainless steel sheets shall be of the thickness specified and shall be according to ASTM A 240 (A 240M), Type 302 or 304. The sliding surface shall be polished to a bright mirror finish less than 20 micro-in. (510 nm) root mean square.
- (d) Structural Steel. All structural steel used in the bearing assemblies shall be according to AASHTO M 270, Grade 50 (M 270M Grade 345), unless otherwise specified.
- (e) Threaded studs. The threaded stud, when required, shall conform to the requirements of AASHTO M 164 (M 164M).

- (f) Polyether Urethane for Disc bearings shall be according to all of the following requirements:

PHYSICAL PROPERTY	ASTM TEST METHOD	REQUIREMENTS	
Hardness, Type D durometer	D 2240	45 Min	65 Max
Tensile Stress, psi (kPa) At 100% elongation, min	D 412	1500 psi (10,350 kPa)	2300 psi (15,900 kPa)
Tensile Stress, psi (kPa) At 200% elongation, min	D 412	2800 psi (19,300 kPa)	4000 psi (27,600 kPa)
Tensile Strength, psi (kPa), min	D 412	4000 psi (27,600 kPa)	6000 psi (41,400 kPa)
Ultimate Elongation, %, min	D 412	350	220
Compression Set 22 hr. at 158 °F (70 °C), Method B %, max	D 395	40	40

The physical properties for a durometer hardness between the minimum and maximum values shown above shall be determined by straight line interpolation.

Design. The fabricator shall design the HLMR bearings according to the appropriate AASHTO Design Specifications noted on the bridge plans.

Fabrication. The bearings shall be complete factory-produced assemblies. They shall provide for rotation in all directions and for sliding, when specified, in directions as indicated on the plans. All bearings shall be furnished as a complete unit from one manufacturing source. All material used in the manufacture shall be new and unused with no reclaimed material incorporated into the finished assembly.

The translation capability for both guided and non-guided expansion bearings shall be provided by means of a polished stainless steel sliding plate that bears on a PTFE sheet bonded and recessed to the top surface of the piston or disc. The sliding element of expansion bearings shall be restrained against movement in the fixed direction by exterior guide bars capable of resisting the horizontal forces or 20 percent of the vertical design load on the bearing applied in any direction, whichever is greater. The sliding surfaces of the guide bar shall be of PTFE sheet and stainless steel. Guiding off of the fixed base, or any extension of the base, will not be permitted.

Structural steel bearing plates shall be fabricated according to Article 505.04(l) of the Standard Specifications. Prior to shipment the exposed edges and other exposed portions of the structural steel bearing plates shall be cleaned and painted according to Articles 506.03 and 506.04 of the Standard Specifications. Painting shall be with the paint specified for shop painting of structural steel. During cleaning and painting the stainless steel, PTFE sheet and neoprene shall be protected from abrasion and paint.

PTFE sheets shall be bonded to steel under factory controlled conditions using heat and pressure for the time required to set the epoxy adhesive used. The PTFE sheet shall be free from bubbles and the sliding surface shall be burnished to an absolutely smooth surface.

The steel piston and the steel cylinder for pot bearings shall each be machined from a solid piece of steel. The steel base cylinder shall be either integrally machined, recessed into with a snug fit, or continuously welded to its bottom steel bearing plate.

Packaging. Each HLMR bearing assembly shall be fully assembled at the manufacturing plant and delivered to the construction site as complete units. The assemblies shall be packaged, crated or wrapped so the assemblies will not be damaged during handling, transporting and shipping. The bearings shall be held together with removable restraints so sliding surfaces are not damaged.

Centerlines shall be marked on both top and base plates for alignment in the field. The bearings shall be shipped in moisture-proof and dust-proof covers.

Performance Testing. The following performance tests are required. All tests shall be performed by the manufacturer prior to shipment. Where lot testing is permitted, a lot size shall be the number of bearings per type on the project but not to exceed 25 bearings per type.

Dimension Check. Each bearing shall be checked dimensionally to verify all bearing components are within tolerances. Failure to satisfy any dimensional tolerance shall be grounds for rejecting the bearing component or the entire bearing assembly.

Clearance Test. This test shall be performed on one bearing per lot. The bearing selected for this test shall be the one with the least amount of clearance based on the dimension check. The bearing assembly shall be loaded to its service limit state rated capacity at its full design rotation but not less than 0.02 radians to verify the required clearances exist. This test shall be performed twice for each bearing with the rotation oriented longitudinally with the bridge once in each direction. Any visual signs of rubbing or binding shall be grounds for rejection of the lot.

Proof Load Test. This test shall be performed on one bearing per lot. The bearing assembly shall be load tested to 150 percent of the service limit state rated capacity at a rotation of 0.02 radians. The load shall be maintained for 5 minutes, removed then reapplied for 5 minutes. If the load drops below the required value during either application, the test shall be restarted from the beginning. This test shall be performed twice for each bearing with the rotation oriented longitudinally with the bridge once in each direction.

The bearing shall be visually examined both during the test and upon disassembly after the test. Any resultant visual defects include, but are not limited to:

1. Extruded or deformed elastomer, polyether urethane, or PTFE.
2. Insufficient clearances such as evidence of metal to metal contact between the pot wall and the top plate.
3. Damaged components such as cracked steel, damaged seal rings, or damaged limiting rings.
4. Bond failure.

If any of the above items are found it shall be grounds for rejection of the lot.

Sliding Friction Test. For expansion bearings, this test shall be performed on one bearing per lot. The sliding surfaces shall be thoroughly cleaned with a degreasing solvent. No lubrication other than that specified for the bearing shall be used. The bearing shall be loaded to its service limit state rated capacity for 1 hour prior to and throughout the duration of the sliding test. At least 12 cycles of plus and minus sliding with an amplitude equaling the smaller of the design displacement and 1 inch (25 mm) shall then be applied. The average sliding speed shall be between 0.1 inch and 1.0 inches (2.5 mm and 25 mm) per minute. The sliding friction coefficient shall be computed for each direction of each cycle and its mean and standard deviation shall be computed for the sixth through twelfth cycles.

The friction coefficient for the first movement and the mean plus two standard deviations for the sixth through twelfth cycles shall not exceed the design value used. In addition, the mean value for the sixth through twelfth cycles shall not exceed 2/3 of the design value used. Failure of either of these shall result in rejection of the lot.

The bearing shall also be visually examined both during and after the testing, any resultant defects, such as bond failure, physical destruction, or cold flow of the PTFE shall also be cause for rejection of the lot.

The Contractor shall furnish to the Department a notarized certification from the bearing manufacturer stating the HLMR bearings have been performance tested as specified. The Contractor shall also furnish to the Engineer of Tests at the Bureau of Materials and Physical Research (126 East Ash Springfield, IL 62704) a purchase order prior to fabrication. The purchase order shall contain, as a minimum, the quantity and size of each type of bearing furnished. The Department reserves the right to perform any of the specified tests on one or more of the furnished bearings. If the tested bearing shows failure it shall be replaced and the remaining bearings shall be similarly tested for acceptance at the Contractor's expense.

When directed by the Engineer, the manufacturer shall furnish an additional bearing assembly and/or random samples of component materials used in the bearings, for testing by the Department, according to Article 1083.04 of the Standard Specifications.

Installation. The HLMR bearings shall be erected according to Article 521.05 of the Standard Specifications.

Exposed edges and other exposed portions of the structural steel plates shall be field painted as specified for Structural Steel.

Basis of Payment. This work will be paid for at the contract unit price each for HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED; HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION; or HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION of the load rating specified.

When the fabrication and erection of HLMR bearings is accomplished under separate contracts, the applicable requirements of Article 505.09 shall apply.

Fabricated HLMR bearings and other materials complying with the requirements of this item, furnished and accepted, will be paid for at the contract unit price each for FURNISHING HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED, FURNISHING HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION or FURNISHING HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION of the load rating specified.

Storage and care of fabricated HLMR bearings and other materials complying with the requirements of this item by the Fabrication Contractor beyond the specified storage period, will be paid for at the contract unit price per calendar day for STORAGE OF HIGH LOAD MULTI-ROTATIONAL BEARINGS if a pay item is provided for in the contract, or will be paid for according to Article 109.04 if a pay item is not provided in the contract.

HLMR bearings and other materials fabricated under this item erected according to the requirements of the specifications, and accepted, will be paid for at the contract unit price each for ERECTING HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED, ERECTING HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION or ERECTING HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION of the load rating specified.

CLEANING AND PAINTING NEW METAL STRUCTURES

Effective Date: September 13, 1994

Revised Date: October 4, 2010

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

Materials. All materials to be used on an individual structure shall be produced by the same manufacturer. The Bureau of Materials and Physical Research has established a list of all products that have met preliminary requirements. Each batch of material must be tested and approved by that bureau before use. The specified colors shall be produced in the coating manufacturer's facility. Tinting of the coating after it leaves the manufacturer's facility is not allowed.

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

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

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

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

- a) Contractor Shop Qualifications. Except for miscellaneous steel items such as bearings, side retainers, expansion joint devices, and other items allowed by the Engineer, or unless stated otherwise in the contract, the shop painting Contractors shall be certified to perform the work as follows: the shop painting Contractor shall possess AISC Sophisticated Paint Endorsement or SSPC-QP3 certification. Evidence of current qualifications shall be provided.
- b) Contractor Field Qualifications. Unless indicated otherwise on the contract plans, the field painting contractor shall possess current SSPC QP1 certification. Evidence of current

qualifications shall be provided. The Contractor shall maintain certified status throughout the duration of the painting work under the contract. The Department reserves the right to accept Contractors documented to be currently enrolled in the SSPC-QP7, Painting Contractor Introductory Program, in lieu of the QP certifications noted above.

- c) QC Personnel Qualifications. Personnel managing the shop and field Quality Control program(s) for this work shall possess a minimum classification of Society of Protective Coatings (SSPC) BCI certified, National Association of Corrosion Engineers (NACE) Coating Inspector Level 2-Certified, or shall provide evidence of successful inspection of 3 projects of similar or greater complexity and scope that have been completed in the last 2 years. Copies of the certification and/or experience shall be provided, including names, addresses and telephone numbers of contact persons employed by the bridge owner.

The personnel performing the QC tests for this work shall be trained in coatings inspection and the use of the testing instruments. Documentation of training shall be provided. The QC personnel shall not perform hands on surface preparation or paint activities unless otherwise approved by the Engineer. Painters shall perform wet film thickness measurements, with QC personnel conducting random spot checks of the wet film. The Contractor shall not replace the QC personnel assigned to the project without advance notice to the Engineer, and acceptance of the replacement(s), by the Engineer.

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

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

Quality Control (QC) Inspections. The Contractor shall perform first line, in process QC inspections of each phase of the work. The submitted and accepted QC Program(s) shall be

used to insure that the work accomplished complies with these specifications. The shop painting Contractor shall use their forms as supplied in their submittal. These shop reports shall be made available for review when requested by the Engineer. The field painting Contractor shall use the IDOT Quality Control Daily Report form supplied by the Engineer to record the results of quality control tests. These field reports shall be turned into the Engineer before work resumes the following day. The Engineer or designated representative will sign the report. The signature is an acknowledgment that the report has been received, but should not be construed as an agreement that any of the information documented therein is accurate.

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

- Psychrometer or comparable equipment for the measurement of dew point and relative humidity, together with all necessary weather bureau tables or psychrometric charts.
- Surface temperature thermometer.
- Bresle Cell Kits or CHLOR*TEST kits for chloride determinations, or equivalent.(only required when erected steel is exposed through the winter prior to field painting.)
- Wet Film Thickness Gage.
- Blotter paper for compressed air cleanliness checks.
- Type 2 Magnetic Dry Film Thickness Gage per SSPC - PA2.
- Calibration standards for dry film thickness gage.
- Light meter for measuring light intensity during cleaning, painting, and inspection activities.
- All applicable ASTM and SSPC Standards used for the work.
- Commercially available putty knife of a minimum thickness of 40 mils (1 mm) and a width between 1 and 3 in. (25 and 75 mm). Note that the putty knife is only required in touch-up areas where the coating is being feathered and must be tested with a dull putty knife.

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

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

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

- Mechanical lifting equipment, such as, scissor trucks, hydraulic booms, etc.
- Platforms suspended from the structure comprised of trusses or other stiff supporting members and including rails and kick boards.

- Simple catenary supports are permitted only if independent life lines for attaching a fall arrest system according to Occupational Safety and Health Administration (OSHA) regulations are provided.

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

The Contractor shall provide artificial lighting both inside and outside containment where natural light is inadequate, as determined by the Engineer, to allow proper cleaning, inspection, and painting. Illumination for inspection shall be at least 30 foot candles (325 LUX). Illumination for cleaning and painting, including the working platforms, access, and entryways shall be at least 20 foot candles (215 LUX). General work area illumination outside the containment shall be employed at the discretion of the Engineer and shall be at least 5 foot candles. The exterior lighting system shall be designed and operated so as to avoid glare that interferes with traffic, workers, and inspection personnel.

Construction Requirements for Field Painting. The Contractor shall be responsible for any damage caused to persons, vehicles, or property, except as indemnified by the Response Action Contractor Indemnification Act. Whenever the intended purposes of the protective devices are not being accomplished, as determined by the Engineer, work shall be immediately suspended until corrections are made. Painted surfaces damaged by any Contractor's operation shall be removed and repainted, as directed by the Engineer, at the Contractor's expense.

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

Hold Point Notification for Field Painting. Specific inspection items throughout this specification are designated as Hold Points. Unless other arrangements are made at the project site, the Contractor shall provide the Engineer with a minimum 4-hour notification before a Hold Point inspection will be reached. If the 4-hour notification is provided and the Work is ready for

inspection at that time, the Engineer will conduct the necessary observations. If the Work is not ready at the appointed time, unless other arrangements are made, an additional 4-hour notification is required. Permission to proceed beyond a Hold Point without a QA inspection will be granted solely at the discretion of the Engineer, and only on a case by case basis. The Engineer has the right to reject any work that was performed without adequate provision for QA observations

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

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

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

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

After washing has been accepted by the Engineer, all traces of asphaltic cement, oil, grease, diesel fuel deposits, and other soluble contaminants which remain on the steel surfaces to be painted shall be removed according to SSPC – SP1 Solvent Cleaning, supplemented with scraping (e.g., to remove large deposits of asphaltic cement) as required. The solvent(s) used for cleaning shall be compatible with the primer. The Contractor shall identify the proposed solvent(s) in the submittals. If the primer is softened, wrinkled, or shows other signs of attack from the solvents, the Contractor shall immediately discontinue their use. The name and composition of replacement solvents, together with MSDS, shall be submitted for Engineer acceptance prior to use. If solvent cleaning/scraping is not successful in removing the foreign matter, the Contractor shall use other methods identified in SP1, such as steam cleaning as necessary.

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

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

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

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

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

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

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

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

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

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

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

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

- a) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
 - Zinc Primer: 3 mils (75 microns) min., 6 mils (150 microns) max.
 - Epoxy Mastic(spot coat): 5 mils (125 microns) min., 7 mils (180 microns) max.
 - Intermediate Coat: 2 mils (50 microns) min., 4 mils (100 microns) max.
 - Topcoat: 2 mils (50 microns) min., 4 mils (100 microns) max.

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

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

Organic Zinc-Rich/ Epoxy/ Urethane Paint System. This system shall be for full shop application of the coating system, or when specified on the plans, for the application of two coats in the shop with the finish coat applied in the field. All contact surfaces shall be masked off prior to shop-application of the intermediate and top coats.

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

In the shop, all structural steel designated to be painted shall be given one coat of organic zinc rich primer, one coat of epoxy intermediate, and unless stated otherwise in the plans, one coat of urethane finish. Before the application of the field coats, the shop coats and any newly

installed fasteners shall be spot solvent cleaned per SSPC-SP 1 and all surfaces pressure washed as specified above to remove dirt, oil, lubricants, oxidation products, and foreign substances. All damaged shop coated areas shall then be spot cleaned per SSPC-SP3 (Modified). The surrounding coating at each repair location shall be feathered for a minimum distance of 1 1/2 in. (40 mm) to achieve a smooth transition between the prepared areas and the existing coating. The existing coating in the feathered area shall be roughened to insure proper adhesion of the repair coats.

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

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

- (a) Coating Dry Film Thickness (dft), measured according to SSPC-PA2:
 - Organic Zinc-Rich Primer: 3 mils (75 microns) min., 5 mils (125 microns) max.
 - Aluminum Epoxy Mastic (spot coat): 5 mils (125 microns) min., 7 mils (180 microns) max.
 - Epoxy Intermediate Coat: 3 mils (75 microns) min., 6 mils (150 microns) max.
 - Aliphatic Urethane Top Coat: 2.5 mils (65 microns) min., 4 mils (100 microns) max.
- (b) The total dry film thickness, excluding the spot areas touched up with epoxy mastic, shall be between 8.5 and 15 mils (215 and 375 microns).
- (c) All faying surfaces of field connections shall be masked off after priming and shall not receive the intermediate or top coats in the shop. The intermediate and top coats for field connections shall be applied, in the field, after erection of the structural steel is completed.

Special Instructions.

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

The stencil shall contain the following wording "PAINTED BY (insert the name of the painting Contractor)" and shall show the month and year in which the painting was completed, followed

by "CODE S" for the Inorganic Zinc/ Acrylic System, "CODE X" for the Organic Zinc/ Epoxy/ Urethane System (field applied finish coats), "CODE AB" for the Organic Zinc/ Epoxy/ Urethane System (shop applied), all stenciled on successive lines. This information shall be stenciled on the cover plate of a truss end post near the top of the railing, or on the outside face of an outside stringer near both ends of the bridge facing traffic, or at some equally visible surface designated by the Engineer.

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

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

MECHANICALLY STABILIZED EARTH RETAINING WALLS

Effective: February 3, 1999

Revised: January 18, 2011

Description. This work shall consist of preparing the design, furnishing the materials, and constructing the mechanically stabilized earth (MSE) retaining wall to the lines, grades and dimensions shown in the contract plans and as directed by the Engineer.

General. The MSE wall consists of a concrete leveling pad, precast concrete face panels, a soil reinforcing system, select fill and concrete coping (when specified). The soil reinforcement shall have sufficient strength, quantity, and pullout resistance, beyond the failure surface within the select fill, as required by design. The material, fabrication, and construction shall comply with this Special Provision and the requirements specified by the supplier of the wall system selected by the Contractor for use on the project.

The MSE retaining wall shall be one of the following pre-approved wall systems:

ARES Wall: Tensar Earth Technologies
Stabilized Earth: T&B Structural Systems
MSE Plus: SSL Construction Products
Reinforced Earth: The Reinforced Earth Company
Retained Earth: The Reinforced Earth Company
Strengthened Soil: Shaw Technologies
Tricon Retained Soil: Tricon Precast
Omega System: The Reinforced Earth Company
Sine Wall: Sine Wall, LLC
Sanders MSE Wall: Sanders Pre-Cast Concrete Systems Company

Pre-approval of the wall system does not include material acceptance at the jobsite.

Submittals. The wall system supplier shall submit complete design calculations and shop drawings to the Engineer according to Article 1042.03(b) of the Standard Specifications no later than 90 days prior to beginning construction of the wall. 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. All submittals shall be sealed by an Illinois Licensed Structural Engineer and shall include all details, dimensions, quantities and cross sections necessary to construct the wall and shall include, but not be limited to, the following items:

- (a) Plan, elevation and cross section sheet(s) for each wall showing the following:
 - (1) A plan view of the wall indicating the offsets from the construction centerline to the face of the wall at all changes in horizontal alignment. The plan view shall show the limits of soil reinforcement and stations where changes in length and/or size of reinforcement occur. The centerline shall be shown for all drainage structures or pipes behind or passing through and/or under the wall.

- (2) An elevation view of the wall indicating the elevations of the top of the panels. These elevations shall be at or above the top of exposed panel line shown on the contract plans. This view shall show the elevations of the top of the leveling pads, all steps in the leveling pads and the finished grade line. Each panel type, the number, size and length of soil reinforcement connected to the panel shall be designated. The equivalent uniform applied bearing pressure shall be shown for each designed wall section.
 - (3) A listing of the summary of quantities shall be provided on the elevation sheet of each wall.
 - (4) Typical cross section(s) showing the limits of the reinforced select fill volume included within the wall system, soil reinforcement, embankment material placed behind the select fill, precast face panels, and their relationship to the right-of-way limits, excavation cut slopes, existing ground conditions and the finished grade line.
 - (5) All general notes required for constructing the wall.
- (b) All details for the concrete leveling pads, including the steps, shall be shown. The top of the leveling pad shall be located at or below the theoretical top of the leveling pad line shown on the contract plans. The theoretical top of leveling pad line shall be 3.5 ft. (1.1 m) below finished grade line at the front face of the wall, unless otherwise shown on the plans.
 - (c) Where concrete coping or barrier is specified, the panels shall extend up into the coping or barrier as shown in the plans. The top of the panels may be level or sloped to satisfy the top of exposed panel line shown on the contract plans. Cast-in-place concrete will not be an acceptable replacement for panel areas below the top of exposed panel line. As an alternative to cast in place coping, the Contractor may substitute a precast coping, the details of which must be included in the shop drawings and approved by the Engineer.
 - (d) All panel types shall be detailed. The details shall show all dimensions necessary to cast and construct each type of panel, all reinforcing steel in the panel, and the location of soil reinforcement connection devices embedded in the panels. These panel embed devices shall not be in contact with the panel reinforcement steel.
 - (e) All details of the wall panels and soil reinforcement placement around all appurtenances located behind, on top of, or passing through the soil reinforced wall volume such as parapets with anchorage slabs, coping, foundations, and utilities etc. shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular system shall also be submitted.
 - (f) When specified on the contract plans, all details of architectural panel treatment, including color, texture and form liners shall be shown.

- (g) The details for the connection between concrete panels, embed devices, and soil reinforcement shall be shown.

The initial submittal shall include three sets of shop drawings and one set of calculations. One set of drawings will be returned to the Contractor with any corrections indicated. After approval, the Contractor shall furnish the Engineer with eight sets of corrected plan prints for distribution by the Department. No work or ordering of materials for the structure shall be done until the submittal has been approved by the Engineer.

Materials. The MSE walls shall conform to the supplier's standards as previously approved by the Department, and the following:

- (a) The soil reinforcing system, which includes the soil reinforcement, panel embeds and all connection devices, shall be according to the following:

Inextensible Soil Reinforcement. Steel reinforcement shall be either epoxy coated or galvanized. Epoxy coatings shall be according to Article 1006.10(a)(2), except the minimum thickness of epoxy coating shall be 18 mils (457 microns). No bend test will be required. Galvanizing shall be according to AASHTO M 232 or AASHTO M 111 as applicable.

Mesh and Loop Panel Embeds	AASHTO M 32 /M 32M and M 55/M 55M
Strips	ASTM A 572 Grade 65 (450)
Tie Strip Panel Embeds	AASHTO M 270/M 270M Grade 50 (345) or ASTM A1011 HSLAS Grade 50 (345) Class 2

Extensible Soil Reinforcement. Geosynthetic reinforcement shall be monolithically fabricated from virgin high density polyethylene (HDPE) or high tenacity polyester (HTPET) resins having the following properties verified by mill certifications:

<u>Property for Geosynthetic Reinforcement</u>	<u>Value</u>	<u>Test</u>
Minimum Tensile Strength	**	ASTM 6637

** as specified in the approved design calculations and shown on the shop drawings.

<u>Property for HDPE</u>	<u>Value</u>	<u>Test</u>
Melt Flow Rate (g/cm)	0.060 – 0.150	ASTM D 1238, Procedure B
Density (g/cu m)	0.941 – 0.965	ASTM D 792
Carbon Black	2% (min)	ASTM D 4218

<u>Property for HTPET</u>	<u>Value</u>	<u>Test</u>
Carboxyl End Group (max) (mmol/kg)	<30	GRI-GG7
Molecular Weight (Mn)	>25,000	GRI-GG8

Panel embed/connection devices used with geosynthetic soil reinforcement shall be manufactured from virgin or recycled polyvinyl chloride having the following properties:

<u>Property for Polyvinyl Chloride</u>	<u>Value</u>	<u>Test</u>
Heat Deflection Temperature (°F)	155 - 164	ASTM D 1896
Notched IZOD 1/8 inch @ 73°F (ft-lb/in)	4 - 12	ASTM D 256
Coefficient of Linear Exp. (in/in/°F)	3.5 - 4.5	ASTM D 696
Hardness, Shore D	79	ASTM D 2240

<u>Property for Polypropylene</u>	<u>Value</u>	<u>Test</u>
Melt Flow Rate (g/cm)	0.060 - 0.150	ASTM D 1238, Procedure B
Density (g/cu m)	0.88 - 0.92	ASTM D 792

(b) The select fill, defined as the material placed in the reinforced volume behind the wall, shall be according to Sections 1003 and 1004 of the Standard Specifications and the following:

(1) Select Fill Gradation. Either a coarse aggregate or a fine aggregate may be used. For coarse aggregate, gradations CA 6 thru CA 16 may be used. If an epoxy coated or geosynthetic reinforcing is used, the coarse aggregate gradations shall be limited to CA 12 thru CA 16. For fine aggregate, gradations FA 1, FA 2, or FA 20 may be used.

Other aggregate gradations may be used provided the maximum aggregate size is 1 1/2 in. (38 mm), the maximum material passing the #40 (425 µm) sieve is 60 percent, and the maximum material passing the #200 (75 µm) sieve is 15 percent.

(2) Select Fill Quality. The coarse or fine aggregate shall be Class B quality or better, except that a maximum of 15 percent of the material may be finer than the #200 (75 µm) sieve.

(3) Select Fill Internal Friction Angle. The effective internal friction angle for the coarse or fine aggregate shall be a minimum 34 degrees according to AASHTO T 236 on samples compacted to 95 percent density according to Illinois Modified AASHTO T 99. The AASHTO T 296 test with pore pressure measurement may be used in lieu of AASHTO T 236. If the vendor's design uses a friction angle higher than 34 degrees, as indicated on the approved shop drawings, this higher value shall be taken as the minimum required.

(4) Select Fill and Steel Reinforcing. When steel reinforcing is used, the select fill shall meet the following requirements.

- a. The pH shall be 5.0 to 10.0 according to AASHTO T 289.
- b. The resistivity shall be greater than 3000 ohm centimeters according to AASHTO T 288.
- c. The chlorides shall be less than 100 parts per million according to AASHTO T 291 or ASTM D 4327. For either test, the sample shall be prepared according to AASHTO T 291.

- d. The sulfates shall be less than 200 parts per million according to AASHTO T 290 or ASTM D 4327. For either test, the sample shall be prepared according to AASHTO T 290.
 - e. The organic content shall be a maximum 1.0 percent according to AASHTO T 267.
- (5) Select Fill and Geosynthetic Reinforcing. When geosynthetic reinforcing is used, the select fill pH shall be 4.5 to 9.0 according to AASHTO T 289.
- (6) Test Frequency. Prior to start of construction, the Contractor shall provide internal friction angle, pH, to show the select fill material meets the specification requirements. In addition, resistivity, chlorides, sulfates, and organic content test results will be required if steel reinforcing is used. All test results shall not be older than 12 months. In addition, a sample of select fill material will be obtained for testing and approval by the Department. Thereafter, the minimum frequency of sampling and testing at the jobsite will be one per 20,000 cubic yards (15,500 cubic meters) of select fill material.
- (c) The embankment material behind the select fill shall be according to Section 202 and/or Section 204. An embankment unit weight of 120 lbs/cubic foot (1921 kg/cubic meter) and an effective friction angle of 30 degrees shall be used in the wall system design, unless otherwise indicated on the plans.
- (d) The geosynthetic filter material used across the panel joints shall be either a non-woven needle punch polyester or polypropylene or a woven monofilament polypropylene with a minimum width of 12 in. (300 mm) and a minimum non-sewn lap of 6 in. (150 mm) where necessary.
- (e) The bearing pads shall be rubber, neoprene, polyvinyl chloride, or polyethylene of the type and grade as recommended by the wall supplier.
- (f) All precast panels shall be manufactured with Class PC concrete according to Section 504, Article 1042.02, Article 1042.03, and the following requirements:
- (1) The minimum panel thickness shall be 5 1/2 in. (140 mm).
 - (2) The minimum reinforcement bar cover shall be 1 1/2 in. (38 mm).
 - (3) The panels shall have a ship lap or tongue and groove system of overlapping joints between panels designed to conceal joints and bearing pads.
 - (4) The panel reinforcement shall be epoxy coated according to Article 1006.10 (a)(2).
 - (5) All dimensions shall be within 3/16 in. (5 mm).
 - (6) Angular distortion with regard to the height of the panel shall not exceed 0.2 inches in 5 ft (5 mm in 1.5 m).

- (7) Surface defects on formed surfaces measured on a length of 5 ft. (1.5 m) shall not be more than 0.1 in. (2.5 mm).
- (8) The panel embed/connection devices shall be cast into the facing panels with a tolerance not to exceed 1 in. (25 mm) from the locations specified on the approved shop drawings.

Unless specified otherwise, concrete surfaces exposed to view in the completed wall shall be finished according to Article 503.15(a). The back face of the panel shall be roughly screeded to eliminate open pockets of aggregate and surface distortions in excess of 1/4 in. (6 mm).

Design Criteria. The design shall be according to the appropriate AASHTO Design Specifications noted on the plans for Mechanically Stabilized Earth Walls except as modified herein. The wall supplier shall be responsible for all internal stability aspects of the wall design and shall supply the Department with computations for each designed wall section. The analyses of settlement, bearing capacity and overall slope stability will be 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.

The design of the soil reinforcing system shall be according to the applicable AASHTO or AASHTO LRFD Design Specifications for "Inextensible" steel or "Extensible" geosynthetic reinforcement criteria. The reduced section of the soil reinforcing system shall be sized to allowable stress levels at the end of a 75 year design life.

Steel soil reinforcing systems shall be protected by either galvanizing or epoxy coating. The design life for epoxy shall be 16 years. The corrosion protection for the balance of the 75 year total design life shall be provided using a sacrificial steel thickness computed for all exposed surfaces according to the applicable AASHTO or AASHTO LRFD Design Specifications.

Geosynthetic soil reinforcing systems shall be designed to account for the strength reduction due to long-term creep, chemical and biological degradation, as well as installation damage.

To prevent out of plane panel rotations, the soil reinforcement shall be connected to the standard panels in at least two different elevations, vertically spaced no more than 30 in. (760 mm) apart.

The panel embed/soil reinforcement connection capacity shall be determined according to the applicable AASHTO or AASHTO LRFD Design Specifications.

The factor of safety for pullout resistance in the select fill shall not be less than 1.5, based on the pullout resistance at 1/2 in. (13 mm) deformation. Typical design procedures and details, once accepted by the Department, shall be followed. All wall system changes shall be submitted in advance to the Department for approval.

For aesthetic considerations and differential settlement concerns, the panels shall be erected in such a pattern that the horizontal panel joint line is discontinuous at every other panel. This shall be accomplished by alternating standard height and half height panel placement along the leveling pad. Panels above the lowest level shall be standard size except as required to satisfy the top of exposed panel line shown on the contract plans.

At locations where the plans specify a change of panel alignment creating an included angle of 150 degrees or less, precast corner joint elements will be required. This element shall separate the adjacent panels by creating a vertical joint secured by means of separate soil reinforcement.

Isolation or slip joints, which are similar to corner joints in design and function, may be required to assist in differential settlements at locations indicated on the plans or as recommended by the wall supplier. Wall panels with areas greater than 30 sq. ft. (2.8 sq. m) may require additional slip joints to account for differential settlements. The maximum standard panel area shall not exceed 60 sq. ft. (5.6 sq. m).

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

The foundation soils supporting the structure shall be graded for a width equal to or exceeding the length of the soil reinforcement. Prior to wall construction, the foundation shall be compacted with a smooth wheel vibratory roller. Any foundation soils found to be unsuitable shall be removed and replaced, as directed by the Engineer, and shall be paid for separately according to Section 202.

When structure excavation is necessary, it shall be made and paid for according to Section 502 except that the horizontal limits for structure excavation shall be from the rear limits of the soil reinforcement to a vertical plane 2 ft. (600 mm) from the finished face of the wall. The depth shall be from the top of the original ground surface to the top of the leveling pad. The additional excavation necessary to place the concrete leveling pad will not be measured for payment but shall be included in this work.

The concrete leveling pads shall have a minimum thickness of 6 in. (150 mm) and shall be placed according to Section 503.

As select fill material is placed behind a panel, the panel shall be maintained in its proper inclined position according to the supplier specifications and as approved by the Engineer. Vertical tolerances and horizontal alignment tolerances shall not exceed 3/4 in. (19 mm) when measured along a 10 ft. (3 m) straight edge. The maximum allowable offset in any panel joint shall be 3/4 in. (19 mm). The overall vertical tolerance of the wall, (plumbness from top to

bottom) shall not exceed 1/2 in. per 10 ft. (13 mm per 3 m) of wall height. The precast face panels shall be erected to insure that they are located within 1 in. (25 mm) from the contract plan offset at any location to insure proper wall location at the top of the wall. Failure to meet this tolerance may cause the Engineer to require the Contractor to disassemble and re-erect the affected portions of the wall. A 3/4 in. (19 mm) joint separation shall be provided between all adjacent face panels to prevent direct concrete to concrete contact. This gap shall be maintained by the use of bearing pads and/or alignment pins.

The back of all panel joints shall be covered by a geotextile filter material attached to the panels with a suitable adhesive. No adhesive will be allowed directly over the joints.

The select fill and embankment placement shall closely follow the erection of each lift of panels. At each soil reinforcement level, the fill material should be roughly leveled and compacted before placing and attaching the soil reinforcing system. The soil reinforcement and the maximum lift thickness shall be placed according to the supplier's recommended procedures except, the lifts for select fill shall not exceed 10 in. (255 mm) loose measurement or as approved by the Engineer. Embankment shall be constructed according to Section 205.

At the end of each day's operations, the Contractor shall shape the last level of select fill to permit runoff of rainwater away from the wall face. Select fill shall be compacted according to the project specifications for embankment except the minimum required compaction shall be 95 percent of maximum density as determined by AASHTO T 99. Select fill compaction shall be accomplished without disturbance or distortion of soil reinforcing system and panels. Compaction in a strip 3 ft. (1 m) wide adjacent to the backside of the panels shall be achieved using a minimum of 3 passes of a light weight mechanical tamper, roller or vibratory system. The Engineer will perform one density test per 5000 cu yd (3800 cu m) and not less than one test per 2 ft (0.6 m) of lift.

Method of Measurement. Mechanically Stabilized Earth Retaining Wall will be measured for payment in square feet (square meters). The MSE retaining wall will be measured from the top of exposed panel line to the theoretical top of leveling pad line for the length of the wall as shown on the contract plans.

Basis of Payment. This work, including placement of the select fill within the soil reinforced wall volume shown on the approved shop drawings, precast face panels, soil reinforcing system, concrete leveling pad and accessories will be paid for at the contract unit price per square foot (square meter) for MECHANICALLY STABILIZED EARTH RETAINING WALL.

Concrete coping when specified on the contract plans will be included for payment in this work. Other concrete appurtenances such as anchorage slabs, parapets, abutment caps, etc. will not be included in this work, but will be paid for as specified elsewhere in this contract, unless otherwise noted on the plans.

Excavation necessary to place the select fill for the MSE wall shall be paid for as STRUCTURE EXCAVATION and/or ROCK EXCAVATION FOR STRUCTURES as applicable, according to Section 502.

Embankment placed outside of the select fill volume will be measured and paid for according to Sections 202 and/or 204 as applicable.

PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000

Revised: January 22, 2010

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

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

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

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

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

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

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

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

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

PILING

Effective: May 11, 2009

Revised: January 22, 2010

Revise Article 512.04(a) of the Standard Specifications to read:

“(a) Splicing. Splicing of metal shell piles shall be as follows.

- (1) Planned Splices. Planned field or shop splices may be used when allowed per Article 512.10 or when the lengths specified in Article 512.16 exceed the estimated lengths specified in the contract plans by at least 10 ft (3 m). The location of planned splices shall be approved by the Engineer and located to minimize the chance they will occur within the 10 ft (3 m) below the base of the footing, abutment, or pier.
- (2) Unplanned Splices. Unplanned field splices shall be used as required to furnish lengths beyond those specified in Article 512.16. The length of additional segments shall be specified by the Engineer.”

Revise Article 512.05(a) of the Standard Specifications to read:

“(a) Splicing. Splicing of steel piles shall be as follows.

- (1) Planned Splices. Planned field or shop splices may be used when allowed per Article 512.10 or when the lengths specified in Article 512.16 exceed the estimated lengths specified in the contract plans by at least 10 ft (3 m). The location of planned splices shall be approved by the Engineer and located to minimize the chance they will occur within the 10 ft (3 m) below the base of the footing, abutment, or pier.
- (2) Unplanned Splices. Unplanned field splices shall be used as required to furnish lengths beyond those specified in Article 512.16. The length of additional segments shall be specified by the Engineer.”

Revise the first three paragraphs of Article 512.10 of the Standard Specifications to read:

“512.10 Driving Equipment. The equipment for driving piles shall be adequate for driving piles at least 10 ft (3 m) longer than the longest estimated pile length specified in the contract plans without splicing, unless the estimated pile length exceeds 55 ft (17 m) or prevented by vertical clearance restrictions. The use of shorter length equipment or the use of preplanned splices (necessitated by estimated pile lengths exceeding 55 ft (17 m) or vertical clearance restrictions) shall meet the approval of the Engineer. The equipment for driving piles shall be according to the following.

- (a) Hammers. Piles shall be driven with an impact hammer such as a drop, steam/air, hydraulic, or diesel. The driving system selected by the Contractor shall not result in damage to the pile. The impact hammer shall be capable of being operated at an energy which will maintain a pile penetration rate between 1 and 10 blows per 1 in. (25 mm) when the nominal driven bearing of the pile approaches the nominal required bearing.

For hammer selection purposes, the minimum and maximum hammer energy necessary to achieve these penetrations may be estimated as follows.

$$E \geq \frac{32.90 R_N}{F_{eff}} \quad (\text{English})$$

$$E \leq \frac{65.80 R_N}{F_{eff}} \quad (\text{English})$$

$$E \geq \frac{10.00 R_N}{F_{eff}} \quad (\text{metric})$$

$$E \leq \frac{20.00 R_N}{F_{eff}} \quad (\text{metric})$$

Where:

- R_N = Nominal required bearing in kips (kN)
- E = Energy developed by the hammer per blow in ft lb (J)
- F_{eff} = Hammer efficiency factor according to Article 512.14."

Add the following sentence to the beginning of the fourth paragraph of Article 512.11 of the Standard Specifications:

"Except as required to satisfy the minimum tip elevations required in 512.11(b) above, piles are not required to be driven more than one additional foot (300 mm) after the nominal driven bearing equals or exceeds the nominal required bearing; more than three additional inches (75 mm) after the nominal driven bearing exceeds 110 percent of the nominal required bearing; or more than one additional inch (25 mm) after the nominal driven bearing exceeds 150 percent of the nominal required bearing."

Revise the first paragraph of Article 512.14 of the Standard Specifications to read:

"512.14 Determination of Nominal Driven Bearing. The nominal driven bearing of each pile shall be determined by the WSDOT formula as follows.

$$R_{NDB} = \frac{6.6 F_{eff} E \ln(10N_b)}{1000} \quad (\text{English})$$

$$R_{NDB} = \frac{21.7 F_{eff} E \ln(10N_b)}{1000} \quad (\text{metric})$$

Where:

- R_{NDB} = Nominal driven bearing of the pile in kips (kN)
- N_b = Number of hammer blows per inch (25 mm) of pile penetration
- E = Energy developed by the hammer per blow in ft lb (J)
- F_{eff} = Hammer efficiency factor taken as:
 - 0.55 for air/steam hammers
 - 0.47 for open-ended diesel hammers and steel piles or metal shell piles

0.37 for open-ended diesel hammers and concrete or timber piles
0.35 for closed-ended diesel hammers
0.28 for drop hammers”

Add the following to Article 512.18 of the Standard Specifications.

“(h) When the lengths specified in Article 512.16 exceed the estimated lengths specified in the contract plans by at least 10 ft (3m), additional field splices (for metal shell and steel piles) required to provide the lengths specified in Article 512.16 will be paid for according to Article 109.04.”

FREEZE-THAW AGGREGATES FOR CONCRETE SUPERSTRUCTURES POURED ON GRADE

Effective: April 30, 2010

Revise the first sentence of Article 1004.029(f) to read as follows.

“When coarse aggregate is used to produce portland cement concrete for base course, base course widening, pavement, driveway pavement, sidewalk, shoulders, curb, gutter, combination curb and gutter, median, paved ditch, concrete superstructures on grade such as bridge approach slabs, or their repair using concrete, the gradation permitted will be determined from the results of the Department’s Freeze-Thaw Test (Illinois Modified AASHTO T161).”

AGGREGATE COLUMN GROUND IMPROVEMENT

Effective: January 15, 2009

Revised: October 4, 2010

Description. This work shall consist of furnishing design calculations, shop drawings, materials, and labor necessary to construct aggregate column ground improvements, over the approximate horizontal limits and below the elevation specified on the contract plans, or as modified by the Contractor's approved design.

Submittals. No later than thirty (30) days prior to beginning work, the Contractor shall submit to the Engineer for approval the following information:

- (a) Evidence of the selected subcontractor's successful installation of their aggregate column system on five projects under similar site conditions using the same installation technique. The documentation to be submitted shall include a description of the project, aggregate column installation technique, soil conditions and name and phone number of contracting authority.
- (b) Evidence that the proposed project superintendent for the ground improvement installation has a minimum of three years of method specific experience.
- (c) Shop Drawings sealed by an Illinois Licensed Professional Engineer showing aggregate column horizontal limits, locations, pattern, spacing, diameters, top and bottom elevations, and identification numbers. If an aggregate drainage layer is specified on the plans or a working platform proposed by the Contractor, the thickness, aggregate gradation, and plan dimensions shall be shown in addition to any other details needed to describe the work.
- (d) A description of the equipment, installation technique and construction procedures to be used, including a plan to address any water or spoils.
- (e) The source and gradation of the aggregate proposed for the aggregate columns.
- (f) Design computations, sealed by an Illinois Licensed Professional Engineer, demonstrating the proposed ground improvement plan satisfies the minimum global stability, settlement, and bearing capacity performance requirements stated in the Contract Plans and those contained in this Special Provision.
- (g) The proposed verification program methods to monitor and verify the aggregate column installation is satisfying the design and performance requirements. Also required is a sample of the daily report form to be used by the Contractor to documents the adequacy of that day's work.

Materials. The aggregate used in the columns shall be Class A quality crushed stone or crushed concrete satisfying the requirements of Section 1004 of the standard specifications. The aggregate for any drainage layer specified in the plans shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 15, according to Sections 1003 and 1004 of the Standard Specifications. Any fine or coarse aggregate requested by the Contractor to be used as either a drainage layer or working platform shall be approved by the Engineer.

Design Criteria. The subcontractor selected shall provide an aggregate column ground improvement plan with shop drawings, and design computations, using an Allowable Stress Design that meets the performance requirements shown on the Contract Plans. These requirements normally include the global stability factor of safety, tolerable settlement amounts at various times and in the case of walls or structure footings, the equivalent uniform service bearing pressure applied at various locations and the factor of safety required. In the absence of performance requirements shown on the plans, the following Allowable Stress minimum performance requirements shall be used:

- (a) A factor of safety of 1.5 against global slope stability failure.
- (b) A factor of safety of 2.5 against equivalent uniform service bearing pressure failure.
- (c) Total settlement not to exceed 4 inches (100 mm) and settlement after completing wall or pavement construction not to exceed 1 inch (25 mm).

The design shall use short term strength parameters for the soil, obtained from the soil boring logs and any geotechnical laboratory testing data provided in the Contract Plans and specifications for stability and bearing capacity analyses. Settlement shall be assessed using appropriate soil parameters. Any additional subsurface information needed to design the aggregate columns shall be the responsibility of the Contractor.

The aggregate column ground improvement design need not consider seismic loadings unless otherwise required as part of the performance requirements shown on the plans.

Construction. The construction procedures shall be determined by the aggregate column installer and submitted for approval with the shop drawings. The following are the minimum requirements that the Contractor will be expected to follow unless otherwise approved in the shop drawings submittal.

- (a) The site shall be graded as needed for proper installation of the aggregate column system. Any grading and excavation below the improvement limits shown on the plans shall be incidental to aggregate column installation.
- (b) Any granular base drainage layer or working platform shall be considered incidental to the improvement. Contractor requested drainage layers or working platforms will only be allowed if approved as part of the shop drawings.
- (c) The aggregate column material shall be placed in a manner that allows measurement of the tonnage or quantity of aggregate placed down the hole.
- (d) Columns shall be installed in a sequence that will minimize ground heave. Any heaving shall be re-compacted or excavated as directed by the Engineer prior to wall or embankment construction and be considered incidental to aggregate column improvement.
- (e) The Contractor shall provide a full-time qualified representative to verify all installation procedures and provide the verification program.
- (f) Disposal of any spoils generated shall be according to Article 202.03.

(g) If an obstruction is encountered that cannot be penetrated with reasonable effort, the Contractor shall construct the element from the depth of obstruction to its design top elevation. Depending on the depth of the completed column, column location, and design requirements, the Engineer may require the construction of a replacement aggregate column at an adjacent location. Construction of additional columns will be considered extra work and paid for according to Article 109.04.

(h) Specific Requirements for Vibrator Compacted Aggregate Columns:

- i. Vibrator compacted aggregate columns shall be constructed with a down-hole vibrator, probe and follower tubes of sufficient size to install the columns to the diameter and bottom elevation(s) shown on the approved shop drawings. Pre-boring is permitted if approved as part of the shop drawing submittal.
- ii. The probe and follower tubes shall have visible markings at regular increments to enable measurement of penetration and re-penetration depths.
- iii. Provide methods for supplying to the tip of the probe a sufficient quantity of air or water to widen the probe hole to allow adequate space for aggregate placement around the probe.
- iv. The vibrator shall be withdrawn in 12 to 36 inch (300 to 900 mm) increments, to allow placement of the aggregate.
- v. Lift thickness shall not exceed 4 ft (1.2 m). After penetration to the treatment depth, slowly retrieve the vibrator in 12 to 18 inch (300 to 450 mm) increments to allow aggregate placement.
- vi. Compact the aggregate in each lift by re-penetrating it as needed with the vibrating probe to densify and force the aggregate radially into the surrounding soil. Re-penetrate the aggregate in each increment a sufficient number of times to construct the columns as specified in the approved shop drawings and to meet the verification program requirements.

(i) Specific Requirements for Tamper Compacted (Rammed) Aggregate Columns:

- i. Tamper compacted (rammed) aggregate columns shall be installed by either drilling or displacement methods, capable of constructing columns to the diameters and bottom elevation(s) shown on the approved shop drawings.
- ii. If temporary casing is needed to limit the sloughing of subsurface soils, the casing should be inserted to at least 2 ft (600 mm) beyond any sloughing strata. Upon extraction, the bottom of the casing shall be maintained at not more than 2 feet (600 mm) above the level of aggregate.
- iii. Aggregate placement shall closely follow the excavation of each column. The aggregate shall be placed in 1 to 2 ft (300 to 600 mm) thick lifts. Each lift should be rammed with a high-energy impact tamper as specified in the approved shop drawings and to meet the verification program requirements.

Construction Tolerances. The aggregate columns shall be constructed to the following tolerances:

- (a) The horizontal limits and center of each constructed aggregate column shall be within 8 inches (190 mm) of the location specified on the approved the shop drawings.
- (b) The axis of the constructed aggregate columns shall not be inclined more than 1.67 percent from vertical.
- (c) The installed diameter of any aggregate column shall not be more than 10 percent below the effective diameter indicated on the approved shop drawings.
- (d) The average effective diameter of any group of 50 consecutively installed aggregate columns shall not be less than the effective diameter indicated on approved shop drawings.
- (e) The top of the aggregate column ground improvement shall be located within 8 inches (200 mm) of the top elevation shown on the approved shop drawings. When supporting MSE walls, the top elevation may need to be adjusted to the base of the MSE reinforced mass elevation as shown on the approved MSE shop drawings.
- (f) Except where obstructions, hard or very dense soils are encountered, the aggregate column shall be advanced to at least the treatment depth elevation shown on the approved in the Shop Drawings.

Any aggregate column installation not meeting the above stated tolerances, or otherwise deemed unsatisfactory by the Engineer, may require installation of a replacement aggregate column(s) at the discretion of the Engineer and at the Contractor's expense. The Contractor shall submit to the Engineer revised plans and procedures to bring installations in those areas into tolerance.

Verification Program. The Contractor shall develop and maintain a monitoring and documentation procedure during the installation of all aggregate columns to verify they satisfy the design and performance requirements. The Contractor shall provide qualified personnel to continuously observe and record the required data. The program shall include, as a minimum, the following:

- (a) Quality control procedures to allow verification that each aggregate column is being installed according to the designer's specifications and the requirements in this Special Provision. This will typically include observations of items such as electrical current or hydraulic pressure, number of high-energy impact tamps, aggregate quantity, etc. that must be obtained to achieve the performance requirements.
- (b) Monitoring methods to evaluate the performance of the global aggregate column improvement system after construction of the overlying embankment or wall. This will typically include installation of settlement plates and may also include monitoring points, inclinometers, piezometers or other instrumentation.

- (c) Proposed means and methods for verification that the installed aggregate columns meet the strength and/or stiffness criteria required by the design. This may include modulus or load tests on individual elements and/or groups, soil borings, and other methods.
- (d) A daily report form shall be completed by the Contactor and provided to the Engineer to document the work performed each day and the adequacy of each aggregate column. The form shall be signed by the Contractor's qualified personnel and include as a minimum the following:
 - i. Aggregate columns installed (identified by location number).
 - ii. Date constructed.
 - iii. Elevation of top and bottom of each aggregate column.
 - iv. Average lift thickness.
 - v. Results of quality control testing such as average power consumption or tamping energy obtained during aggregate column installation.
 - vi. Jetting pressure (air or water) if applicable.
 - vii. Description of soil and groundwater conditions.
 - viii. Details of obstructions, delays and any unusual issues.
 - ix. Amount of water used per aggregate column if applicable.
 - x. Estimated weight or volume of aggregate backfill placed in each column.
 - xi. Average installed diameter of each column.

Basis of Payment. This work will be paid at the contract Lump Sum price for AGGREGATE COLUMN GROUND IMPROVEMENT. Any temporary casing, excavation, disposal of water or spoils, drainage layers or working platforms will not be paid for separately, but shall be considered to be included with this work.

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

SPECIAL PROVISION
FOR
COOPERATION WITH UTILITIES

Effective: January 1, 1999
Revised: January 1, 2007

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

Replace Article 105.07 of the Standard Specifications with the following:

"105.07 Cooperation with Utilities. The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.

(a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:

- (1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 ft) distant at right angles from the plan or revised slope limits.

In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 1.2 m (4 ft) outside the edges of structure footings or the structure where no footings are required.

- (2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
- (3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.

(b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:

- (1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.
- (2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

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

SPECIAL PROVISION
FOR
INSURANCE

Effective: February 1, 2007
Revised: August 1, 2007

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

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

Rockford

Rock River Water Reclamation District

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

State of Illinois
Department of Transportation
Bureau of Local Roads and Streets
SPECIAL PROVISION
FOR
CONSTRUCTION AND MAINTENANCE SIGNS

Effective: January 1, 2004
Revised: June 1, 2007

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

701.14. Signs. Add the following paragraph to Article 701.14:

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

**APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS
(BDE)**

Effective: November 1, 2008

Revised: November 1, 2010

Replace the first paragraph of Article 107.22 of the Standard Specifications with the following:

“All proposed borrow areas, including commercial borrow areas; use areas, including, but not limited to temporary access roads, detours, runarounds, plant sites, and staging and storage areas; and/or waste areas are to be designated by the Contractor to the Engineer and approved prior to their use. Such areas outside the State of Illinois shall be evaluated, at no additional cost to the Department, according to the requirements of the state in which the area lies; and approval by the authority within that state having jurisdiction for such areas shall be forwarded to the Engineer. Such areas within Illinois shall be evaluated as described herein.

A location map delineating the proposed borrow area, use area, and/or waste area shall be submitted to the Engineer for approval along with an agreement from the property owner granting the Department permission to enter the property and conduct cultural and biological resource reconnaissance surveys of the site for archaeological resources, threatened or endangered species or their designated essential habitat, wetlands, prairies, and savannahs. The type of location map submitted shall be a topographic map, a plat map, or a 7.5 minute quadrangle map. Submittals shall include the intended use of the site and provide sufficient detail for the Engineer to determine the extent of impacts to the site. The Engineer will initiate cultural and biological resource reconnaissance surveys of the site, as necessary, at no cost to the Contractor. The Engineer will advise the Contractor of the expected time required to complete all surveys. If the proposed area is within 150 ft (45 m) of the highway right-of-way, a topographic map of the proposed site will be required as specified in Article 204.02.”

80207

CEMENT (BDE)

Effective: January 1, 2007

Revised: April 1, 2011

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

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

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

Portland cement shall be according to AASHTO M 85, and shall meet the standard physical and chemical requirements. The Contractor has the option to use any type of portland cement listed in AASHTO M 85 unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C or F fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust.

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

Portland-pozzolan cement shall be according to AASHTO M 240 and shall meet the standard physical and chemical requirements. The Contractor has the option to use portland-pozzolan cement unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C or F fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust. The pozzolan constituent for Type IP using Class F fly ash shall be a maximum of 25 percent of the weight (mass) of the portland-pozzolan cement. The pozzolan constituent for Type IP using Class C fly ash shall be a maximum of 30 percent of the weight (mass) of the portland-pozzolan cement. The pozzolan constituent for Type IP using microsilica or high-reactivity metakaolin shall be a maximum of ten percent. The pozzolan constituent for Type IP using other materials shall have the approval of the Engineer.

Portland-pozzolan cement may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

- (c) Portland Blast-Furnace Slag Cement. Acceptance of portland blast-furnace slag cement shall be according to the current Bureau of Materials and Physical Research's Policy

Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland blast-furnace slag cement shall be according to AASHTO M 240 and shall meet the standard physical and chemical requirements. The Contractor has the option to use portland blast-furnace slag cement unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C or F fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust. The blast-furnace slag constituent for Type IS shall be a maximum of 35 percent of the weight (mass) of the portland blast-furnace slag cement.

Portland blast-furnace slag cement may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
- (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified AASHTO T 131.
 - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, 3200 psi (22,100 kPa) at 6.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified AASHTO T 106.
 - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.
 - (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.
 - (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to Illinois Modified AASHTO T 161, Procedure B.
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to AASHTO M 85, except the time of setting shall not apply. The chemical requirements shall be determined according to AASHTO T 105 and shall be as follows: minimum 38 percent aluminum oxide (Al_2O_3), 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.”

80166

CERTIFICATION OF METAL FABRICATOR (BDE)

Effective: July 1, 2010

Revise Article 106.08 of the Standard Specifications to read:

“106.08 Certification of Metal Fabricator. All fabricators performing work on metal components of structures shall be certified under the appropriate category of the AISC Quality Certification Program as follows.

- (a) Fabricators of the main load carrying steel components of welded plate girder, box girder, truss, and arch structures shall be certified under Category MBr (Major Steel Bridges).
- (b) Fabricators of the main load carrying steel components of rolled beam structures, either simple span or continuous, and overhead sign structures shall be certified under Category SBr (Simple Steel Bridges).

Fabricators of steel or other non-ferrous metal components of structures not certified under (a) or (b) above shall be certified under the program for Bridge and Highway Metal Component Manufacturers.”

80260

CONCRETE ADMIXTURES (BDE)

Effective: January 1, 2003

Revised: April 1, 2009

Replace the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

“(b) Admixtures. The use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted when approved by the Engineer. Admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Department will maintain an Approved List of Corrosion Inhibitors. Corrosion inhibitor dosage rates shall be according to Article 1020.05(b)(12). The Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted when determining an admixture dosage from this list. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity, finely divided mineral sources(s) and quantity, influence of other admixtures, haul time, placement conditions, and other factors as appropriate shall be considered. The Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour. When a retarding admixture is required or appropriate for a bridge deck or bridge deck overlay pour, the initial set time shall be delayed until the deflections due to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

When determining water in admixtures for water/cement ratio, the Contractor shall calculate 70 percent of the admixture dosage as water, except a value of 50 percent shall be used for a latex admixture used in bridge deck latex concrete overlays.”

Revise Section 1021 of the Standard Specifications to read:

“SECTION 1021. CONCRETE ADMIXTURES

1021.01 General. Admixtures shall be furnished in liquid form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer and trade name of the material. Containers shall be readily identifiable as to manufacturer and trade name of the material they contain.

Corrosion inhibitors **will be maintained on the Department's Approved List of Corrosion Inhibitors.** All other concrete admixture products will be maintained **on the Department's**

Approved List of Concrete Admixtures. For the admixture submittal, a report prepared by an independent laboratory accredited by the AASHTO Materials Reference Laboratory (AMRL) for Portland Cement Concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, for corrosion inhibitors the ASTM G 109 test information specified in ASTM C 1582 is not required to be from an independent lab. All other information in ASTM C 1582 shall be from an independent lab.

Tests shall be conducted using materials and methods specified on a "test" concrete and a "reference" concrete, together with a certification that no changes have been made in the **formulation of the material since the performance of the tests**. Per the manufacturer's option, the cement content for all required tests shall either be according to applicable specifications or 5.65 cwt/cu yd (335 kg/cu m). Compressive strength test results for six months and one year will not be required.

Prior to the approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to AASHTO T 161, Procedure B. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

The manufacturer shall include in the submittal the following admixture information: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and the manufacturing range for pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM C 494. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to ASTM C 260.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, and 1021.07, the pH allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to ASTM C 494.

When test results are more than seven years old, the manufacturer shall re-submit the infrared spectrophotometer trace and the report prepared by an independent laboratory accredited by AASHTO.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass).

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.

1021.02 Air-Entraining Admixtures. Air-entraining admixtures shall be according to AASHTO M 154.

1021.03 Retarding and Water-Reducing Admixtures. The admixture shall be according to the following.

- (a) The retarding admixture shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall be according to AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

1021.04 Accelerating Admixtures. The admixture shall be according to AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating).

1021.05 Self-Consolidating Admixtures. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete mixture that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall be according to AASHTO M 194, Type F.

The viscosity modifying admixture shall be according to ASTM C 494, Type S (specific performance).

1021.06 Rheology-Controlling Admixture. The rheology-controlling admixture shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. The rheology-controlling admixture shall be according to ASTM C 494, Type S (specific performance).

1021.07 Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.

- (a) Calcium Nitrite. The corrosion inhibitor shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution, and shall comply with the requirements of AASHTO M 194, Type C (accelerating).
- (b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582."

80094

CONCRETE JOINT SEALER (BDE)

Effective: January 1, 2009

Add the following to the end of the second paragraph of Article 503.19 of the Standard Specifications:

“After the surface is clean and before applying protective coat, joints being sealed according to Section 588 shall be covered with a masking tape.”

Revise Section 588 of the Standard Specifications to read:

“SECTION 588. CONCRETE JOINT SEALER

588.01 Description. This work shall consist of sealing the transverse joint in the bridge roadway slab.

588.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Hot-Poured Joint Sealer	1050.02
(b) Prefomed Flexible Foam Expansion Joint Filler.....	1051.09

CONSTRUCTION REQUIREMENTS

588.03 General. The faces of all joints to be sealed shall be free of foreign matter, curing compound, oils, grease, dirt, free water, and laitance. Concrete joints to be sealed shall be free of cracked or spalled areas. Any cracked areas shall be chipped back to sound concrete before placing joint sealer.

The hot-poured joint sealer shall be placed when the air temperature in the shade is 40 °F (5 °C) or higher, unless approved by the Engineer.

A continuous length of expansion joint filler of the size designated on the plans, shall be placed in the joint opening at the depth below the finished surface of the joint shown on the plans. Hot-poured joint sealer shall be stirred during heating to prevent localized overheating. The sealing material shall be applied to each joint opening according to the details shown on the plans or as directed by the Engineer, without spilling on the exposed concrete surfaces.

All bridge joints shall be filled to 1/4 in. (6 mm) below the finished surface of the joint. This is to be interpreted to mean that the surface of the sealant shall be level and the point of its contact with the sidewalls of the joint shall be 1/4 in. (6 mm) below the finished surface of the joint.

Any sealing compound that is not bonded to the joint wall or face 24 hours after placing shall be removed and the joint shall be cleaned and resealed.

588.04 Basis of Payment. This work will not be paid for as a separate item, but shall be considered as included in the unit price bid for the major item of construction involved.”

80215

CONCRETE MIX DESIGNS (BDE)

Effective: April 1, 2009

Add the following to Article 1020.05(c) of the Standard Specifications:

- "(5) Performance Based Finely Divided Mineral Combination. For Class PV and SI concrete a performance based finely divided mineral combination may be used. The minimum cement factor, maximum cement factor, and water cement ratio of Article 1020.04 shall be replaced with the values below, and the performance based finely divided mineral combination herein is an alternative to Articles 1020.05(c)(1), (c)(2), (c)(3), and (c)(4). The mix design shall meet the following requirements and the Engineer may request a trial batch.
- a. The mixture shall contain a minimum of 375 lbs/cu yd (222 kg/cu m) of portland cement. For a blended cement, a sufficient amount shall be used to obtain the required 375 lbs/cu yd (222 kg/cu m) of portland cement in the mixture. For example, a blended cement stated to have 20 percent finely divided mineral, ignoring any ASTM C 595 tolerance on the 20 percent, would require a minimum of 469 lbs/cu yd (278 kg/cu m) of material in the mixture. When the mixture is designed for cement content from 375 lbs/cu yd (222 kg/cu m) to 400 lbs/cu yd (237 kg/cu m), the total of organic processing additions, inorganic processing additions, and limestone addition in the cement shall not exceed 5.0 percent.
 - b. The mixture shall contain a maximum of two finely divided minerals. The finely divided mineral in a blended cement shall count toward the total number of finely divided minerals allowed. The finely divided mineral(s) shall constitute a maximum of 35.0 percent of the total cement plus finely divided mineral(s). The fly ash portion shall not exceed 30.0 percent for Class C fly ash or 25.0 percent for Class F fly ash. The Class C and F fly ash combination shall not exceed 30.0 percent. The ground granulated blast-furnace slag portion shall not exceed 35.0 percent. The microsilica or high-reactivity metakaolin portion used together or separately shall not exceed 5.0 percent. The finely divided mineral in the blended cement shall apply to the maximum 35.0 percent, and shall be determined as discussed in a. above for determining portland cement in blended cement.
 - c. For central mixed Class PV and SI concrete, the mixture shall contain a minimum of 535 lbs/cu yd (320 kg/cu m) of cement and finely divided mineral(s) summed together, and a water-reducing admixture shall be used. The value shall be 565 lbs/cu yd (335 kg/cu m) without a water-reducing admixture.

For truck mixed or shrink mixed Class PV and SI concrete, the mixture shall contain a minimum of 575 lbs/cu yd (345 kg/cu m) of cement and finely

divided mineral(s) summed together, and a water-reducing admixture shall be used. The value shall be 605 lbs/cu yd (360 kg/cu m) without a water-reducing admixture.

- d. The mixture shall contain a maximum of 705 lbs/cu yd (418 kg/cu m) of cement and finely divided mineral(s) summed together.
- e. The mixture shall have a water/cement ratio of 0.32 – 0.44.
- f. The mixture shall not be used for placement underwater.
- g. The combination of cement and finely divided mineral(s) shall have an ASTM C 1567 expansion value ≤ 0.16 percent, and shall be performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly.

If during the two year time period the Contractor needs to replace the portland cement, and the replacement portland cement has an equal or lower total equivalent alkali content ($\text{Na}_2\text{O} + 0.658\text{K}_2\text{O}$), a new ASTM C 1567 test will not be required. However, replacement of a blended cement with another cement will require a new ASTM C 1567 test.”

80226

CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)

Effective: April 1, 2009

Revised: July 1, 2009

Diesel Vehicle Emissions Control. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively (15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall submit copies of monthly summary reports and include certified copies of the ULSD diesel fuel delivery slips for diesel fuel delivered to the jobsite for the reporting time period, noting the quantity of diesel fuel used.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

Environmental Deficiency Deduction. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from 1/2 hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end

with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

80237

CONSTRUCTION AIR QUALITY - IDLING RESTRICTIONS (BDE)

Effective: April 1, 2009

Idling Restrictions. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

- 1) The motor vehicle has a gross vehicle weight rating of less than 8000 lb (3630 kg).
- 2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
- 3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
- 4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
- 5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
- 6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
- 7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
- 8) When the motor vehicle idles due to mechanical difficulties over which the operator has no control.
- 9) The outdoor temperature is less than 32 °F (0 °C) or greater than 80 °F (26 °C).

When the outdoor temperature is greater than or equal to 32 °F (0 °C) or less than or equal to 80 °F (26 °C), a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

Environmental Deficiency Deduction. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be \$1,000.00 for each deficiency identified.

80239

DETERMINATION OF THICKNESS (BDE)

Effective: April 1, 2009

Revise Articles 353.12 and 353.13 of the Standard Specifications to Articles 353.13 and 353.14 respectively.

Add the following Article to the Standard Specifications:

“353.12 Tolerance in Thickness. The thickness of base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction, bike paths, and individual locations less than 500 ft (150 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness.

The procedure described in Article 407.10(b) will be followed, except the option of correcting deficient pavement with additional lift(s) shall not apply.”

Revise Article 354.09 of the Standard Specifications to read:

“354.09 Tolerance in Thickness. The thickness of base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course widening thickness.

The procedure described in Article 407.10(b) will be followed, except:

- (a) The width of a unit shall be the width of the widening along one edge of the pavement.
- (b) The length of the unit shall be 1000 ft (300 m).
- (c) The option of correcting deficient pavement with additional lift(s) shall not apply.”

Revise Article 355.09 of the Standard Specifications to read:

“355.09 Tolerance in Thickness. The thickness of HMA base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 500 ft (150 m) long, will be evaluated according to Article 407.10(b). Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to

placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness.”

Revise Article 356.07 of the Standard Specifications to read:

“356.07 Tolerance in Thickness. The thickness of HMA base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated according to Article 407.10(b) except, the width of a unit shall be the width of the widening along one edge of the pavement and the length of a unit shall be 1000 ft (300 m). Temporary locations are defined as those constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s) and subtract them from the measured core thickness to determine the base course widening thickness.”

Revise Article 407.10 of the Standard Specifications to read:

“407.10 Tolerance in Thickness. Determination of pavement thickness shall be performed after the pavement surface tests and corrective action have been completed according to Article 407.09. Pay adjustments made for pavement thickness will be in addition to and independent of those made for pavement smoothness. Pavement pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous pavement shall be evaluated with the following exclusions: temporary pavements; variable width pavements; radius returns; short lengths of contiguous pavements less than 500 ft (125 m) in length; and constant width portions of turn lanes less than 500 ft (125 m) in length. Temporary pavements are defined as pavements constructed and removed under the same contract.

The method described in Article 407.10(a), shall be used except for those pavements constructed in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m). The method described in Article 407.10(b) shall be used in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m).

(a) Percent Within Limits. The percent within limits (PWL) method shall be as follows.

- (1) Lots and Sublots. The pavement will be divided into approximately equal lots of not more than 5000 ft (1500 m) in length. When the length of a continuous strip of pavement is 500 ft (150 m) or greater but less than 5000 ft (1500 m), these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement will be grouped together to form lots approximately 5000 ft (1500 m) in length. Short segments between structures will be measured continuously with the structure segments omitted. Each lot will be subdivided into ten equal sublots. The width of a sublot and lot will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.

- (2) Cores. Cores 2 in. (50 mm) in diameter shall be taken from the pavement by the Contractor, at locations selected by the Engineer. The exact location for each core will be selected at random, but will result in one core per subplot. Core locations will be specified prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the core lengths. The cores will be measured with a device supplied by the Department immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples shall be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

- (3) Deficient Sublot. When the length of the core in a subplot is deficient by more than ten percent of plan thickness, the Contractor may take three additional cores within that subplot at locations selected at random by the Engineer. If the Contractor chooses not to take additional cores, the pavement in that subplot shall be removed and replaced.

When the three additional cores are taken, the length of those cores will be averaged with the original core length. If the average shows the subplot to be deficient by ten percent or less, no additional action is necessary. If the average shows the subplot to be deficient by more than ten percent, the pavement in that subplot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient sublots to remain in place. For deficient sublots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient subplot is removed and replaced, or additional lifts are placed, the corrected subplot shall be retested for thickness. The length of the new core taken in the subplot will be used in determining the PWL for the lot.

When a deficient subplot is left in place, and no additional lift(s) are placed, no payment will be made for the deficient subplot. The length of the original core taken in the subplot will be used in determining the PWL for the lot.

- (4) Deficient Lot. After addressing deficient sublots, the PWL for each lot will be determined. When the PWL of a lot is 60 percent or less, the pavement in that lot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient lots to remain in place.

For deficient lots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient lot is removed and replaced, or additional lifts are placed, the corrected lot shall be retested for thickness. The PWL for the lot will then be recalculated based upon the new cores; however, the pay factor for the lot shall be a maximum of 100 percent.

When a deficient lot is left in place, and no additional lift(s) are placed, the PWL for the lot will not be recalculated.

- (5) Right of Discovery. When the Engineer has reason to believe the random core selection process will not accurately represent the true conditions of the work, he/she may order additional cores. The additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action. The need for, and location of, additional cores will be determined prior to commencement of coring operations.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, more additional cores shall be taken to determine the limits of the deficient pavement and that area shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the subplot. An acceptable core is a core with a length of at least 90 percent of plan thickness.

For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement.

When the additional cores show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

- (6) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are placed, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness.
- (7) Determination of PWL. The PWL for each lot will be determined as follows.

Definitions:

- x_i = Individual values (core lengths) under consideration
 n = Number of individual values under consideration (10 per lot)
 \bar{x} = Average of the values under consideration
LSL = Lower Specification Limit (98% of plan thickness)
 Q_L = Lower Quality Index
 s = Sample Standard Deviation
PWL = Percent Within Limits

Determine \bar{x} for the lot to the nearest two decimal places.

Determine s for the lot to the nearest three decimal places using:

$$s = \sqrt{\frac{\sum(x_i - \bar{x})^2}{n-1}} \quad \text{where} \quad \sum(x_i - \bar{x})^2 = (x_1 - \bar{x})^2 + (x_2 - \bar{x})^2 + \dots + (x_{10} - \bar{x})^2$$

Determine Q_L for the lot to the nearest two decimal places using:

$$Q_L = \frac{(\bar{x} - LSL)}{s}$$

Determine PWL for the lot using the Q_L and the following table. For Q_L values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.

- (8) Pay Factors. The pay factor (PF) for each lot will be determined, to the nearest two decimal places, using:

$$PF \text{ (in percent)} = 55 + 0.5 (PWL)$$

If \bar{x} for a lot is less than the plan thickness, the maximum PF for that lot shall be 100 percent.

- (9) Payment. Payment of incentive or disincentive for pay items subject to the PWL method will be calculated using:

$$\text{Payment} = (((TPF/100)-1) \times CUP) \times (TOTPAVT - DEFFPAVT)$$

TPF = Total Pay Factor

CUP = Contract Unit Price
TOTPAVT = Area of Pavement Subject to Coring
DEFPAVT = Area of Deficient Pavement

The TPF for the pavement shall be the average of the PF for all the lots; however, the TPF shall not exceed 102 percent.

Area of Deficient pavement (DEFPAVT) is defined as an area of pavement represented by a subplot deficient by more than ten percent which is left in place with no additional thickness added.

Area of Pavement Subject to Coring (TOTPAVT) is defined as those pavement areas included in lots for pavement thickness determination.

PERCENT WITHIN LIMITS							
Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)
0.00	50.00	0.40	65.07	0.80	78.43	1.20	88.76
0.01	50.38	0.41	65.43	0.81	78.72	1.21	88.97
0.02	50.77	0.42	65.79	0.82	79.02	1.22	89.17
0.03	51.15	0.43	66.15	0.83	79.31	1.23	89.38
0.04	51.54	0.44	66.51	0.84	79.61	1.24	89.58
0.05	51.92	0.45	66.87	0.85	79.90	1.25	89.79
0.06	52.30	0.46	67.22	0.86	80.19	1.26	89.99
0.07	52.69	0.47	67.57	0.87	80.47	1.27	90.19
0.08	53.07	0.48	67.93	0.88	80.76	1.28	90.38
0.09	53.46	0.49	68.28	0.89	81.04	1.29	90.58
0.10	53.84	0.50	68.63	0.90	81.33	1.30	90.78
0.11	54.22	0.51	68.98	0.91	81.61	1.31	90.96
0.12	54.60	0.52	69.32	0.92	81.88	1.32	91.15
0.13	54.99	0.53	69.67	0.93	82.16	1.33	91.33
0.14	55.37	0.54	70.01	0.94	82.43	1.34	91.52
0.15	55.75	0.55	70.36	0.95	82.71	1.35	91.70
0.16	56.13	0.56	70.70	0.96	82.97	1.36	91.87
0.17	56.51	0.57	71.04	0.97	83.24	1.37	92.04
0.18	56.89	0.58	71.38	0.98	83.50	1.38	92.22
0.19	57.27	0.59	71.72	0.99	83.77	1.39	92.39
0.20	57.65	0.60	72.06	1.00	84.03	1.40	92.56
0.21	58.03	0.61	72.39	1.01	84.28	1.41	92.72
0.22	58.40	0.62	72.72	1.02	84.53	1.42	92.88
0.23	58.78	0.63	73.06	1.03	84.79	1.43	93.05
0.24	59.15	0.64	73.39	1.04	85.04	1.44	93.21
0.25	59.53	0.65	73.72	1.05	85.29	1.45	93.37
0.26	59.90	0.66	74.04	1.06	85.53	1.46	93.52
0.27	60.28	0.67	74.36	1.07	85.77	1.47	93.67
0.28	60.65	0.68	74.69	1.08	86.02	1.48	93.83
0.29	61.03	0.69	75.01	1.09	86.26	1.49	93.98
0.30	61.40	0.70	75.33	1.10	86.50	1.50	94.13
0.31	61.77	0.71	75.64	1.11	86.73	1.51	94.27
0.32	62.14	0.72	75.96	1.12	86.96	1.52	94.41
0.33	62.51	0.73	76.27	1.13	87.20	1.53	94.54
0.34	62.88	0.74	76.59	1.14	87.43	1.54	94.68
0.35	63.25	0.75	76.90	1.15	87.66	1.55	94.82
0.36	63.61	0.76	77.21	1.16	87.88	1.56	94.95
0.37	63.98	0.77	77.51	1.17	88.10	1.57	95.08
0.38	64.34	0.78	77.82	1.18	88.32	1.58	95.20
0.39	64.71	0.79	78.12	1.19	88.54	1.59	95.33

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

PERCENT WITHIN LIMITS (continued)					
Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)
1.60	95.46	2.00	98.83	2.40	99.89
1.61	95.58	2.01	98.88	2.41	99.90
1.62	95.70	2.02	98.92	2.42	99.91
1.63	95.81	2.03	98.97	2.43	99.91
1.64	95.93	2.04	99.01	2.44	99.92
1.65	96.05	2.05	99.06	2.45	99.93
1.66	96.16	2.06	99.10	2.46	99.94
1.67	96.27	2.07	99.14	2.47	99.94
1.68	96.37	2.08	99.18	2.48	99.95
1.69	96.48	2.09	99.22	2.49	99.95
1.70	96.59	2.10	99.26	2.50	99.96
1.71	96.69	2.11	99.29	2.51	99.96
1.72	96.78	2.12	99.32	2.52	99.97
1.73	96.88	2.13	99.36	2.53	99.97
1.74	96.97	2.14	99.39	2.54	99.98
1.75	97.07	2.15	99.42	2.55	99.98
1.76	97.16	2.16	99.45	2.56	99.98
1.77	97.25	2.17	99.48	2.57	99.98
1.78	97.33	2.18	99.50	2.58	99.99
1.79	97.42	2.19	99.53	2.59	99.99
1.80	97.51	2.20	99.56	2.60	99.99
1.81	97.59	2.21	99.58	2.61	99.99
1.82	97.67	2.22	99.61	2.62	99.99
1.83	97.75	2.23	99.63	2.63	100.00
1.84	97.83	2.22	99.66	2.64	100.00
1.85	97.91	2.25	99.68	≥ 2.65	100.00
1.86	97.98	2.26	99.70		
1.87	98.05	2.27	99.72		
1.88	98.11	2.28	99.73		
1.89	98.18	2.29	99.75		
1.90	98.25	2.30	99.77		
1.91	98.31	2.31	99.78		
1.92	98.37	2.32	99.80		
1.93	98.44	2.33	99.81		
1.94	98.50	2.34	99.83		
1.95	98.56	2.35	99.84		
1.96	98.61	2.36	99.85		
1.97	98.67	2.37	99.86		
1.98	98.72	2.38	99.87		
1.99	98.78	2.39	99.88		

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

(b) Minimum Thickness. The minimum thickness method shall be as follows.

- (1) Length of Units. The length of a unit will be a continuous strip of pavement 500 ft (150 m) in length.
- (2) Width of Units. The width of a unit will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
- (3) Thickness Measurements. Pavement thickness will be based on 2 in. (50 mm) diameter cores.

Cores shall be taken from the pavement by the Contractor at locations selected by the Engineer. When determining the thickness of a unit, one core shall be taken in each unit.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the cores. Core measurements will be determined immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples may be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

- (4) Unit Deficient in Thickness. In considering any portion of the pavement that is deficient, the entire limits of the unit will be used in computing the deficiency or determining the remedial action required.
- (5) Thickness Equals or Exceeds Specified Thickness. When the thickness of a unit equals or exceeds the specified plan thickness, payment will be made at the contract unit price per square yard (square meter) for the specified thickness.
- (6) Thickness Deficient by Ten Percent or Less. When the thickness of a unit is less than the specified plan thickness by ten percent or less, a deficiency deduction will be assessed against payment for the item involved. The deficiency will be a percentage of the contract unit price as given in the following table.

Percent Deficiency (of Plan Thickness)	Percent Deduction (of Contract Unit Price)
0.0 to 2.0	0
2.1 to 3.0	20
3.1 to 4.0	28
4.1 to 5.0	32
5.1 to 7.5	43
7.6 to 10.0	50

- (7) Thickness Deficient by More than Ten Percent. When a core shows the pavement to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient pavement. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient pavement. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient pavement shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness. The thickness of the new core will be used to determine the pay factor for the corrected area.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement. In addition, an amount equal to two times the contract cost of the deficient pavement will be deducted from the compensation due the Contractor.

The thickness of the first acceptable core on each side of the core more than ten percent deficient will be used to determine any needed pay adjustments for the remaining areas on each side of the area deficient by more than ten percent. The pay adjustment will be determined according to Article 407.10(b)(6).

- (8) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. These additional cores shall be taken at specific locations determined by the

Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, the procedures outlined in Article 407.10(b)(7) shall be followed, except the Engineer will determine the additional core locations.

When the additional cores, ordered by the Engineer, show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

- (9) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness.”

Revise Article 482.06 of the Standard Specifications to read:

“482.06 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. When the contract includes square yards (square meters) as the unit of measurement for HMA shoulder, thickness determinations shall be made according to Article 407.10(b)(3) and the following.

- (a) Length of the Units. The length of a unit shall be a continuous strip of shoulder 2500 ft (750 m) long.
- (b) Width of the Units. The width of the unit shall be the full width of the shoulder.
- (c) Thickness Deficient by More than Ten Percent. When a core shows the shoulder to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient shoulder. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient shoulder. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient shoulder will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient shoulder shall be brought to specified thickness by the addition of the applicable mixture, at no additional cost to the Department and subject to the lift thickness requirements of Article 312.05, or by removal and replacement with a new mixture. However, the surface elevation of the completed shoulder shall not exceed by more than 1/8 in. (3 mm) the surface elevation of the adjacent pavement. When requested in writing by the Contractor, the Engineer may permit in writing such thin shoulder to remain in place. When an area of thin shoulder is left in place, and no additional lift(s) are placed, no payment will be made for the thin shoulder. In addition,

an amount equal to two times the contract unit price of the shoulder will be deducted from the compensation due the Contractor.

When an area of deficient shoulder is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

- (d) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. When the additional cores, ordered by the Engineer, show the shoulder to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04. When the additional core shows the shoulder to be less than 90 percent of plan thickness, the procedure in (c), above shall be followed."

Revise Article 483.07 of the Standard Specifications to read:

"483.07 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. Thickness determinations shall be made according to Article 482.06 except the option of correcting deficient pavement with additional lift(s) shall not apply."

80227

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: January 1, 2011

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

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

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

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of

DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 5.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

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

BIDDING PROCEDURES. Compliance with this Special Provision is a material bidding requirement. The failure of the bidder to comply will render the bid not responsive.

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The names and addresses of DBE firms that will participate in the contract;

- (2) A description, including pay item numbers, of the work each DBE will perform;
- (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
- (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
- (6) If the contract goal is not met, evidence of good faith efforts.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for 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.

CALCULATING DBE PARTICIPATION. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to count toward the achievement of the overall goal and the contract goal the value of payments made for the work actually performed by DBE companies. In addition, a DBE must perform a commercially useful function on the contract to be counted. A commercially useful function is generally performed when the DBE is responsible for the work and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. The Department and Contractor are governed by the provisions of 49 CFR part 26.55(c) on

questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall

goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) The Contractor must notify and obtain written approval from the Department's Bureau of Small Business Enterprises prior to replacing a DBE or making any change in the participation of a DBE. Approval for replacement will be granted only if it is demonstrated that the DBE is unable or unwilling to perform. The Contractor must make every good faith effort to find another certified DBE subcontractor to substitute for the original DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the original DBE, to the extent needed to meet the contract goal.
- (c) Any deviation from the DBE condition-of-award or contract specifications must be approved, in writing, by the Department. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract.
- (d) In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or

- (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonably competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted.
- (f) If the commitment of work is in the form of additional tasks assigned to an existing subcontract, then a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (g) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (h) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (j) of this part.

- (i) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (j) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

80029

EQUIPMENT RENTAL RATES (BDE)

Effective: August 2, 2007

Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

“Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4).”

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

“(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.

- a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the “Equipment Watch Rental Rate Blue Book” (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: 0.5 x (FHWA hourly rate - EOC).

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

- b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used.”

80189

FRICTION AGGREGATE (BDE)

Effective: January 1, 2011

Revise Article 1004.01(a)(4) of the Standard Specifications to read:

- “(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.
- a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).
 - b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase.”

Revise Article 1004.03(a) of the Standard Specifications to read:

“**1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA).** The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	<u>Allowed Alone or in Combination:</u> Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA All Other	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination:</u> Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete

Use	Mixture	Aggregates Allowed								
HMA High ESAL Low ESAL	Binder IL-25.0, IL-19.0, or IL-19.0L SMA Binder	<u>Allowed Alone or in Combination:</u> Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}								
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-12.5, IL-9.5, or IL-9.5L SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination:</u> Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}								
HMA High ESAL	D Surface and Leveling Binder IL-12.5 or IL-9.5 SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination:</u> Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) ^{5/} Crushed Steel Slag ^{4/ 5/} Crushed Concrete ^{3/}								
		<u>Other Combinations Allowed:</u>								
		<table border="1"> <thead> <tr> <th>Up to...</th> <th>With...</th> </tr> </thead> <tbody> <tr> <td>25% Limestone</td> <td>Dolomite</td> </tr> <tr> <td>50% Limestone</td> <td>Any Mixture D aggregate other than Dolomite</td> </tr> <tr> <td>75% Limestone</td> <td>Crushed Slag (ACBF)^{5/} or Crushed Sandstone</td> </tr> </tbody> </table>	Up to...	With...	25% Limestone	Dolomite	50% Limestone	Any Mixture D aggregate other than Dolomite	75% Limestone	Crushed Slag (ACBF) ^{5/} or Crushed Sandstone
Up to...	With...									
25% Limestone	Dolomite									
50% Limestone	Any Mixture D aggregate other than Dolomite									
75% Limestone	Crushed Slag (ACBF) ^{5/} or Crushed Sandstone									

Use	Mixture	Aggregates Allowed	
HMA High ESAL	E Surface IL-12.5 or IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination:</u> Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) ^{5/} Crushed Steel Slag ^{5/} Crushed Concrete ^{3/} No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		50% Dolomite ^{2/}	Any Mixture E aggregate
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF) ^{5/} , Crushed Steel Slag ^{5/} , or Crystalline Crushed Stone
75% Crushed Gravel or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF) ^{5/} , or Crushed Steel Slag ^{5/}		
HMA High ESAL	F Surface IL-12.5 or IL-9.5 SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination:</u> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) ^{5/} Crushed Steel Slag ^{5/} No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>

Use	Mixture	Aggregates Allowed	
		50% Crushed Gravel, Crushed Concrete ^{3/} , or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF) ^{5/} , Crushed Steel Slag ^{5/} , or Crystalline Crushed Stone

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When either slag is used, the blend percentages listed shall be by volume."

80265

HOT-MIX ASPHALT – ANTI-STRIPPING ADDITIVE (BDE)

Effective: November 1, 2009

Revise the first and second paragraphs of Article 1030.04(c) of the Standard Specifications to read:

“(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283. To be considered acceptable by the Department as a mixture not susceptible to stripping, the conditioned to unconditioned split tensile strength ratio (TSR) shall be equal to or greater than 0.85 for 6 in. (150 mm) specimens. Mixtures, either with or without an additive, with TSRs less than 0.85 for 6 in. (150 mm) specimens will be considered unacceptable. Also, the conditioned tensile strength for mixtures containing an anti-strip additive shall not be lower than the original conditioned tensile strength determined for the same mixture without the anti-strip additive.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option.”

80245

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

“Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 2 in. (50 mm), from each pavement edge. (i.e. for a 4 in. (100 mm) lift the near edge of the density gauge or core barrel shall be within 4 in. (100 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location.”

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

“Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 – 96.0%	90.0%
IL-9.5, IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%”

80246

HOT-MIX ASPHALT – DROP-OFFS (BDE)

Effective: January 1, 2010

Revise the third paragraph of Article 701.07 of the Standard Specifications to read:

“At locations where construction operations result in a differential in elevation exceeding 3 in. (75 mm) between the edge of pavement or edge of shoulder within 3 ft (900 mm) of the edge of the pavement and the earth or aggregate shoulders, Type I or II barricades or vertical panels shall be placed at 100 ft (30 m) centers on roadways where the posted speed limit is 45 mph or greater and at 50 ft (15 m) centers on roadways where the posted speed limit is less than 45 mph.”

80250

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HOT-MIX ASPHALT - FINE AGGREGATE (BDE)

Effective: April 1, 2010

Add the following to the gradation tables of Article 1003.01(c) of the Standard Specifications:

"FINE AGGREGATE GRADATIONS					
Grad No.	Sieve Size and Percent Passing				
	3/8	No. 4	No. 8	No. 16	No. 200
FA 22	100	6/	6/	8±8	2±2

FINE AGGREGATE GRADATIONS (Metric)					
Grad No.	Sieve Size and Percent Passing				
	9.5 mm	4.75 mm	2.36 mm	1.18 mm	75 µm
FA 22	100	6/	6/	8±8	2±2

6/ For the fine aggregate gradation FA 22, the aggregate producer shall set the midpoint percent passing, and the Department will apply a range of ± ten percent. The midpoint shall not be changed without Department approval."

Revise Article 1003.03(a) of the Standard Specifications to read:

"(a) Description. Fine aggregate for HMA shall consist of sand, stone sand, chats, slag sand, or steel slag sand. For gradation FA 22, uncrushed material will not be permitted."

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

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22.

Gradation FA 1, FA 2, or FA 3 shall be used when required for prime coat aggregate application for HMA."

80259

IMPROVED SUBGRADE (BDE)

Effective: January 1, 2010

Revise the second paragraph of Article 302.04 of the Standard Specifications to read:

"The quantity of modified soil constructed shall be limited to that which can be covered by the full thickness of portland cement concrete pavement or HMA binder during the same construction season."

Revise the first paragraph of Article 302.07 of the Standard Specifications to read:

"302.07 Application of Modifier. The modifier shall be applied uniformly on the soil. The application of modifier shall be limited to that amount which can be mixed with the soil within the same working day."

Revise the first paragraph of Article 302.08 of the Standard Specifications to read:

"302.08 Mixing. The modifier, soil, and water shall be thoroughly mixed. Mixing shall continue until a homogenous layer of the required thickness has been obtained and a minimum of 75 percent of the mixture is smaller than 1 in. (25 mm). The moisture content of the modified soil shall be above optimum moisture content with a maximum of three percent above optimum."

Revise Article 302.10 of the Standard Specifications to read:

"302.10 Finishing and Curing. When multiple lifts are used to construct the modified soil layer, the top lift shall be a minimum of 6 in. (150 mm) thick when compacted.

Construction of pipe underdrains shall follow the requirements of Article 407.07. The surface of the modified soil shall be kept drained according to Article 301.09 and shall maintain moisture content not exceeding three percent above optimum prior to pavement construction.

When compaction of the modified soil is nearing completion, the surface shall be shaped to the required lines, grades, and cross section shown on the plans. For HMA base course and pavement (full-depth) and portland cement concrete base course and pavement, the surface of the modified soil shall be brought to true shape and correct elevation according to Article 301.07, except well compacted earth shall not be used to fill low areas.

The modified soil shall be cured for a minimum of 24 hours. The ambient air temperature shall be above 45 °F (7 °C) during curing.

During the curing period, the moisture content of the modified soil shall be maintained at optimum by sprinkling with water, use of plastic sheeting, or applying bituminous materials according to Article 312.14. During this period, no equipment or traffic will be permitted on the completed work beyond that required for maintenance of curing.

Equipment of such weight, or used in such a way as to cause a rut depth of 1/2 in. (13 mm) or more in the finished modified soil, shall be removed, or the rutting otherwise prevented, as directed by the Engineer.”

Revise the first paragraph of Article 302.11 of the Standard Specifications to read:

“**302.11 Subgrade Stability.** Following curing, the Engineer will determine the stability of the modified soil in terms of the immediate bearing value (IBV), according to Illinois Test Procedure 501. The IBV shall be a minimum of 10.0 measured within 10 calendar days prior to pavement construction.”

Revise the second paragraph of Article 310.04 of the Standard Specifications to read:

“The quantity of lime stabilized soil mixture constructed shall be limited to that which can be covered by the full thickness of portland cement concrete pavement or HMA binder during the same construction season.”

Revise the first paragraph of Article 310.08(a) of the Standard Specifications to read:

“(a) Initial Mixing. The lime, soil, and water shall be thoroughly mixed until a uniform mixture throughout the required depth and width is obtained. All clods and lumps shall be reduced to a maximum size of 2 in. (50 mm). The moisture content of the stabilized soil shall be above optimum moisture content with a maximum of three percent above optimum.”

Insert the following paragraph after the first paragraph of Article 310.10 of the Standard Specifications:

“Construction of pipe underdrains shall follow the requirements of Article 407.07. The surface of the lime stabilized soil shall be kept drained according to Article 301.09 and shall maintain a maximum moisture content of three percent above optimum prior to pavement construction.”

Revise the first paragraph of Article 310.11 of the Standard Specifications to read:

“**310.11 Subgrade Stability.** Following curing, the Engineer will determine the stability of the lime stabilized soil mixture in terms of the immediate bearing value (IBV) according to Illinois Test Procedure 501. The IBV shall be a minimum of 23.0 measured within 10 calendar days prior to pavement construction.”

Revise the second paragraph of Article 311.05 of the Standard Specifications to read:

“The granular material shall be placed and compacted at least three days prior to the placement of pavement or base course. Except where required for temporary access, the quantity of subbase granular material Types A or B to be placed shall be limited to that which can be covered by the full thickness of PCC pavement or HMA binder during the same

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construction season.”

80252

LIQUIDATED DAMAGES (BDE)

Effective: April 1, 2009

Revised: April 1, 2011

Revise the table in Article 108.09 of the Standard Specifications to read:

"Schedule of Deductions for Each Day of Overrun in Contract Time"			
Original Contract Amount		Daily Charges	
From More Than	To and Including	Calendar Day	Work Day
\$ 0	\$ 100,000	\$ 475	\$ 675
100,000	500,000	750	1,050
500,000	1,000,000	1,025	1,425
1,000,000	3,000,000	1,275	1,725
3,000,000	6,000,000	1,425	2,000
6,000,000	12,000,000	2,300	3,450
12,000,000	And over	5,800	8,125"

80230

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METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008

Revised: April 1, 2009

Add the following to Article 503.02 of the Standard Specifications:

“(g) Metal Hardware Cast into Concrete 1006.13”

Add the following to Article 504.02 of the Standard Specifications:

“(j) Metal Hardware Cast into Concrete 1006.13”

Revise Article 1006.13 of the Standard Specifications to read:

“**1006.13 Metal Hardware Cast into Concrete.** Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3, 5, or 7.

The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

Insert Diameter	Proof Load
5/8 in. (16 mm)	6600 lb (29.4 kN)
3/4 in. (19 mm)	6600 lb (29.4 kN)
1 in. (25 mm)	9240 lb (41.1 kN)”

80203

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MULCH AND EROSION CONTROL BLANKETS (BDE)

Effective: November 1, 2010

Revised: April 1, 2011

Revise the first sentence of Article 251.03 of the Standard Specifications to read:

“Within 24 hours of seed placement, mulch by one of the following methods shall be placed on the areas specified.”

Revise Article 251.03(b)(2) of the Standard Specifications to read:

“(2) Procedure 2. This procedure shall consist of stabilizing the straw with an approved mulch blower followed immediately by an overspray application of light-duty hydraulic mulch. The hydraulic mulch shall be according to Article 251.03(c) except that it shall be applied as a slurry of 900 lb (1020 kg) of mulch and 1000 gal (9500 L) of water per acre (hectare) using a hydraulic mulch applicator. The light-duty hydraulic mulch shall be agitated a minimum of five minutes before application and shall be agitated during application. The light-duty hydraulic mulch shall be applied from opposing directions to ensure even coverage.”

Revise Article 251.03(c) of the Standard Specification to read:

“(c) Method 3. This method shall consist of the machine application of a light-duty hydraulic mulch. Seeding shall be conducted as a separate operation and shall not be added to the hydraulic mulch slurry. Hydraulic mulch shall not be applied when the ambient temperature is at or below freezing. To achieve full and even coverage, the hydraulic mulch shall be applied from two opposing directions. Mixing and application rates shall be according to the manufacturer’s recommendations and meet the minimum application rates set in Article 1081.06(a)(2).”

Revise Article 251.03(d) of the Standard Specifications to read:

“(d) Method 3A. This method shall consist of the machine application of a heavy-duty hydraulic mulch. Seeding shall be conducted as a separate operation and shall not be added to the hydraulic mulch slurry. The hydraulic mulch shall not be applied when the ambient temperature is at or below freezing. To achieve full and even coverage, the hydraulic mulch shall be applied from two opposing directions. Mixing and application rates shall be according to the manufacturer’s recommendations and meet the minimum application rates set in Article 1081.06(a)(2). The heavy-duty hydraulic mulch shall be applied using a mechanically agitated hydraulic mulching machine.”

Add the following to Article 251.03 of the Standard Specifications:

“(e) Method 4. This method shall consist of applying compost combined with a performance additive designed to bind/stabilize the compost. The compost/performance additive

mixture shall be applied to the surface of the slope using a pneumatic blower at a depth of 2 in. (50 mm)."

Revise Article 251.04 of the Standard Specifications to read:

"251.04 Erosion Control Blanket. Erosion control blanket may be placed using either excelsior blanket or knitted straw blanket. Within 24 hours of seed placement, blanket shall be placed on the areas specified. Prior to placing the blanket, the areas to be covered shall be relatively free of rocks or clods over 1 1/2 in. (40 mm) in diameter, and sticks or other foreign material which will prevent the close contact of the blanket with the seed bed. If, as a result of rain, the prepared seed bed becomes crusted or eroded, or if eroded places, ruts, or depressions exist for any reason, the Contractor shall rework the soil until it is smooth and reseed such areas which are reworked.

After the area has been properly shaped, fertilized, and seeded, the blanket shall be laid out flat, evenly, and smoothly, without stretching the material. The excelsior and knitted straw blankets shall be placed so that the netting is on the top and the fibers are in contact with the soil. The heavy duty blankets shall be placed so that the heavy duty extruded plastic mesh is on the bottom.

For placement in ditches, the erosion control blanket shall be applied parallel to the centerline of the ditch so that there are no longitudinal seams within 2 ft (600 mm) of the bottom centerline of the ditch. The blanket shall be toed in on the upslope edge and shingled or overlapped with the flow.

On slopes, the blanket shall be applied either horizontally or vertically to the contour, toed in on the upslope edge, and shingled or overlapped with the flow.

When placed adjacent to the roadway, blankets shall be toed in along the edge of shoulder.

Anchoring the blankets shall be according to the manufacturer's specifications."

Revise Article 251.06(b) of the Supplemental Specifications to read:

"(b) Measured Quantities. Mulch Methods 1, 2, 3, 3A and 4 will be measured for payment in place in acres (hectares) of surface area mulched. Erosion control blanket, heavy duty erosion control blanket, and turf reinforcement mat will be measured for payment in place in square yards (square meters)."

Revise Article 251.07 of the Supplemental Specifications to read:

"251.07 Basis of Payment. This work will be paid for at the contract unit price per acre (hectare) for MULCH, METHOD 1; MULCH, METHOD 2; MULCH, METHOD 3; MULCH, METHOD 3A; MULCH, METHOD 4; and at the contract unit price per square yard (square meter) for EROSION CONTROL BLANKET, HEAVY DUTY EROSION CONTROL BLANKET, or TURF REINFORCEMENT MAT."

Revise Article 1081.06(a)(2) of the Standard Specifications to read:

“(2) Hydraulic Mulch. The mulch component shall be comprised of a minimum of 70 percent biodegradable material such as wood cellulose, paper fibers, straw or cotton and shall contain no growth or germination inhibiting factors. The remainder of the components shall consist of the manufacturer’s choice of tackifiers and/or strengthening fibers needed to meet the performance specifications. Tackifiers shall be non-toxic and LC 50 test results shall be provided along with the manufacturer’s certification. Hydraulic mulch shall disperse evenly and rapidly and remain in slurry when agitated with water. When uniformly applied, the slurry shall form an absorbent cover allowing percolation of water to the underlying surface. Hydraulic mulch shall be packaged in UV and moisture resistant factory labeled packages or bags with the net quantity of the packaged material plainly shown on each package. The biodegradable material shall be relatively free of glossy papers and shall not be water soluble. The hydraulic mulches shall be according to the following.

Light-Duty Hydraulic Mulch	
Property ^{1/}	Value
Functional Longevity ^{2/}	3 months
Minimum Application Rates	2000 lb/acre (2240 kg/ha)
Typical Maximum Slope Gradient (V:H)	≤ 1:3
Maximum Uninterrupted Slope Length	50 ft (15 m)
Maximum C Factor	0.15
Minimum Vegetation Establishment ^{5/}	200 %

Heavy-Duty Hydraulic Mulch	
Property ^{1/}	Value
Functional Longevity ^{2/}	12 months
Minimum Application Rates	3000 lb/acre (3360 kg/ha)
Typical Maximum Slope Gradient (V:H)	≤ 1:2
Maximum Uninterrupted Slope Length	100 ft (30 m)
Maximum C Factor ^{3/4/}	0.02
Minimum Vegetation Establishment ⁵	400 %

1/ This table sets minimum requirements only. Refer to manufacturer recommendations for application rates, instructions, gradients, maximum continuous slope lengths and other site specific recommendations.

2/ Manufacturer's estimated time period, based upon field observations, that a material can be anticipated to provide erosion control as influenced by its composition and site-specific conditions.

- 3/ "C" Factor calculated as ratio of soil loss from HECP protected slope (tested at specified or greater gradient, h:v) to ratio of soil loss from unprotected (control) plot based on large-scale testing.
- 4/ Large-scale test methods shall be according to ASTM D 6459.
- 5/ Minimum vegetation establishment shall be calculated according to ASTM D 7322.

The manufacturer shall furnish a certification with each shipment of hydraulic mulch stating the number of packages or bags furnished and that the material complies with these requirements."

80262

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007

Revised: November 1, 2009

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

“(a) National Pollutant Discharge Elimination System (NPDES) / Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, or the Contractor’s activities represents a violation of the Department’s NPDES permits, the Engineer will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the work effort required. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the Department’s NPDES permits. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or portion of a calendar day until the deficiency is corrected to the satisfaction of the Engineer. The calendar day(s) will begin with notification to the Contractor and end with the Engineer’s acceptance of the correction. The base value of the daily monetary deduction is \$1000.00 and will be applied to each location for which a deficiency exists. The value of the deficiency deduction assessed for each infraction will be determined by multiplying the base value by a Gravity Adjustment Factor provided in Table A. Except for failure to participate in a required jobsite inspection of the project prior to initiating earthmoving operations which will be based on the total acreage of planned disturbance at the following multipliers: <5 Acres: 1; 5-10 Acres: 2; >10-25 Acres: 3; >25 Acres: 5. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day multiplied by a Gravity Adjustment Factor.

Table A Deficiency Deduction Gravity Adjustment Factors				
Types of Violations	Soil Disturbed and Not Permanently Stabilized At Time of Violation			
	< 5 Acres	5 - 10 Acres	>10 - 25 Acres	> 25 Acres
Failure to Install or Properly Maintain BMP	0.1 - 0.5	0.2 - 1.0	0.5 - 2.5	1.0 - 5
Careless Destruction of BMP	0.2 - 1	0.5 - 2.5	1.0 - 5	1.0 - 5
Intrusion into Protected Resource	1.0 - 5	1.0 - 5	2.0 - 10	2.0 - 10
Failure to properly manage Chemicals, Concrete Washouts or Residuals, Litter or other Wastes	0.2 - 1	0.2 - 1	0.5 - 2.5	1.0 - 5
Improper Vehicle and Equipment Maintenance, Fueling or Cleaning	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5
Failure to Provide or Update Written or Graphic Plans Required by SWPPP	0.2 - 1	0.5 - 2.5	1.0 - 5	1.0 - 5
Failure to comply with Other Provisions of the NPDES Permit	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5"

80180

PAVEMENT PATCHING (BDE)

Effective: January 1, 2010

Revise the first sentence of the second paragraph of Article 701.17(e)(1) of the Standard Specifications to read:

“In addition to the traffic control and protection shown elsewhere in the contract for pavement, two devices shall be placed immediately in front of each open patch, open hole, and broken pavement where temporary concrete barriers are not used to separate traffic from the work area.”

80254

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000

Revised: January 1, 2006

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

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

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

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

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section

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

80022

POST MOUNTING OF SIGNS (BDE)

Effective: January 1, 2011

Revise the second paragraph of Article 701.14 of the Standard Specifications to read:

“Post mounted signs shall be a breakaway design. The sign shall be within five degrees of vertical. Two posts shall be used for signs greater than 16 sq ft (1.5 sq m) in area or where the height between the sign and the ground exceeds 7 ft (2.1 m).”

80268

PRECAST CONCRETE HANDLING HOLES (BDE)

Effective: January 1, 2007

Add the following to Article 540.02 of the Standard Specifications:

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

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

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

Add the following to Article 542.02 of the Standard Specifications:

“(ee) Handling Hole Plugs 1042.16“

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

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

Add the following to Article 550.02 of the Standard Specifications:

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

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

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

Add the following to Article 602.02 of the Standard Specifications:

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

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

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

Add the following to Section 1042 of the Standard Specifications:

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

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

80171

277

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.

Basis of Payment. 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.

34261

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.

Basis of Payment. 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.

80157

RAISED REFLECTIVE PAVEMENT MARKERS (BDE)

Effective: November 1, 2009

| Revised: April 1, 2010

| Revise the first sentence of the second paragraph of Article 781.03(a) of the Standard Specifications to read:

“The pavement shall be cut to match the bottom contour of the marker using a concrete saw fitted with 18 and 20 in. (450 and 500 mm) diameter blades.”

80247

RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007

Revised: January 1, 2011

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

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

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

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

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

- (a) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass one sieve size larger than the maximum sieve size specified for the mix the RAP will be used in.
- (b) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (c) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an

inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

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

(e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

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

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

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

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

Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous /Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %

1/2 in. (12.5 mm)	± 8 %	± 15 %
No. 4 (4.75 mm)	± 6 %	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 μm)	± 5 %	
No. 200 (75 μm)	± 2.0 %	± 4.0 %
Asphalt Binder	± 0.4 % ^{1/}	± 0.5 %
G _{mm}	± 0.03	

1/ The tolerance for FRAP shall be ± 0.3 %.

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

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

1031.04 Quality Designation of Aggregate in RAP/FRAP.

(a) The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

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

(b) The aggregate quality of FRAP shall be determined as follows.

- (1) If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer. If the quality is not known, the quality shall be determined according to Article 1031.04(b)(2).
- (2) Fractionated stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications."

1031.05 Use of RAP/FRAP in HMA. The use of RAP/FRAP shall be a Contractor's option when constructing HMA in all contracts. The use of RAP/FRAP in HMA shall be as follows.

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

Max RAP Percentage

HMA Mixtures ^{1/, 3/}	Maximum % RAP		
	Binder/Leveling	Surface	Polymer
Ndesign			

	Binder		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

- 1/ For HMA shoulder and stabilized subbase (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.
- 2/ Value of Max % RAP if homogeneous RAP stockpile of IL-9.5 RAP is utilized.
- 3/ When RAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275°F (135 °C) the grades shall be reduced as follows:

Overlays:

When WMA contains between 20 and 30 percent RAP the high temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

Full Depth:

When WMA contains between 20 and 30 percent RAP, the low temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

- (g) When the Contractor chooses the FRAP option, the percentage of FRAP shall not exceed the amounts indicated in the table below for a given N Design.

Max FRAP Percentage

HMA Mixtures ^{1/, 2/}	Maximum % FRAP		
	Binder/Leveling Binder	Surface	Polymer Modified
Ndesign			
30	35	35	10
50	30	25	10
70	25	20	10

90	20	15	10
105	10	10	10

- 1/ For HMA shoulder and stabilized subbase (HMA) N30, the amount of FRAP shall not exceed 50 percent of the mixture.
- 2/ When FRAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275°F (135 °C) the grades shall be reduced as follows:

Overlays:

When WMA contains between 20 and 30 percent FRAP the high temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

Full Depth:

When WMA contains between 20 and 30 percent FRAP, the low temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

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

RAP/FRAP designs shall be submitted for volumetric verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix design at the percent previously verified.

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

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

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

(a) Dryer Drum Plants.

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

(b) Batch Plants.

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- (4) Mineral filler weight to the nearest pound (kilogram).
- (5) RAP/FRAP weight to the nearest pound (kilogram).
- (6) Virgin asphalt binder weight to the nearest pound (kilogram).

- (7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

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

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

80172

SEEDING (BDE)

Effective: July 1, 2004

Revised: July 1, 2010

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

"Table 1 - SEEDING MIXTURES		
Class – Type	Seeds	lb/acre (kg/hectare)
1A Salt Tolerant Lawn Mixture 7/	Bluegrass Perennial Ryegrass Red Fescue (Audubon, Sea Link, or Epic) Hard Fescue (Rescue 911, Spartan II, or Reliant IV) Fults Salt Grass 1/ or Salty Alkaligrass	60 (70) 20 (20) 20 (20) 20 (20) 60 (70)
2 Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV) Perennial Ryegrass Creeping Red Fescue Red Top	100 (110) 50 (55) 40 (50) 10 (10)
2A Salt Tolerant Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV) Perennial Ryegrass Red Fescue (Audubon, Sea Link, or Epic) Hard Fescue (Rescue 911, Spartan II, or Reliant IV) Fults Salt Grass 1/ or Salty Alkaligrass	60 (70) 20 (20) 30 (20) 30 (20) 60 (70)
3 Northern Illinois Slope Mixture 7/	Elymus Canadensis (Canada Wild Rye) Perennial Ryegrass Alsike Cover 2/ Desmanthus Illinoensis (Illinois Bundleflower) 2/, 5/ Andropogon Scoparius (Little Bluestem) 5/ Bouteloua Curtipendula (Side-Oats Grama) Fults Salt Grass 1/ or Salty Alkaligrass Oats, Spring Slender Wheat Grass 5/ Buffalo Grass (Cody or Bowie) 4/, 5/, 9/	5 (5) 20 (20) 5 (5) 2 (2) 12 (12) 10 (10) 30 (35) 50 (55) 15 (15) 5 (5)

"Table 1 - SEEDING MIXTURES			
6A	Salt Tolerant Conservation Mixture	Andropogon Scoparius (Little Bluestem) 5/	5 (5)
		Elymus Canadensis (Canada Wild Rye) 5/	2 (2)
		Buffalo Grass (Cody or Bowie) 4/, 5/, 9/	5 (5)
		Vernal Alfalfa 2/	15 (15)
		Oats, Spring	48 (55)
		Fults Salt Grass 1/ or Salty Alkaligrass	20 (20)"

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

"7/ In Districts 1 through 6, the planting times shall be April 1 to June 15 and August 1 to November 1. In Districts 7 through 9, the planting times shall be March 1 to June 1 and August 1 to November 15. Seeding may be performed outside these dates provided the Contractor guarantees a minimum of 75 percent uniform growth over the entire seeded area(s) after a period of establishment. Inspection dates for the period of establishment will be as follows: Seeding conducted in Districts 1 through 6 between June 16 and July 31 will be inspected after April 15 and seeding conducted between November 2 and March 31 will be inspected after September 15. Seeding conducted in Districts 7 through 9 between June 2 and July 31 will be inspected after April 15 and seeding conducted between November 16 and February 28 will be inspected after September 15. The guarantee shall be submitted to the Engineer in writing prior to performing the work. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

Revise the first paragraph of Article 1081.04(a) of the Standard Specifications to read:

"(a) Sampling and Testing. Each lot of seed furnished shall be tested by a State Agriculture Department (including other States) or by land grant college or university agricultural sections or by a Registered Seed Technologist. Germination testing of seed shall be accomplished within the 12 months prior to the seed being installed on the project."

Delete the last sentence of the first paragraph of Article 1081.04(c)(2) of the Standard Specifications.

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

TABLE II						
Variety of Seeds	Hard Seed % Max.	Purity % Min.	Pure Live Seed % Min.	Weed % Max.	Secondary * Noxious Weeds No. per oz (kg) Max. Permitted	Notes
Alfalfa	20	92	89	0.50	6 (211)	1/

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

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

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

80131

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

Effective: November 1, 2005

Revised: July 1, 2010

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

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

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

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

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

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

Mix Design Submittal. The Contractor's Level III PCC Technician shall submit a mix design according to the "Portland Cement Concrete Level III Technician" course manual, except target slump information is not applicable and will not be required. However, a target slump flow shall be submitted.

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

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

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

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

The Contractor shall provide the labor, equipment, and materials to test the concrete. The mixture will be evaluated by the Engineer for strength, air content, slump flow, visual stability index, J-ring value or L-box blocking ratio, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor.

A new trial batch will be required whenever there is a change in the source of any component material, proportions beyond normal field adjustments, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

Mixing Portland Cement Concrete. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer

performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

Falsework and Forms. In addition to Articles 503.05 and 503.06 of the Standard Specifications, the Contractor shall ensure the design of the falsework and forms is adequate for the additional form pressure caused by the fluid concrete. Forms shall be tight to prevent leakage of fluid concrete.

When the form height for placing the self-consolidating concrete is greater than 10.0 ft (3.0 m), direct monitoring of form pressure shall be performed according to Illinois Test Procedure SCC-10. The monitoring requirement is a minimum, and the Contractor shall remain responsible for adequate design of the falsework and forms. The Contractor shall record the formwork pressure during concrete placement. This information shall be used by the Contractor to prevent the placement rate from exceeding the maximum formwork pressure allowed, to monitor the thixotropic change in the concrete during the pour, and to make appropriate adjustments to the mix design. This information shall be provided to the Engineer during the pour.

Placing and Consolidating. 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.”

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Quality Control by Contractor at Plant. The specified test frequencies for aggregate gradation, aggregate moisture, air content, unit weight/yield, and temperature shall be performed as indicated in the contract.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The hardened visual stability index test will not be required to be performed at the plant.

Quality Control by Contractor at Jobsite. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 50 cu yd (40 cu m) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 300 cu yd (230 cu m) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

If mix foaming or other potential detrimental material is observed during placement or at the completion of the pour, the material shall be removed while the concrete is still plastic.

Quality Assurance by Engineer at Plant. For air content and aggregate gradation, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

Quality Assurance by Engineer at Jobsite. For air content and strength, quality assurance independent sample testing and split sample testing will be performed as indicated in the contract.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 1.5 in. (40 mm) for slump flow and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 1.5 in. (40 mm) for the J-ring value and ten percent for the L-box blocking ratio.

For each hardened visual stability index test performed by the Contractor, the cut cylinders shall be presented to the Engineer for determination of the rating. The Engineer reserves the right to conduct quality assurance split sample testing. A limit of precision will not apply to the hardened visual stability index.

80152

SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004

Revised: July 1, 2010

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

Usage. Self-consolidating concrete may be used for precast concrete products.

Materials. Materials shall be according to 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 hardened visual stability index shall be a maximum of 1.

Mixing Portland Cement Concrete. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer

performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

Placing and Consolidating. 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.

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

80132



SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

Revised: April 1, 2011

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting according to Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

The mobilization payment to the subcontractor is an advance payment of the reported amount of the subcontract and is not a payment in addition to the amount of the subcontract; therefore, the amount of the advance payment will be deducted from future progress payments.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

80143

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002

Revised: January 1, 2011

Add the following to Article 280.02 of the Standard Specifications to read:

- “(k) Filter Fabric 1080.03
- “(l) Urethane Foam/Geotextile1081.15(i)”

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

“Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer.”

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

“The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor’s operations, or for the Contractor’s convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer’s written approval.”

Revise Article 280.04(a) of the Standard Specifications to read:

“(a) Temporary Ditch Checks. This system consists of the construction of temporary ditch checks to prevent siltation, erosion, or scour of ditches and drainage ways. Temporary ditch checks shall be constructed with products from the Department’s approved list, rolled excelsior, or with aggregate placed on filter fabric when specified. Filter fabric shall be installed according to the requirements of Section 282. Riprap shall be placed according to Article 281.04. Manufactured ditch checks shall be installed according to the manufacturer’s specifications. Spacing of ditch checks shall be such that the low point in the center of one ditch check is at the same elevation as the base of the ditch check immediately upstream. Temporary ditch checks shall be sufficiently long enough that the top of the device in the middle of the ditch is 6 in. (150 mm) lower than the bottom of the terminating ends of the ditch side slopes.

When rolled excelsior is used, each ditch check shall be installed and maintained such that the device is no less than 10 in. (250 mm) high at the point of overflow. Units installed at a spacing requiring a height greater than 10 in. (250 mm) shall be maintained at the height for the spacing at which they were originally installed.”

Revise the last sentence of the first paragraph Article 280.04(b) of the Standard Specifications to read:

“The barrier shall be constructed with rolled excelsior, silt filter fence, or urethane foam/geotextiles.”

Revise the last sentence of the first paragraph of Article 280.04(g) of the Standard Specifications to read:

“The temporary mulch cover shall be installed according to Article 251.03 except for any reference to seeding.”

Add the following to Article 280.04 of the Standard Specifications:

(h) Temporary Erosion Control Blanket. This system consists of temporarily installing erosion control blanket or heavy duty erosion control blanket over areas that are to be reworked during a later construction phase. Work shall be according to Article 251.04 except references to seeding and fertilizer shall not apply. When an area is to be reworked more than once, the blanket shall be carefully removed, properly stored, and then reinstalled over the same area.”

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

“(b) Temporary Ditch Checks. This work will be measured for payment along the long axis of the device in place in feet (meters) except for aggregate ditch checks which will be measured for payment in tons (metric tons). Payment will not be made for aggregate in excess of 108 percent of the amount specified by the Engineer.”

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

“(f) Temporary Mulch. This work will be measured for payment according to Article 251.05(b).”

Add the following to Article 280.07 of the Standard Specifications:

“(g) Temporary Erosion Control Blanket. This work will be measured for payment in place in square yards (square meters) of actual surface covered.

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

“Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment.”

Revise Article 280.08(b) of the Standard Specifications to read:

“(b) Temporary Ditch Checks. This work will be paid for at the contract unit price per foot (meter) for TEMPORARY DITCH CHECKS except for aggregate ditch checks which will be paid for at the contract unit price per ton (metric ton) for AGGREGATE DITCH CHECKS.”

Revise Article 280.08(f) of the Standard Specifications to read:

“(f) Temporary Mulch. Temporary Mulch will be paid for according to Article 251.06.”

Add the following to Article 280.08 of the Standard Specifications:

“(g) Temporary Erosion Control Blanket. Temporary Erosion Control Blanket will be paid for at the contract unit price per square yard (square meter) for TEMPORARY EROSION CONTROL BLANKET or TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET.

The work of removing, storing, and reinstalling the blanket over areas to be reworked more than once will not be paid for separately but shall be included in the cost of the temporary erosion control blanket or temporary heavy duty erosion control blanket.”

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

Revise the second sentence of the first paragraph of Article 1081.15(e) of the Standard Specifications to read:

“The upstream facing of the aggregate ditch check shall be constructed of gradation CA 3. The remainder of the ditch check shall be constructed of gradation RR 3.”

Revise Article 1081.15(f) of the Supplemental Specifications to read:

“(f) Rolled Excelsior. Rolled excelsior shall consist of an excelsior fiber filling totally encased inside netting and sealed with metal clips or knotted at the ends. The fiber density shall be a minimum of 1.24 lb/cu ft (20 kg/cu m) based on a moisture content of 22 percent at manufacturing. The netting shall be composed of a polyester or polypropylene material which retains 70 percent of its strength after 500 hours of exposure to sunlight. The maximum opening of the net shall be 1 x 1 in. (25 x 25 mm).”

Add the following to Article 1081.15 of the Standard Specifications:

“(i) Urethane Foam/Geotextile. Urethane foam/geotextile shall be triangular shaped having a minimum height of 10 in. (250 mm) in the center with equal sides and a minimum 20 in. (500 mm) base. The triangular shaped inner material shall be a low density urethane foam. The outer cover shall be a woven geotextile fabric placed around the inner material and allowed to extend beyond both sides of the triangle a minimum of 18 in. (450 mm).

(1) The geotextile shall meet the following properties:

Property	Value	Test Method
Grab Tensile Strength lb (N) (min.)	124 (550) min.	ASTM D 4632
Grab Elongation @ Brake (percent)	15 min.	ASTM D 4632
Burst Strength psi (kPa)	280 (1930) min.	ASTM D 3786
AOS (Sieve No.)	30 min.	ASTM D 4751
UV Resistance (500 hours) (percent)	80 min.	ASTM D 4355

(2) The urethane foam shall meet the following properties:

Property	Value	Test Method
Density lb/cu ft (kg/cu m)	1.0 ± 0.1 (16.0 ± 1.6)	ASTM D 3574
Tensile Strength psi (kPa)	10 (70) min.	ASTM D 3574
Elongation (percent)	125 min.	ASTM D 3574
Tear Resistance lb/in. (N/mm)	1.25 (0.22)	ASTM D 3574"

80087

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TRAINING SPECIAL PROVISIONS (BDE) This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 2. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

BASIS OF PAYMENT This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

20338

TRUCK MOUNTED/TRAILER MOUNTED ATTENUATORS (BDE)

Effective: January 1, 2010

Revise Article 701.03(k) of the Standard Specifications to read:

“(k) Truck Mounted/Trailer Mounted Attenuators 1106.02”

Revise Article 701.15(h) of the Standard Specifications to read:

“(h) Truck Mounted/Trailer Mounted Attenuators (TMA). TMA units shall have a roll ahead distance in the event of an impact. The TMA shall be between 100 and 200 ft (30 and 60 m) behind the vehicle ahead or the workers. This distance may be extended by the Engineer.

TMA host vehicles shall have the parking brake engaged when stationary.

The driver and passengers of the TMA host vehicle should exit the vehicle if the TMA is to remain stationary for 15 minutes or more in duration.”

Revise Article 1106.02(g) of the Standard Specifications to read:

“(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be a NCHRP 350 approved unit for Test Level 3. Test Level 2 may be used as directed by the Engineer for normal posted speeds less than or equal to 45 mph.”

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**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

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ATTACHMENTS

**A. Employment Preference for Appalachian Contracts
(included in Appalachian contracts only)**

I. GENERAL

1. These contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4 and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

- a. Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

- b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
- b. The contractor will accept as his operating policy the following statement: "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees,

applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be

in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees.

Contractors shall obtain lists of DBE construction firms from SHA

personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training,

qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of

DBE subcontractors or subcontractors with meaningful minority and

female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located

on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the

contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any

employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid

the full amount of fringe benefits listed on the wage determination

for the applicable classification. If the Administrator for the Wage

and Hour Division determines that a different practice prevails for

the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration

withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or

permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.
- c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely

all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for submitting payroll copies of all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U.S. C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

- a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
- b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
- c. Furnish, upon the completion of the contract, to the SHA resident engineer on Form FHWA-47 together with the data

required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractors' own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in

surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

“Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.”

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or

subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 *et seq.*, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 *et seq.*, as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal

is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions

and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

2. Where the prospective primary participant is unable to certify

**Certification Regarding Debarment, Suspension, Ineligibility And
Voluntary Exclusion-Lower Tier Covered Transactions:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

**XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR
LOBBYING**

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**MINIMUM WAGES FOR FEDERAL AND FEDERALLY
ASSISTED CONSTRUCTION CONTRACTS**

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

NOTICE

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <http://www.dot.state.il.us/desenv/delett.html>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <http://www.dot.state.il.us/desenv/subsc.html>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.