

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

**WHO CAN BID ?**

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

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

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

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

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

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

**IDOT is not responsible for any e-mail related failures.**

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

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

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

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

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

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

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

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

**ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS**

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

# 136

RETURN WITH BID

Proposal Submitted By
Name
Address
City

Letting January 18, 2008

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

### NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.

(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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



Illinois Department  
of Transportation

Springfield, Illinois 62764

Contract No. 87333  
KENDALL County  
Section 02-00039-00-PV (Oswego)  
Route FAU 2508 (Douglas Road)  
Project ACM-8003(252)  
District 3 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

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

Prepared by

F

Checked by

(Printed by authority of the State of Illinois)

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## INSTRUCTIONS

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

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

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

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

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

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Preparation and submittal of bids	217/782-7806
Mailing of CD-ROMS	217/782-7806

RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of \_\_\_\_\_  
\_\_\_\_\_

Taxpayer Identification Number (Mandatory) \_\_\_\_\_

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

**Contract No. 87333  
KENDALL County  
Section 02-00039-00-PV (Oswego)  
Project ACM-8003(252)  
Route FAU 2508 (Douglas Road)  
District 3 Construction Funds**

**Project consists of widening and reconstruction, including a precast 3-sided bridge, curb and gutter, storm sewer, replacement of watermain, pavement markings, traffic signals, noise wall and all other items to complete the project on FAU Route 2508 Douglas Road from U.S. Route 30 to U.S. Route 34 in the village of Oswego.**

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents shall govern performance and payments.

**RETURN WITH BID**

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

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

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

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

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

**Attach Cashier's Check or Certified Check Here**

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

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

Item \_\_\_\_\_

Section No. \_\_\_\_\_

County \_\_\_\_\_

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

BD 354 (Rev. 11/2001)

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

STATE JOB # - C-93-055-03  
 PPS NBR - 1-20350-0000

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF PRICES  
 CONTRACT NUMBER - 87333  
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 RUN DATE - 12/05/07  
 RUN TIME - 202732

COUNTY NAME	CODE	DIST	SECTION NUMBER	PROJECT NUMBER	ROUTE
KENDALL	093	03	02-00039-00-PV (OSWEGO)	ACM-8003/252/000	FAU 2508

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE
				DOLLARS	CENTS	
A2000116	T-ACERX FREM AB 2	EACH	8.000	=		
A2001716	T-ACER SAGR 2	EACH	4.000	=		
A2002916	T-CELTIS OCCID 2	EACH	4.000	=		
A2006416	T-QUERCUS ALBA 2	EACH	4.000	=		
A2006716	T-QUERCUS MACR 2	EACH	4.000	=		
D2002960	E-PINUS STROBUS 5'	EACH	6.000	=		
XX000714	FENCE REM & RE-ERECT	FOOT	36.000	=		
XX001018	REM & REPL CONC DRWY	SQ YD	26.000	=		
XX001047	VALVE VAULTS ABANDON	EACH	4.000	=		
XX001306	SIDEWALK REM & REPL	SQ FT	270.000	=		
XX002856	RE-OPTIMIZE TR-SIG SY	L SUM	1.000	=		
XX003516	CONN EX W MN NP 8	EACH	1.000	=		
XX003551	3-SIDED PRC STRUCT	FOOT	93.000	=		
XX003560	CURB & GUTTER REM&REP	FOOT	30.000	=		
XX004771	T-ULMUS CARP AE 2	EACH	6.000	=		

FAU 2508  
 02-00039-00-PV (OSWEGO)  
 KENDALL

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF PRICES  
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 RUN TIME - 202732

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	CTS
				DOLLARS	CENTS		
XX005107	CONN EX W MN NP 12	EACH	1.000	=			
XX005924	TEMPORARY RMP REMOVAL	SQ YD	34.000	=			
XX005963	ANTI-GRAFFITI COATING	SQ FT	79,130.000	=			
XX007086	S MAA & P DMA 40 & 48	EACH	1.000	=			
XX007087	DI WM CL52 12	FOOT	1,542.000	=			
XX007088	HOR DIR DRIL HDPE WM DR11 14 9/32	FOOT	350.000	=			
XX007089	VALVE VAULT 4 DIA W/ 8 VALVE	EACH	2.000	=			
XX007090	VALVE VAULT 5 DIA W/ 12VALVE	EACH	5.000	=			
X0322256	TEMP INFO SIGNING	SQ FT	300.000	=			
X0322925	ELCBL C TRACER 14 1C	FOOT	2,419.000	=			
X0323330	PCC SUBSTRUCTURE	L SUM	1.000	=			
X0323819	NOISE ABATE WALL PRC	SQ FT	45,026.000	=			
X0323841	WM LINE STOP 8	EACH	1.000	=			
X0323988	TEMP SOIL RETEN SYSTEM	SQ FT	1,046.000	=			
X0324450	SEG CONC BLK WALL, SP	SQ FT	3,530.000	=			

FAU 2508  
 02-00039-00-PV (OSWEGO)  
 KENDALL

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULE OF PRICES  
 CONTRACT NUMBER - 87333  
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 RUN TIME - 202732

ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
X0324915	RELOC LT UNIT & POLE	EACH	2.000	=			
X0325680	HMA SIDEWALK	SQ FT	28,046.500	=			
X0712400	TEMP PAVEMENT	SQ YD	3,677.000	=			
X0919000	TEMP PAVT REMOVAL	SQ YD	3,677.000	=			
X4403300	CONC MEDIAN REMOV	SQ FT	547.000	=			
X8050010	SERV INSTALL GRND MT	EACH	3.000	=			
X8710020	FOCC62.5/125 MM12SM12	FOOT	2,419.000	=			
X8730027	ELCBL C GROUND 6 1C	FOOT	1,789.000	=			
X8730250	ELCBL C 20 3C TW SH	FOOT	1,485.000	=			
Z0022800	FENCE REMOVAL	FOOT	807.000	=			
Z0045100	PRESS CONNECT 12X12	EACH	2.000	=			
Z0076600	TRAINNEES	HOUR	2,500.000	=	0.80		2,000.00
20100110	TREE REMOV 6-15	UNIT	406.000	=			
20100210	TREE REMOV OVER 15	UNIT	79.000	=			
20200100	EARTH EXCAVATION	CU YD	18,545.000	=			

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 KENDALL

ILLINOIS DEPARTMENT OF TRANSPORTATION  
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	CTS
				DOLLARS	CENTS		
20201200	REM & DISP UNS MATL	CU YD	2,585.000	=			
20700400	POROUS GRAN EMB SPEC	CU YD	183.000	=			
20800150	TRENCH BACKFILL	CU YD	1,391.000	=			
20900110	POROUS GRAN BACKFILL	CU YD	124.000	=			
21101615	TOPSOIL F & P 4	SQ YD	30,870.000	=			
21300010	EXPLOR TRENCH SPL	FOOT	200.000	=			
25000210	SEEDING CL 2A	ACRE	6.000	=			
25000400	NITROGEN FERT NUTR	POUND	540.000	=			
25000500	PHOSPHORUS FERT NUTR	POUND	540.000	=			
25000600	POTASSIUM FERT NUTR	POUND	540.000	=			
25100115	MULCH METHOD 2	ACRE	6.000	=			
25100630	EROSION CONTR BLANKET	SQ YD	29,040.000	=			
28000300	TEMP DITCH CHECKS	EACH	12.000	=			
28000400	PERIMETER EROS BAR	FOOT	1,798.000	=			
28000500	INLET & PIPE PROTECT	EACH	13.000	=			

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ILLINOIS DEPARTMENT OF TRANSPORTATION  
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
28000510	INLET FILTERS	EACH	58.000	=			
28100209	STONE RIPRAP CL A5	TON	450.000	=			
28200200	FILTER FABRIC	SQ YD	400.000	=			
35101400	AGG BASE CSE B	TON	48,691.000	=			
35501450	HMA BASE COURSE	TON	17,487.000	=			
35600704	HMA BC WID 7	SQ YD	92.000	=			
40201000	AGGREGATE-TEMP ACCESS	TON	9,804.000	=			
40600100	BIT MATLS PR CT	GALLON	18,944.000	=			
40600300	AGG PR CT	TON	41.000	=			
40600982	HMA SURF REM BUTT JT	SQ YD	662.000	=			
40600990	TEMPORARY RAMP	SQ YD	34.000	=			
40603235	P HMA BC IL19.0 N70	TON	5,829.000	=			
40603540	P HMA SC "D" N70	TON	3,609.000	=			
42400200	PC CONC SIDEWALK 5	SQ FT	17,267.500	=			
42400800	DETECTABLE WARNINGS	SQ FT	160.000	=			

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 KENDALL

ILLINOIS DEPARTMENT OF TRANSPORTATION  
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	CTS
				DOLLARS	CENTS		
44000100	PAVEMENT REM	SQ YD	30,756.000	=			
44000152	HMA SURF REM 3/4	SQ YD	8,152.000	=			
44000500	COMB CURB GUTTER REM	FOOT	4,064.000	=			
44000600	SIDEWALK REM	SQ FT	9,171.000	=			
44201717	CL D PATCH T2 6	SQ YD	51.000	=			
44201721	CL D PATCH T3 6	SQ YD	109.000	=			
44201723	CL D PATCH T4 6	SQ YD	1,509.000	=			
48101600	AGGREGATE SHLDS B 8	SQ YD	83.000	=			
48203003	HMA SHOULDERS 1 1/2	SQ YD	291.000	=			
50100200	REM EXIST STRUCT	L SUM	1.000	=			
50105200	REM EXIST CULVERTS	EACH	3.000	=			
50200100	STRUCTURE EXCAVATION	CU YD	1,216.000	=			
50300225	CONC STRUCT	CU YD	225.000	=			
50300300	PROTECTIVE COAT	SQ YD	80.000	=			
50800205	REINF BARS, EPOXY CTD	POUND	21,440.000	=			

FAU 2508  
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ILLINOIS DEPARTMENT OF TRANSPORTATION  
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE
				DOLLARS	CENTS	
50800515	BAR SPLICERS	EACH	80.000	=		
50901105	STEEL RAILING	FOOT	420.000	=		
50901750	PARAPET RAILING	FOOT	112.000	=		
51500100	NAME PLATES	EACH	1.000	=		
54213675	PRC FLAR END SEC 30	EACH	1.000	=		
54247150	GRATING-C FL END S 30	EACH	1.000	=		
550A0050	STORM SEW CL A 1 12	FOOT	2,929.000	=		
550A0070	STORM SEW CL A 1 15	FOOT	1,619.000	=		
550A0090	STORM SEW CL A 1 18	FOOT	193.000	=		
550A0120	STORM SEW CL A 1 24	FOOT	1,477.000	=		
550A0140	STORM SEW CL A 1 30	FOOT	137.000	=		
550A0340	STORM SEW CL A 2 12	FOOT	200.000	=		
550A0360	STORM SEW CL A 2 15	FOOT	20.000	=		
550A0380	STORM SEW CL A 2 18	FOOT	396.000	=		
550A0410	STORM SEW CL A 2 24	FOOT	266.000	=		

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ILLINOIS DEPARTMENT OF TRANSPORTATION  
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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE
				DOLLARS	CENTS	
550A0430	STORM SEW CL A 2 30	FOOT	78.000			
55100500	STORM SEWER REM 12	FOOT	135.000			
55100700	STORM SEWER REM 15	FOOT	149.000			
55100900	STORM SEWER REM 18	FOOT	83.000			
55101200	STORM SEWER REM 24	FOOT	44.000			
56400500	FIRE HYDNITS TO BE REM	EACH	5.000			
56400510	FIRE HYDNT REM & REPL	EACH	3.000			
56400820	FIRE HYD W/AUX V & VB	EACH	6.000			
59100100	GEOCOMPOSITE WALL DR	SQ YD	155.000			
60107600	PIPE UNDERDRAINS 4	FOOT	228.000			
60218400	MAN TA 4 DIA T1F CL	EACH	14.000			
60219000	MAN TA 4 DIA T8G	EACH	2.000			
60219300	MAN TA 4 DIA T1F&G	EACH	1.000			
60220230	MAN TA 4 DIA SPL F&G	EACH	11.000			
60221100	MAN TA 5 DIA T1F CL	EACH	5.000			

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				DOLLARS	CENTS	
60221700	MAN TA 5 DIA T8G	EACH	1.000 X	=		
60222930	MAN TA 5 DIA SPL F&G	EACH	3.000 X	=		
60223800	MAN TA 6 DIA T1F CL	EACH	1.000 X	=		
60224005	MAN TA 6 DIA T8G	EACH	1.000 X	=		
60224446	MAN TA 7 DIA T1F CL	EACH	1.000 X	=		
60236200	INLETS TA T8G	EACH	3.000 X	=		
60238700	INLETS TA W/SPL F&G	EACH	2.000 X	=		
60240301	INLETS TB T8G	EACH	5.000 X	=		
60240385	INLETS TB W/SPL F&G	EACH	42.000 X	=		
60255800	MAN ADJ NEW T1F CL	EACH	1.000 X	=		
60260050	SAN MAN RECONST	EACH	2.000 X	=		
60260400	INLETS ADJ NEW T1F CL	EACH	1.000 X	=		
60265700	VV ADJUST	EACH	7.000 X	=		
60266600	VALVE BOX ADJ	EACH	1.000 X	=		
60500040	REMOV MANHOLES	EACH	2.000 X	=		

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	CTS
				DOLLARS	CENTS		
60500060	REMOV INLETS	EACH	5.000	=			
60605000	COMB CC&G TB6.24	FOOT	13,608.000	=			
60619600	CONC MED TSB6.12	SQ FT	6,827.000	=			
67000400	ENGR FIELD OFFICE A	CAL MO	23.000	=			
67000600	ENGR FIELD LAB	CAL MO	23.000	=			
67100100	MOBILIZATION	L SUM	1.000	=			
70101800	TRAF CONT & PROT SPL	L SUM	1.000	=			
70103815	TR CONT SURVEILLANCE	CAL DA	600.000	=			
70106800	CHANGEABLE MESSAGE SN	CAL MO	23.000	=			
70300210	TEMP PVT MK LTR & SYM	SQ FT	1,040.000	=			
70300220	TEMP PVT MK LINE 4	FOOT	66,997.000	=			
70300240	TEMP PVT MK LINE 6	FOOT	9,539.000	=			
70300250	TEMP PVT MK LINE 8	FOOT	3,110.000	=			
70300260	TEMP PVT MK LINE 12	FOOT	2,994.000	=			
70300280	TEMP PVT MK LINE 24	FOOT	963.000	=			

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	CTS
				DOLLARS	CENTS		
70300510	PAVT MARK TAPE T3 L&S	SQ FT	94.000	X	=		
70300520	PAVT MARK TAPE T3 4	FOOT	1,440.000	X	=		
70300540	PAVT MARK TAPE T3 6	FOOT	1,073.000	X	=		
70300570	PAVT MARK TAPE T3 24	FOOT	78.000	X	=		
70301000	WORK ZONE PAVT MK REM	SQ FT	22,504.000	X	=		
70400100	TEMP CONC BARRIER	FOOT	400.000	X	=		
70400200	REL TEMP CONC BARRIER	FOOT	400.000	X	=		
72000100	SIGN PANEL T1	SQ FT	55.000	X	=		
72000200	SIGN PANEL T2	SQ FT	148.000	X	=		
72400600	RELOC SIN PAN ASSY TB	EACH	1.000	X	=		
78000100	THPL PVT MK LTR & SYM	SQ FT	697.000	X	=		
78000200	THPL PVT MK LINE 4	FOOT	18,429.000	X	=		
78000400	THPL PVT MK LINE 6	FOOT	1,494.000	X	=		
78000500	THPL PVT MK LINE 8	FOOT	3,110.000	X	=		
78000600	THPL PVT MK LINE 12	FOOT	2,994.000	X	=		

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE
				DOLLARS	CENTS	
78000650	THPL PVT MK LINE 24	FOOT	658.000	X	=	
78100100	RAISED REFL PAVT MKR	EACH	615.000	X	=	
78300100	PAVT MARKING REMOVAL	SQ FT	15,044.000	X	=	
81000300	CON T 1 GALVS	FOOT	2,227.000	X	=	
81000600	CON T 2 GALVS	FOOT	2,938.000	X	=	
81000700	CON T 2 1/2 GALVS	FOOT	167.000	X	=	
81001000	CON T 4 GALVS	FOOT	582.000	X	=	
81018200	CON P 1 GALVS	FOOT	293.000	X	=	
81018500	CON P 2 GALVS	FOOT	62.000	X	=	
81018600	CON P 2 1/2 GALVS	FOOT	20.000	X	=	
81018900	CON P 4 GALVS	FOOT	1,092.000	X	=	
81400100	HANDHOLE	EACH	19.000	X	=	
81400300	DBL HANDHOLE	EACH	4.000	X	=	
81900200	TR & BKFIL F ELECT WK	FOOT	5,228.000	X	=	
85000200	MAIN EX TR SIG INSTAL	EACH	4.000	X	=	

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
85700205	FAC T4 CAB SPL	EACH	3.000	=			
86200300	UNINTER POWER SUP EXT	EACH	6.000	=			
86400100	TRANSCIEIVER - FIB OPT	EACH	3.000	=			
87301215	ELCBL C SIGNAL 14 2C	FOOT	1,266.000	=			
87301225	ELCBL C SIGNAL 14 3C	FOOT	2,719.000	=			
87301245	ELCBL C SIGNAL 14 5C	FOOT	3,990.000	=			
87301255	ELCBL C SIGNAL 14 7C	FOOT	4,109.000	=			
87301305	ELCBL C LEAD 14 1PR	FOOT	10,183.000	=			
87301805	ELCBL C SERV 6 2C	FOOT	150.000	=			
87502440	TS POST GALVS 10	EACH	1.000	=			
87502490	TS POST GALVS 15	EACH	1.000	=			
87502500	TS POST GALVS 16	EACH	3.000	=			
87700200	S MAA & P 32	EACH	1.000	=			
87700240	S MAA & P 40	EACH	1.000	=			
87700250	S MAA & P 42	EACH	1.000	=			

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS	DOLLARS	CTS
87700260	S MAA & P 44	EACH	3.000				
87700280	S MAA & P 48	EACH	1.000				
87700300	S MAA & P 52	EACH	1.000				
87702450	S MAA & P DMA 30 & 38	EACH	1.000				
87800100	CONC FDN TY A	FOOT	20.000				
87800150	CONC FDN TY C	FOOT	12.000				
87800415	CONC FDN TY E 36D	FOOT	132.000				
87900200	DRILL EX HANDHOLE	EACH	3.000				
88040070	SH P LED 1F 3S BM	EACH	6.000				
88040090	SH P LED 1F 3S MAM	EACH	11.000				
88040150	SH P LED 1F 5S BM	EACH	2.000				
88040160	SH P LED 1F 5S MAM	EACH	15.000				
88102710	PED SH LED 1F BM	EACH	5.000				
88102718	PED SH LED 1F PM	EACH	2.000				
88200410	TS BACKPLATE L F PLAS	EACH	40.000				

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ITEM NUMBER	PAY ITEM DESCRIPTION	UNIT OF MEASURE	QUANTITY	UNIT PRICE		TOTAL PRICE	
				DOLLARS	CENTS		DOLLARS
88500100	INDUCTIVE LOOP DETECT	EACH	60.000	X	=		
88600100	DET LOOP T1	FOOT	7,055.000	X	=		
88700200	LIGHT DETECTOR	EACH	10.000	X	=		
88700300	LIGHT DETECTOR AMP	EACH	5.000	X	=		
88800100	PED PUSH-BUTTON	EACH	7.000	X	=		
89000100	TEMP TR SIG INSTALL	EACH	4.000	X	=		
89502200	MOD EX CONTR	EACH	3.000	X	=		
89502300	REM ELCBL FR CON	FOOT	2,236.000	X	=		
89502375	REMOV EX TS EQUIP	EACH	3.000	X	=		
89502380	REMOV EX HANDHOLE	EACH	3.000	X	=		
TOTAL						\$	

NOTE:

- EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.
- 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.
- IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
- A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

## RETURN WITH BID

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

#### I. GENERAL

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

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

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

#### II. ASSURANCES

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

##### B. Felons

1. The Illinois Procurement Code provides:

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

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

##### C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

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

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

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

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

The current salary of the Governor is \$171,000.00. Sixty percent of the salary is \$102,600.00.

## RETURN WITH BID

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

### **D. Negotiations**

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

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

### **E. Inducements**

1. The Illinois Procurement Code provides:

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

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

### **F. Revolving Door Prohibition**

1. The Illinois Procurement Code provides:

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

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

### **G. Reporting Anticompetitive Practices**

1. The Illinois Procurement Code provides:

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

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

### **H. Confidentiality**

1. The Illinois Procurement Code provides:

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

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

## RETURN WITH BID

### **I. Insider Information**

1. The Illinois Procurement Act provides:

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

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

### **III. CERTIFICATIONS**

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

#### **B. Bribery**

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

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

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

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

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

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

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

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

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

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

#### **C. Educational Loan**

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

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

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

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

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

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

## RETURN WITH BID

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

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

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

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

### **E. International Anti-Boycott**

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

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

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

### **F. Drug Free Workplace**

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

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

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

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

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

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

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

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

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

**G. Debt Delinquency**

1. The Illinois Procurement Code provides:

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

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

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

1. The Illinois Procurement Code provides:

Section 50-60(c).

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

**I. Addenda**

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

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

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

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

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

**NA - FEDERAL**

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

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

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

**M. Disclosure of Business Operations in Iran**

Public Act 95-0616 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 Act.

Failure to make the disclosure required by the Act 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.

## TO BE RETURNED WITH BID

### IV. DISCLOSURES

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

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

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

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

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

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

#### **C. Disclosure Form Instructions**

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

The Department has retained the Form A disclosures submitted by all bidders responding to these requirements for the April 24, 1998 or any subsequent letting conducted by the Department. The bidder has the option of submitting the information again or the bidder may check the following certification statement indicating that the information previously submitted by the bidder is, as of the date of submission, current and accurate. Before checking this certification, the bidder should carefully review its prior submissions to ensure the Certification is correct. If the Bidder checks the Certification, the Bidder should proceed to Form B instructions.

### CERTIFICATION STATEMENT

**I have determined that the Form A disclosure information previously submitted is current and accurate, and all forms are hereby incorporated by reference in this bid. Any necessary additional forms or amendments to previously submitted forms are attached to this bid.**

\_\_\_\_\_  
(Bidding Company)



\_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Date

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

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

1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES \_\_\_ NO \_\_\_
2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$102,600.00? YES \_\_\_ NO \_\_\_
3. Does anyone in your organization receive more than \$102,600.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES \_\_\_ NO \_\_\_
4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$102,600.00? YES \_\_\_ NO \_\_\_  
(Note: Only one set of forms needs to be completed per person per bid even if a specific individual would require a yes answer to more than one question.)

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

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

**Form B: Identifying Other Contracts & Procurement Related Information** Disclosure Form B must be completed for each bid submitted by the bidding entity. *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.

**D. Bidders Submitting More Than One Bid**

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

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

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RETURN WITH BID/OFFER

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

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

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

DISCLOSURE OF FINANCIAL INFORMATION

1. Disclosure of Financial Information. The individual named below has an interest in the BIDDER (or its parent) in terms of ownership or distributive income share in excess of 5%, or an interest which has a value of more than \$102,600.00 (60% of the Governor's salary as of 7/1/07). (Make copies of this form as necessary and attach a separate Disclosure Form A for each individual meeting these requirements)

FOR INDIVIDUAL (type or print information)

NAME:

ADDRESS

Type of ownership/distributable income share:

stock sole proprietorship Partnership other: (explain on separate sheet): % or \$ value of ownership/distributable income share:

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

(a) State employment, currently or in the previous 3 years, including contractual employment of services.

Yes \_\_\_ No \_\_\_

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

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois Toll Highway Authority? Yes \_\_\_ No \_\_\_
2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) provide the name the State agency for which you are employed and your annual salary.

**RETURN WITH BID/OFFER**

- 3. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes \_\_\_ No \_\_\_
  
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes \_\_\_ No \_\_\_

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

Yes \_\_\_ No \_\_\_

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois Toll Highway Authority? Yes \_\_\_ No \_\_\_
  
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds \$102,600.00, (60% of the Governor's salary as of 7/1/07) 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 \$102,600.00, (60% of the salary of the Governor as of 7/1/07) are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the salary of the Governor? Yes \_\_\_ No \_\_\_
  
- 4. If 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 \$102,600.00, (60% of the Governor's salary as of 7/1/07) are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of 2 times the salary of the Governor? Yes \_\_\_ No \_\_\_

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(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 \_\_\_

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

Yes \_\_\_ No \_\_\_

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(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 \_\_\_

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

Yes \_\_\_ No \_\_\_

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

Yes \_\_\_ No \_\_\_

**RETURN WITH BID/OFFER**

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

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

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

**APPLICABLE STATEMENT**

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

Completed by:  \_\_\_\_\_ Date \_\_\_\_\_  
Signature of Individual or Authorized Representative

**NOT APPLICABLE STATEMENT**

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

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

\_\_\_\_\_ Date \_\_\_\_\_  
Signature of Authorized Representative

RETURN WITH BID/OFFER

**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

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

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

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

**DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION**

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

If "No" is checked, the bidder only needs to complete the signature box on the bottom of this page.

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

**THE FOLLOWING STATEMENT MUST BE 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. 87333  
KENDALL County  
Section 02-00039-00-PV (Oswego)  
Project ACM-8003(252)  
Route FAU 2508 (Douglas Road)  
District 3 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. 87333  
KENDALL County  
Section 02-00039-00-PV (Oswego)  
Project ACM-8003(252)  
Route FAU 2508 (Douglas Road)  
District 3 Construction Funds**

PROPOSAL SIGNATURE SHEET

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

(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 \_\_\_\_\_

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

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)
By: (Signature & Title) By: (Signature of Attorney-in-Fact)

Notary Certification for Principal and Surety

STATE OF ILLINOIS,
COUNTY OF

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

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

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

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

My commission expires Notary Public

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

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

# PROPOSAL ENVELOPE



## 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. 87333  
KENDALL County  
Section 02-00039-00-PV (Oswego)  
Project ACM-8003(252)  
Route FAU 2508 (Douglas Road)  
District 3 Construction Funds



**Illinois Department of Transportation**



## NOTICE TO BIDDERS

- 1. TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., January 18, 2008. 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. 87333  
KENDALL County  
Section 02-00039-00-PV (Oswego)  
Project ACM-8003(252)  
Route FAU 2508 (Douglas Road)  
District 3 Construction Funds**

**Project consists of widening and reconstruction, including a precast 3-sided bridge, curb and gutter, storm sewer, replacement of watermain, pavement markings, traffic signals, noise wall and all other items to complete the project on FAU Route 2508 Douglas Road from U.S. Route 30 to U.S. Route 34 in the village of Oswego.**

- 3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.  
  
(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the  
Illinois Department of Transportation

Milton R. Sees, Secretary

BD 351 (Rev. 01/2003)

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FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2008

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 1-1-08)

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LR SD 13		Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR 102		Protests on Local Lettings	Jan. 1, 2007	
LR 105		Cooperation with Utilities	Jan. 1, 1999	Jan. 1, 2007
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LR 107-3		Disadvantaged Business Enterprise Participation	Jan. 1, 2007	
LR 107-4	106	x Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 108		Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 212		Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1		Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		Asphalt Stabilized Base Course, Plant Mix	Feb. 2, 1963	Jan. 1, 2007
LR 400-1		Bituminous Treated Earth Surface	Jan. 1, 2008	
LR 400-2		Bituminous Surface Mixture (Class B)	Jan. 1, 2008	
LR 400-3		Pavement Rehabilitation by the Heat-Scarify-Overlay Method	Jan. 1, 2008	
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LR 403-2		Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
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LR 503-1		Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
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LR 1013		Rock Salt (Sodium Chloride)	Aug. 1, 1969	Jan. 1, 2002
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Effective: September 5, 2007

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		GBSP12	Drainage System	June 10, 1994	Jan 1, 2007
		GBSP13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Jan 1, 2007
		GBSP14	Jack and Remove Existing Bearings	April 20, 1994	Jan 1, 2007
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		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
		GBSP22	Cleaning and Painting New Metal Structures	Sept 13, 1994	Jan 1, 2007
		GBSP25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	June 1, 2007
		GBSP26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	Feb 2, 2007
		GBSP28	Deck Slab Repair	May 15, 1995	Feb 2, 2007
		GBSP29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	June 1, 2007
		GBSP30	Bridge Deck Latex Concrete Overlay	May 15, 1995	June 1, 2007
		GBSP31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	June 1, 2007
		GBSP32	Temporary Sheet Piling	Sept 2, 1994	Jan 1, 2007
		GBSP33	Pedestrian Truss Superstructure	Jan 13, 1998	Jan 1, 2007
		GBSP34	Concrete Wearing Surface	June 23, 1994	Sept 5, 2007
		GBSP35	Silicone Bridge Joint Sealer	Aug 1, 1995	Jan 1, 2007
		GBSP36	Surface Preparation and Painting Req. for Weathering Steel	Nov 21, 1997	Feb 2, 2007
		GBSP37	Underwater Structure Excavation Protection	April 1, 1995	Jan 1, 2007
		GBSP38	Mechanically Stabilized Earth Retaining Walls	Feb 3, 1999	June 1, 2007
		GBSP42	Drilled Soldier Pile Retaining Wall	Sept 20, 2001	Feb 2, 2007
		GBSP43	Driven Soldier Pile Retaining Wall	Nov 13, 2002	Feb 2, 2007
X	110	GBSP44	Temporary Soil Retention System	Dec 30, 2002	Jan 1, 2007
		GBSP45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Jan 1, 2007
		GBSP46	Geotextile Retaining Walls	Sept 19, 2003	June 1, 2007
		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
		GBSP51	Pipe Underdrain for Structures	May 17, 2000	Jan 1, 2007
X	112	GBSP52	Porous Granular Embankment (Special)	Sept 28, 2005	Jan 1, 2007
		GBSP53	Structural Repair of Concrete	Mar 15, 2006	Sept 5, 2007
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		GBSP57	Temporary Mechanically Stabilized Earth Retaining Walls	Jan 6, 2003	Jan 1, 2007
		GBSP58	Mechanical Splice	Sep 21, 1995	Jan 1, 2007
		GBSP59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	Jan 1, 2007
		GBSP60	Containment and Disposal of Non-Lead Pain Cleaning Residues	Nov 25, 2004	Jan 1, 2007
		GBSP61	Slipform Parapet	June 1, 2007	
		GBSP62	Concrete Deck Beams	June 13, 2008	
		GBSP63	Demolition Plans for Removal of Existing Structures	Sept 5, 2007	

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**BDE SPECIAL PROVISIONS**  
For the January 18 and March 7, 2008 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.

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80186			Alkali-Silica Reaction for Cast-in-Place Concrete	Aug. 1, 2007	
80108			Asbestos Bearing Pad Removal	Nov. 1, 2003	
7254I			Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal	June 1, 1989	Jan. 2, 2007
* 80192			Automated Flagger Assistance Device	Jan. 1, 2008	
80173	113	X	Bituminous Materials Cost Adjustments	Nov. 2, 2006	Jan. 2, 2007
5026I			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
5048I			Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
5049I			Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
5053I			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	Jan. 1, 2007
80166	116	X	Cement	Jan. 1, 2007	Nov. 1, 2007
* 80193			Concrete Barrier	Jan. 1, 2008	
80177			Digital Terrain Modeling for Earthwork Calculations	April 1, 2007	
80029	119	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 1, 2007
* 80178			Dowel Bars	April 1, 2007	Jan. 1, 2008
80167			Electrical Service Installation – Traffic Signals	Jan. 1, 2007	
80190			Engineer's Field Office (Long Distance Bill)	Nov. 1, 2007	
80179			Engineer's Field Office Type A	April 1, 2007	
80175			Epoxy Pavement Markings	Jan. 1, 2007	
* 80189	126A	X	Equipment Rental Rates	Aug. 2, 2007	Jan. 2, 2008
80180	127	X	Erosion and Sediment Control Deficiency Deduction	April 1, 2007	
80169			High Tension Cable Median Barrier	Jan. 1, 2007	
* 80194			HMA – Hauling on Partially Completed Full-Depth Pavement	Jan. 1, 2008	
80181			Hot-Mix Asphalt – Field Voids in the Mineral Aggregate	April 1, 2007	
* 80136			Hot-Mix Asphalt Mixture IL-4.75	Nov. 1, 2004	Jan. 1, 2008
* 80195			Hot-Mix Asphalt Mixture IL-9.5L	Jan. 1, 2008	
80109			Impact Attenuators	Nov. 1, 2003	Jan. 1, 2007
80110	128	X	Impact Attenuators, Temporary	Nov. 1, 2003	Jan. 1, 2007
* 80196	130	X	Mast Arm Assembly and Pole	Jan. 1, 2008	
80045			Material Transfer Device	June 15, 1999	Jan. 1, 2007
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2007
80082			Multilane Pavement Patching	Nov. 1, 2002	
80129			Notched Wedge Longitudinal Joint	July 1, 2004	Jan. 1, 2007
80182			Notification of Reduced Width	April 1, 2007	
* 80069			Organic Zinc-Rich Paint System	Nov. 1, 2001	Jan. 1, 2008
80022	132	X	Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
80134			Plastic Blockouts for Guardrail	Nov. 1, 2004	Jan. 1, 2007
80119			Polyurea Pavement Marking	April 1, 2004	Jan. 1, 2007
80170			Portland Cement Concrete Plants	Jan. 1, 2007	
80171	134	X	Precast Handling Holes	Jan. 1, 2007	
80015			Public Convenience and Safety	Jan. 1, 2000	
3426I			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80172	136	X	Reclaimed Asphalt Pavement (RAP)	Jan. 1, 2007	Aug. 1, 2007

<u>File Name</u>	<u>Pg#</u>		<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80183	142	X	Reflective Sheeting on Channelizing Devices	April 1, 2007	
* 80151	143	X	Reinforcement Bars	Nov. 1, 2005	Jan. 2, 2008
80164			Removal and Disposal of Regulated Substances	Aug. 1, 2006	Jan. 1, 2007
80184			Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	April 1, 2007	
80131	145	X	Seeding	July 1, 2004	Aug. 1, 2007
80152	147	X	Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	Jan. 1, 2007
80132	152	X	Self-Consolidating Concrete for Precast Products	July 1, 2004	Jan. 1, 2007
* 80197	154	X	Silt Filter Fence	Jan. 1, 2008	
80127			Steel Cost Adjustment	April 2, 2004	April 1, 2007
80153			Steel Plate Beam Guardrail	Nov. 1, 2005	Aug. 1, 2007
80191	155	X	Stone Gradation Testing	Nov. 1, 2007	
80143	156	X	Subcontractor Mobilization Payments	April 2, 2005	
80075			Surface Testing of Pavements	April 1, 2002	Jan. 1, 2007
* 80087	157	X	Temporary Erosion Control	Nov. 1, 2002	Jan. 1, 2008
80176	158	X	Thermoplastic Pavement Markings	Jan. 1, 2007	
80161	160	X	Traffic Signal Grounding	April 1, 2006	Jan. 1, 2007
20338	162	X	Training Special Provisions	Oct. 15, 1975	
80185			Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	April 1, 2007	
80162	165	X	Uninterruptable Power Supply (UPS)	April 1, 2006	Jan. 1, 2007
80149			Variable Spaced Tining	Aug. 1, 2005	Jan. 1, 2007
80163	171	X	Water Blaster with Vacuum Recovery	April 1, 2006	Jan. 1, 2007
80071	172	X	Working Days	Jan. 1, 2002	

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

80187 Legal Requirements to be Observed

The following special provisions are in the 2008 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>
80168	Errata for the 2007 Standard Specifications	Supplemental	Jan. 1, 2007	Aug. 1, 2007
80142	Hot-Mix Asphalt Equipment, Spreading and Finishing Machine	Article 1102.3	Jan. 1, 2005	Jan. 1, 2007
80148	Planting Woody Plants	Section 253	Jan. 1, 2006	
80160	Reflective Crack Control Treatment	Section 443, Article 1062.04	April 1, 2006	Jan. 1, 2007
80154	Turf Reinforcement Mat	Section 251	Nov. 1, 2005	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:

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

**STATE OF ILLINOIS**

**SPECIAL PROVISIONS**

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction, Adopted January 1, 2007", the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, the "Standard Specifications for Water and Sewer Main Construction in Illinois", prepared by the Illinois Society of Professional Engineers, Consulting Engineers Council of Illinois, et al., as amended May, 1996, fourth edition and/or latest revisions (hereafter referred to as the *Standard Utility Specifications*), "Fox Metro Water Reclamation District Standard Specification" (latest edition), AASHTO Standard Specifications to Highway Bridges (17<sup>th</sup> Edition and as specified herein) and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, which apply to and govern the construction of Route FAU 2508 (Douglas Road), Section 02-00039-00-PV, in Kendall County, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

Contract # 87333

**LOCATION OF PROJECT**

The project begins north of US Route 34 and extends 1.29 miles north to US Route 30 in Oswego, Kendall County, Illinois.

**DESCRIPTION OF PROJECT**

This project includes the furnishing of all labor, materials, and equipment required to construct the proposed improvements, which consist of resurfacing the existing pavement from the southern project limit to approximately Old Post Road, reconstructing and widening from approximately Old Post Road to US Route 30, installing curb and gutter, storm sewer, and regrading the existing ditches. The proposed improvements include enhancements to the various side road intersections within the project limits. Also included in the proposed improvements is the replacement of various portions of existing watermain, the replacement of the existing bridge over Waubensee Creek with a pre-cast three-sided box culvert, installation of noise abatement wall, retaining wall, pavement marking, and the installation and/or modification of traffic signals at various locations throughout the project along Douglas Road in Oswego, Illinois.

**STATUS OF UTILITIES TO BE ADJUSTED**

<u>Name &amp; Address of Utility</u>	<u>Type</u>	<u>Location</u>	<u>Estimated Date Relocation Complete</u>
ComEd 1 N 423 Swift Road Lombard, IL 60148	Buried and Overhead Electric	Various locations	November 2007

Fox Metro 682 State Route 31 Oswego, IL 60543	24" Buried Sanitary Sewer 66" Buried Sanitary Sewer	Waubonsee Creek	No relocation necessary. Manhole reconstruction included in project.
Comcast Cable 688 Industrial Drive Elmhurst, IL 60126	Overhead CATV Buried Cable	Various locations located on ComEd poles. Three underground crossings at Farmington Lakes Drive, Long Beach, Weisbrook	November 2007
AT&T 65 W. Webster Street Floor 4E Joliet, IL 60432	Buried Telephone, Fiber Optic	Various locations	December 2007
Nicor Gas Company 90 North Finley Road Glen Ellyn, IL 60137	Buried Gas	Various locations	Spring 2008
Village of Oswego 100 Theodore Drive Oswego, IL 60543	12" and 8" Watermain	Various locations	Relocation included in project.

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Section 102 and Articles 105.07, 107.20, 107.31 and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

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

**DUST CONTROL**

In addition to the general requirements of Section 107 of the Standard Specifications, the contractor shall be required to prepare a plan for pavement cleaning and dust control for this project. A detailed plan outlining specific wetting, tarping, and/or cleaning procedures, or similar dust control methods is to be submitted for approval at the preconstruction meeting.

As required by Chapter 95 1/2, paragraphs 15-109 and 15-109.1 of the Illinois Vehicle Code, no blowing or spillage of material will be allowed during the hauling operations. The specific preventative measures proposed by the contractor are to be included in the dust control plan.

If, in the opinion of the engineer, excessive dust is produced during the hauling operations, the hauling shall stop until corrective action is taken.

Approval of the dust control and pavement cleaning procedures will not relieve the contractor of his responsibility to provide a safe work zone for the traveling public.

No additional compensation will be allowed for dust alleviation.

#### **EMBANKMENT**

This work shall be performed in accordance with Section 205 of the Standard Specifications except that the embankment material shall not be placed and compacted at moisture contents in excess of 110 percent of optimum moisture unless authorized, in writing, by the engineer.

Topsoil material shall not be placed in the embankment within 12 inches of high type base and surface courses.

#### **EXPLORATION TRENCH, SPECIAL**

This work shall consist of constructing a trench for the purpose of verifying clearances and locations of existing utilities and storm sewers. The exploration trench shall be constructed at the locations directed by the Engineer.

The depth of the trench shall be variable. The width of the trench shall be sufficient to allow proper investigation of the entire trench.

After the trench has been inspected by the Engineer. The excavated material shall be used to backfill the trench in a manner satisfactory to the Engineer. Any excess materials shall be disposed of according to Article 202.03 of the Standard Specifications.

This work will be paid for at the contract unit price per foot for EXPLORATION TRENCH, SPECIAL.

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

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

#### **PRIMING**

The prime coat used on brick, concrete, or hot-mix asphalt bases shall be RC-70.

#### **HOT-MIX ASPHALT COMPACTION EQUIPMENT**

The hot-mix asphalt surface course will be compacted in accordance with Article 406.07 of the Standard Specifications, except a pneumatic tired roller will not be allowed.

### **SURFACE COURSE PAVING SEQUENCE**

The hot-mix asphalt surface course shall be placed in a sequence that will minimize the time the centerline edge is exposed to traffic. When at the end of a day's operations the exposed centerline edge is greater than 300 m (1000 ft.), the contractor will be required to pave in the adjacent lane on the following workday.

### **REMOVE EXISTING CULVERTS**

Revise third paragraph of Article 501.06 to read: Removal of existing culverts will be measured for payment in units of each at the location designated on the plans.

Revise the fifth paragraph of Article 501.07 to read: Removal of existing pipe culverts will be paid for at the contract unit price per each for REMOVE EXISTING CULVERTS, which price shall include the removal and disposal of any culvert and any headwalls attached to culvert designated for removal. Also, included is the filling of holes or depressions left after removing the culvert and leveling the ground surface.

### **COMPUTER CABINET**

The contractor shall provide a computer cabinet for the engineer's field office. The computer cabinet shall be made as specified on the plan detail. The computer cabinet shall be permanently attached to a structural element of the field office in a manner to prevent theft of the entire cabinet.

The computer cabinet will not be paid for separately but shall be included in the cost of the ENGINEERS FIELD OFFICE, TYPE A.

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

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

All of the telephone lines provided shall have unpublished numbers.

### **TRAFFIC CONTROL PLAN**

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

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

Standard Specifications:

- Section 701- Work Zone Traffic Control and Protection
- Section 703 - Work Zone Pavement Marking
- Section 781 - Raised Reflective Pavement Markers
- Section 783 - Pavement Marking and Marker Removal
- Section 1106 - Work Zone Traffic Control Devices

Highway Standards:

701001	701006	701011	701101	701106
701301	701311	701501	701602	701606
701701	702001	704001		

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

**SPECIAL PROVISIONS**

- Contractor Access
- Changeable Message Sign
- Temporary Information Signing
- Pavement Marking Removal
- Traffic Control and Protection (Special)

At Douglas Road over Waubensee Creek, Highway Standard 701501 shall be used in conjunction with details for Temporary Concrete Barriers as contained in the drawings for the barriers on the bridge and in Highway Standard 704001 for the barriers on the roadway. Temporary Concrete Barriers shall be located a minimum of 80 feet up-station and down-station of the bridge and shall taper behind drums for the last 25 feet. Temporary Concrete Barriers used within the limits described above shall have Type C Bidirectional reflectors spaced at 25 foot centers. Impact attenuators shall be located at each end of the limits described above.

Contractor shall maintain radii at the end of the various stages in order to maintain traffic flow. Pavement removal is to occur at the end of the various stages. Pavement replacement is to occur within 48 hours of pavement removal.

**TRAFFIC CONTROL SURVEILLANCE:** In addition to the Standard Specifications for Article 701.04(b)(2), Surveillance, this item will be required when Traffic Standards 701101, 701606, and 701701 are in place.

**TRAFFIC CONTROL AND PROTECTION (SPECIAL)**

This work shall consist of providing traffic control and protection in accordance with the specific plan details, notes, and special provisions that have been prepared for this contract.

**Method of Measurement:** All traffic control (except work zone pavement marking) required by the traffic control plan details, notes, and special provisions will be measured for payment on a lump sum basis. Work zone pavement markings will be measured per foot.

**Basis of Payment:** All traffic control and protection will be paid for at the contract lump sum price for **TRAFFIC CONTROL AND PROTECTION (SPECIAL)**. This price shall be payment in full for all labor, materials, transportation, handling, and incidental work necessary to furnish, install, maintain, and remove all traffic control devices required by the traffic control plan details, notes, and special provisions and as approved by the Engineer.

**TEMPORARY PAVEMENT MARKING, SHORT TERM PAVEMENT MARKING and PAVEMENT MARKING TAPE, TYPE III** will be paid for separately in accordance with Section 703 of the Standard Specifications.

### CONTRACTOR ACCESS

At road closure locations where Type III barricades are installed in a manner that will not allow contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be altered, when approved by the Engineer, in the manner shown on Highway Standard 702001 for Road Closed to Through Traffic. "Road Closed" signs (R11-2), supplemented by "Except Authorized Vehicles" signs (R3-1101), shall be mounted on both the near right and the far left barricade(s). At the end of each work day, the barricades shall be returned to their in-line positions. This work will not be paid for separately, but shall be include in the associated traffic control pay items.

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

### CHANGEABLE MESSAGE SIGN

The Contractor shall furnish two (2) Changeable Message Signs for this project. The signs shall be operational two weeks prior to any lane closure and shall be located as directed by the Engineer. Any relocation of the signs directed by the Engineer during construction will not be paid for separately, but shall be included in the cost of the Changeable Message Sign.

### TEMPORARY INFORMATION SIGNING

An estimated quantity has been provided in the plans for temporary information signing.

#### Description.

This work shall consist of furnishing, installing, maintaining, relocating for various states of construction and eventually removing temporary informational signs. Included in this item may be ground mount signs, skid mount signs, truss mount signs, bridge mount signs, and overlay sign panels which cover portions of existing signs.

#### Materials.

Materials shall be according to the following Articles of Section 1000 - Materials:

	<u>Item</u>	<u>Article/Section</u>
a.)	Sign Base (Notes 1 & 2)	1090
b.)	Sign Face ( Note 3)	1091
c.)	Sign Legends	1092
d.)	Sign Supports	1093
e.)	Overlay Panels (Note 4)	1090.02

Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.

Note 2. Type A sheeting can be used on the plywood base.

Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.

Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

## GENERAL CONSTRUCTION REQUIREMENTS

### Installation.

The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

The attachment of temporary signs to existing sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at the Contractor's expense.

Signs which are placed on overhead bridge structures shall be fastened to the handrail with stainless steel bands. These signs shall rest on the concrete parapet where possible. The Contractor shall furnish mounting details for approval by the Engineer.

### Method Of Measurement.

This work shall be measured for payment in square feet (square meters) edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs will be included as part of this pay item.

### Basis Of Payment.

This work shall be paid for at the contract unit price per square foot for TEMPORARY INFORMATION SIGNING.

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

Description: This work shall consist of removing all permanent or work zone pavement marking, painted pavement markings, polylurea pavement marking, epoxy paint pavement markings, thermoplastic pavement marking, or pavement marking tape type III by hydro-blasting in accordance with the applicable portions of Section 783 and 703 of the Standard Specifications and described herein. Pavement marking tape type III may be peeled or burned off. However, all remnants or burn marks shall be hydro-blasted.

Removal Requirements: Removal requirements shall be as follows:

- a) The existing paint pavement markings or epoxy paint pavement markings shall be removed without pavement surface damage to the satisfaction of the Engineer.
- b) A high pressure water spray or "hydro-blast" shall be used during the removal, the pressure at the nozzle shall be approximately 172,000 kPa (25,000 psi) with maximum flow rate of 56 L/min (15 gal/min). The nozzle shall be in close proximity to the pavement surface.
- c) Over cleaning to the extent of possible damage to the roadway surface shall be held to a minimum. Very small particles of tightly adhering existing markings

may remain in place, if in the opinion of the Engineer, complete removal of the small particles will result in pavement surface damage.

Method of Measurement: The removal of permanent or work zone pavement marking, painted pavement markings, polyurea pavement marking, epoxy paint pavement markings, thermoplastic pavement marking, or pavement marking tape type III will be measured in square feet.

Basis of Payment: This work will be paid for at the contract unit price per square meter (square foot) for PAVEMENT MARKING REMOVAL or WORK ZONE PAVEMENT MARKING REMOVAL.

### **TEMPORARY PAVEMENT**

This work shall consist of constructing temporary pavement at the locations indicated in the Maintenance of Traffic plans. The temporary pavement shall be constructed of 2" of Hot-Mix Asphalt Surface Course, Mix "D", N50, Hot-Mix Asphalt Base Course 2" (mixture type HMA Binder IL-19 mm) on top of an aggregate base course consisting of 8" Aggregate Base Course, Type A. Temporary pavement and sub-base shall be paid for at the contract unit price per square yard for TEMPORARY PAVEMENT. Removal of the temporary pavement and sub-base granular material shall be paid for at the contract unit price per square yard for TEMPORARY PAVEMENT REMOVAL.

### **PRESSURE CONNECTION TO EXISTING WATER MAIN**

This work shall consist of the excavation, installation of a tapping sleeve and related appurtenances and the tapping of the existing water main. The installation of a valve and vault in conjunction with the pressure connection is not included herein and shall be paid for separately at the contract prices described elsewhere within these Specifications. Connection to existing mains shall be done according to Section 46 in the *Standard Utility Specifications*. The existing water mains to be abandoned shall be drained and the ends plugged. Whenever a section of water pipe has been completely physically disconnected from any and all possible connections to the City's existing water system, then all open ends of this section of water pipe shall be plugged by filling with concrete, for a minimum longitudinal length of 12 inches.

This work will be paid for at the contract unit price per each for PRESSURE CONNECTION, of the size specified.

### **WATER MAIN LINE STOPS**

The Contractor shall install line stops at locations deemed necessary as per the direction of the City and/or Engineer.

This work will be paid for at the contract unit price per each for WATERMAIN LINE STOP of the diameter specified. The contract unit price shall include all labor, material, and equipment necessary to perform the work, which prices shall include all excavation and backfill, bedding and cover, bracing, pipe joint material and restraint, pipe and fittings, trench dewatering, disinfection, removal and disposal of waste excavated materials, protection, replacement or repair of existing utilities, removal of existing fittings and installation of new fittings, and labor.

**CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE)**

This work shall be accomplished according to Section 41-2.10 of the *Standard Utility Specifications* at locations shown on the plans. Any necessary shut down of existing mains shall be coordinated with the Village of Oswego Public Works Department. Connection to existing mains shall be done according to the *Standard Utility Specifications*. The existing water mains to be abandoned shall be drained and the ends plugged. This abandonment shall be accomplished with the use of line stops, valve closures and be performed such that all fittings on existing water mains to remain in service upon the completion of this project shall be removed and spool pieces of water main inserted in their place. Whenever a section of water pipe has been completely physically disconnected from any and all possible connections to the City's existing water system, then all open ends of this section of water pipe shall be plugged by filling with concrete, for a minimum longitudinal length of 12 inches.

This work will be paid for at the contract unit price per each for CONNECTIONS TO EXISTING WATER MAINS (NON-PRESSURE), of the sized specified, which price shall include all required mechanical joint fittings, line stops, and valve closures as specified on the plans and "megalug" restrained joints complete and in place.

**DUCTILE IRON WATER MAIN, 12" DIAMETER**

This work shall be accomplished according to Section 41 of the *Standard Utility Specifications* and shall consist of excavation; bracing; bedding and cover; pipe joint restraint; trench dewatering; trench backfilling with excavated materials; testing; disinfecting; finish grading; removal and disposal of waste excavated materials; protection; replacement or repair of existing utilities. The water main shall be constructed of class 52 cement lined (ANSI 21.4/AWWA C-104) ductile iron pipe (ANSI 21.51/AWWA C151, PC350). Backfilling with select granular backfill materials, where located under or within four (4) feet of a pavement, driveway or sidewalk or other paved surface, shall be paid for separately and is not included. Where the water main is to be installed in an open augured hole or steel casing, the water main shall be assembled and manually pushed through the open bore hole. All fittings and plugs required to construct the water main in the alignment shown on the plan and profile views are to be considered included in the contract unit price for this item of work.

This work will be paid for at the contract unit price per foot for DUCTILE IRON WATER MAIN, CL. 52, 12", which prices shall include all excavation and backfill, bedding and cover, joint materials and restraints, hydrostatic tests, disinfection of the water main, water main shall be measured along the installed centerline of pipe.

**5' VAULT W/12" VALVE, TYPE A WITH TYPE 1 FRAME AND CLOSED LID**

This work shall be accomplished according to Sections 42 and 44 of the *Standard Utility Specifications* and shall consist of the installation of all main line valves within precast concrete vaults as detailed within plans including joint restraints; flexible watertight pipe to vault seals; steps; adjusting rings; frames and covers. This item does not include fire hydrant auxiliary valves which will be paid for separately and are described elsewhere within these Specifications. This work will be paid for at the contract unit price per each for 5' VAULT W/12" VALVE.

#### **4' VAULT W/8" VALVE, TYPE A WITH TYPE 1 FRAME AND CLOSED LID**

This work shall be accomplished according to Sections 42 and 44 of the *Standard Utility Specifications* and shall consist of the installation of all main line valves within precast concrete vaults as detailed within plans including joint restraints; flexible watertight pipe to vault seals; steps; adjusting rings; frames and covers. This item does not include fire hydrant auxiliary valves which will be bid separately and is described elsewhere within these Specifications. This work will be paid for at the contract unit price per each for 4' VAULT W/8" VALVE.

#### **ABANDON EXISTING VALVE VAULT**

This work shall consist of abandoning existing valve vaults with the valve remaining in place. The existing frame, lid, cone section and the top operating nut of the valve shall be removed and all except the cones section shall be delivered to the Village of Oswego Public Works Department. The cones section shall be disposed of off-site at the Contractors expense. The vault shall be backfilled and compacted with CA-6 with the area above the vault filled and compacted with CA-7 to the pavement subgrade.

This work will be paid for at the contract unit price per each for VALVE VAULTS TO BE ABANDONED including all materials and backfilling of the vault.

#### **FIRE HYDRANT TO BE REMOVED**

Where indicated on the plans, existing fire hydrants shall be removed and disposed of at the direction of the Village of Oswego Public Works Department. All exposed open ends of pipes shall be filled with at least twelve (12) inches of concrete. Any excavation within four (4) feet of a paved surface or of a proposed paved surface shall be backfilled with compacted granular trench backfill. This work shall be measured and paid for at the contract unit price per each for FIRE HYDRANT TO BE REMOVED and shall include all material, equipment and labor needed to remove the fire hydrant and auxiliary valve as described above and to fill the resulting excavation.

#### **FIRE HYDRANT TO BE REMOVED AND REPLACED**

Where indicated on the plans, existing fire hydrants shall be removed and disposed of at the direction of the Village of Oswego Public Works Department; and replaced with a new fire hydrant with auxiliary valve. This work shall be performed under pressure with line stops or tapping sleeves and valves.

This work shall be accomplished according to Section 45 of the *Standard Utility Specifications* and the detail shown on the plans. Hydrant barrel length shall be five and one half feet bury from finished grade. The installed depth of water main shall be measured so that the appropriate extension for the fire hydrant is supplied. The breakaway flange shall be set no more than two (2) inches above finished grade.

Construction shall conform to the detail shown on the plans. Hydrant shall be installed with megalugs and stainless steel bolts. Each hydrant shall be equipped with an auxiliary gate valve, attached to the hydrant, complete with valve box. An anchoring tee shall be used at each auxiliary valve and hydrant. All hydrants and auxiliary valves shall open left.

Any excavation within four (4) feet of a paved surface or of a proposed paved surface shall be backfilled with compacted granular trench backfill. This work shall be measured and paid for at the contract unit price per each for FIRE HYDRANT TO BE REMOVED AND REPLACED and shall include material, line stops, tapping sleeves, equipment and labor to remove the existing fire hydrant and auxiliary valve as described above, install new fire hydrant with auxiliary valve, including six (6) inch diameter service pipe, and backfill the resulting excavation.

### **FIRE HYDRANT WITH AUXILIARY VALVE AND BOX**

This work shall be accomplished according to Section 45 of the *Standard Utility Specifications* and the detail shown on the plans. Hydrant barrel length shall be five and one half feet bury from finished grade. The installed depth of water main shall be measured so that the appropriate extension for the fire hydrant is supplied. The breakaway flange shall be set no more than two (2) inches above finished grade.

Construction shall conform to the detail shown on the plans. Hydrant shall be installed with megalugs and stainless steel bolts. Each hydrant shall be equipped with an auxiliary gate valve, attached to the hydrant, complete with valve box. An anchoring tee shall be used at each auxiliary valve and hydrant. All hydrants and auxiliary valves shall open left.

This work will be paid for at the contract unit price per each for FIRE HYDRANT W/ AUXILIARY VALVE AND VALVE BOX, installed complete and in place, including the six (6) inch diameter service pipe.

### **HORIZONTAL DIRECTIONAL DRILL HDPE WATER MAIN, DR 11, 14" DIAMETER**

This work shall be accomplished according to ASTM F1962-05 – "Use of Maxi-Horizontal Directional Drilling for Placement of Polyethylene Pipe or Conduit Under Obstacles, Including River Crossings". The water main to be directionally drilled shall be HDPE DR 11, conforming to the requirements of AWWA C906. Prior to beginning the work, Contractor shall submit to the Engineer, a work plan detailing the procedure and schedule to be used to execute the project.

This work will be paid for at the contract unit price per foot for HORIZONTAL DIRECTIONAL DRILL HDPE WATER MAIN, DR11, 14" DIAMETER, which price shall include all excavation and backfill for pilot bore hole, bracing, bore pit, bedding and cover, joint materials and restraints, pipe material, installation of tracer wire, all labor/equipment/material, removal and disposal of waste excavated materials, hydrostatic tests, disinfection of the water main, finish grading, protection, and replacement or repair of existing utilities. Water main shall be measured along the installed centerline of pipe.

### **WATER MAIN JOINT RESTRAINT**

Blocking to prevent movement of mains under pressure at bends and fittings shall be by Portland Cement Concrete (PCC), a minimum of 12-inche thick pre-cast blocks, placed between solid ground and the fittings in such a manner that pipe fittings and joints will be accessible for repairs. All bends of 22.5 degrees or greater, and all tees and plugs shall be thrust protected to prevent movement of the line under pressure.

Thrust protection may also be attained by the use of a combination of mechanical retaining glands and threaded stainless steel rods. Mechanical joint restraint shall be incorporated in the design of the follower gland. The restraint mechanism shall consist of individually activated gripping surfaces to maximize restraint capabilities. Glands shall be manufactured of ductile-iron conforming to ASTM/A536-80. The gland shall be such that it can replace the standardized mechanical joint gland and can be used with the standardized mechanical joint bell conforming to ANSI/AWWA A21.11/C111 and ASNI/AWWA A21.53/C153 of the latest revision. Twist-off nuts, sized same as tee-head bolts, shall be used to ensure proper activating of restraining devices. The restraining glands shall have a pressure rating equal to that of the pipe on which it is used. The restraining glands shall be EBAA Iron Inc. Megalug, Romac Industries, Inc. Grip Ring, or equal. Thrust restraint shall be considered incidental.

### **PRESSURE TEST AND CHLORINATION SAMPLE RISER**

The pressure test and chlorination sample riser shall consist of a one-inch corporation tapped directly to the water main in the valve vault on both ends of the relocated water main. Corporation stop shall be required on the *Water Service Detail* or equal. A sufficient amount of 1" Type-K copper shall be installed so as to exit the vault.

### **DISINFECTING WATER MAINS**

As part of the project, all new water mains shall be disinfected before they are placed in service. Disinfecting shall be in accordance with Section 41.2.13 of the *Standard Utility Specifications* for Water and Sewer Main Construction in Illinois and as outlined in the Village code. All disinfection, as required by this Chapter, shall be performed by an independent firm exhibiting experience in the methods and techniques of this operation, and shall be done in the presence of the Director of Public Works or his designated representative. The Director of Public Works shall be notified of the time of disinfection a minimum of twenty-four (24) hours prior to the disinfection.

The preferred point of application of the chlorinating agent shall be at the beginning of the pipe line extension of any valved section of it and through a corporation stop in the top of the newly laid pipe. The injector for delivering the chlorine-gas into the pipe should be supplied from a tap on the pressure side of the gate valve controlling the flow into the pipeline extension.

Water from the existing distribution system or other source of supply shall be controlled so as to flow slowly into the newly laid pipeline during the application of chlorine-gas. The rate of chlorine mixture flow shall be in such proportion to the rate of water entering the pipe that the chlorine dose applied to the water entering the newly laid pipe shall be at least forty (40) to fifty (50) ppm, or enough to meet the requirements in the *Standard Utility Specifications* during the retention period. This may require as much as one hundred (100) ppm of chlorine in the water left in the line after chlorination. Valves shall be manipulated so that the strong chlorine solution in the line being treated will not flow back into the line supplying the water.

Treated water shall be retained in the pipe long enough to destroy all spore-forming bacteria. This retention period shall be at least twenty-four (24) hours. After the chlorine-treated water has been retained for the required time, the chlorine residual at the pipe extremities and at other representative points should be at least ten (10) ppm.

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

The cost of disinfecting water mains shall be considered incidental to and included in the contract unit price for water main.

### **FINAL FLUSHING AND TESTING**

Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipeline at its extremities until the replacement water, throughout its length shall, upon test, be approved as safe water by the Director of Public Works. This quality of water delivered by the new main should continue for a period of at least two (2) full days as demonstrated by laboratory examination of samples taken from a tap located and installed in such a way as to prevent outside contamination. Samples shall be taken from required chlorination whips by a representative of the Owner. Samples should never be taken from an unsterilized hose or from a fire hydrant, because such samples seldom meet current bacteriological standards.

Bacteriological analysis of the samples shall be performed by a laboratory approved by the Illinois Department of Public Health. Should the initial treatment result in an unsatisfactory bacterial test, the procedure shall be repeated until satisfactory results are obtained. Samples shall be delivered to the laboratory by the Owner. Results of the analysis shall be transmitted by the laboratory directly to the Owner. Test results shall indicate the date the sample was collected, the date the analysis was made, the exact location at which the samples were taken, the Owner submitting the sample, and the project at which the samples were collected. Samples shall be taken at locations chosen by the Owner. Line flushing and testing shall be considered incidental to the per lineal foot price for water main of the type and size specified. The Contractor shall be responsible for payment of the laboratory analysis.

### PRESSURE TEST

As part of the construction, all water mains shall be pressure tested as described in this Section. The Director of Public Works shall be notified of the time of the test a minimum of twenty four (24) hours prior to the test.

All newly laid pipe shall be subjected to a hydrostatic pressure of one hundred fifty (150) pounds per square inch. Duration of each pressure test shall be for a period of not less than two (2) hours. Each valved section of pipe shall be filled with water and the specified test pressure shall be applied by means of pump connected to the pipe. Before applying the specified test pressure, all air shall be expelled from the pipe. All leaks shall be repaired until tight. Any cracked or defective pipes, fittings, valves, or hydrants discovered in consequence of this pressure test shall be removed and replaced and the test repeated until satisfactory results are obtained.

All testing shall be done before the installation of service lines. Suitable means shall be provided for determining the quantity of water lost by leakage under the specified test pressure. Allowable leakage shall not be greater than that computed as follows:

$$L = \frac{N \times D \times (P)^{\frac{1}{2}}}{7400} \text{ or } L = \frac{S \times D \times (P)^{\frac{1}{2}}}{133,200}$$

L=Allowable leakage in gallons per hour

N=Number of joints in length of pipeline tested

D=Nominal diameter of the pipe in inches

P=Average test pressure during leakage test in pounds per square inch gauge

S=Length of pipeline tested in feet

Leakage is defined, as the quantity of water required to be supplied to the newly laid pipe necessary to maintain the specified leakage test pressure.

All pressure tests shall be done in the presence of the Director of Public Works or his designated representative.

Prior to chlorination, the main shall be flushed as thoroughly as possible with the water pressure and outlets available. Flushing shall be done after the pressure test is made. It must be understood that such flushing removes only the lighter solids and cannot be relied upon to remove heavy material allowed to get into the main during laying. If no hydrant is installed at the end of the main, a tap should be provided large enough to effect a velocity in the main of at least 2.5 feet per second. Pressure testing shall be considered incidental to the per lineal foot price for water main of the type and size specified.

### **SANITARY MANHOLE TO BE RECONSTRUCTED**

This work shall be performed in accordance with Section 602 of the Standard Specifications. Also included in this pay item is coordination with Fox Metro Water Reclamation District. Fox Metro Water Reclamation District will inspect any adjusted manholes with the Engineer for compliance to Fox Metro Water Reclamation District Standard Specifications. "Adaptor-Seal", "Infi-Shield", or approved equal chimney seals shall be installed on all utility manholes to be adjusted. The manhole reconstruction shall not be paid for separately but included in the unit price for SANITARY MANHOLE TO BE RECONSTRUCTED.

### **NOISE ABATEMENT WALL, PRECAST CONCRETE**

Description: This work shall consist of furnishing the design, shop drawings, materials and the fabrication and installation of noise abatement walls and construction of foundations according to these Special Provisions, details in the plans and at location shown on the plans or as directed by the Engineer.

General: The noise abatement wall shall consist of precast concrete panels placed between precast concrete posts supported by drilled shaft foundations, as shown on the plans. The design, material, fabrication, and construction shall comply with this Special Provision and the requirements specified by the noise abatement wall supplier for use on the project. Wooden walls or other composite walls will not be allowed as substitutes for the concrete wall system. The walls shall have no omissions or gap except as detailed on the plans. Some sections of wall are expected to retain fill where indicated on the plans.

The Contractor shall prepare a wall design submittal for the Engineer for review and approval. The noise wall shall be designed and constructed to extend to the minimum lines, grades, and dimensions of the wall envelope shown on the contract plans and as directed by the Engineer.

The walls shall be fabricated to produce a reflective noise abatement system unless noted otherwise. The contractor shall verify the wall locations of the proposed ground mounted wall for conflicts and realign or redesign the wall to avoid any conflicts. The Contractor shall inform the Engineer in writing of any conflicts before realigning or redesigning the wall.

Submittals: The wall system supplier shall submit complete design calculations and shop plans to the Engineer for review and approval no later than 120 days prior to beginning construction of the wall. Once approved by the Engineer, submittals shall be forwarded to IDOT for review and approval. The time required for preparation and review of these submittals shall be charged to the allowable contract time. Delays caused by untimely submittals or insufficient data will not be considered justification for any time extensions. No additional compensation will be made for any additional material, equipment, or other items found necessary to comply with the project specifications as a result of the Engineer's review. The Contractor will be required to submit the necessary shop drawings as per Article 105.04 of the Standard Specifications. All submittals shall be sealed by a Structural Engineer licensed in Illinois and include, but not limited to, the following items:

- a) Plan, elevation and cross-section sheets(s) for each wall showing the following:
  - 1) A plan view of the wall indicating the station and offset required to locate the drilled shaft foundations. The proposed foundation diameter(s) and spacing(s) shall be indicated with all changes in the walls horizontal alignment shown. Each panel and post shall be numbered and any changes in type or size shall be noted. The centerline of any utilities passing under the wall shall also be shown.

- 2) An elevation view of the wall, indicating the elevations of the top of the concrete posts and panels as well as the elevations of the bottom of the panels, tops of the shaft foundations, all steps in wall system and the finished grade line. Each post size and length, panel type and size, and foundation depth shall be designated.
  - 3) The typical cross-section(s) showing the panel, post and foundation, the elevation relationship between existing ground conditions and the finished grade as well as slopes adjacent to the wall.
  - 4) All general notes required for constructing the wall.
- b) All details for the steps in the bottom of panels shall be shown. The bottom of the panels shall be located at or below the theoretical bottom of panel line shown on the contract plans. The theoretical bottom of panel line is assumed to be 6 inches below the finished grade line at from face of wall, unless otherwise shown on the plans.
  - c) Tops of the panels and posts shall extend to or above the theoretical top of wall line shown on the contract plans. All panel tops shall be cast and placed horizontally with any changes in elevation accomplished by stepping adjacent panel sections at posts. Steps shall not exceed 1 foot in height, except within the last 50 feet where 2 foot steps will be permitted. Walls shall be designed so that the top edge of the top panel will be equal to or below the top of the post.
  - d) All panel types shall be detailed. The details shall allow dimensions necessary to cast and construct each type of panel, all reinforcing steel in the panel and the location of post or foundation connection hardware of lifting devices embedded in the panels.
  - e) All details of architectural panel treatment, including color, texture and form liners shall be shown. All joints shall be horizontal or vertical and be aligned with the adjacent panels.
  - f) The details for the connection between panels and posts as well as their connection to the foundation shall be shown. A foundation detail shall be shown indicating the reinforcement and post anchorage system.
  - g) Testing Data and Certification. Test reports and certifications shall reference material manufactured specifically for this contract.

The Contractor shall deliver to the Engineer for approval a 2 feet x 2 feet sample of the colors, textures and patterns proposed for use on the project. The samples must be made at the plant that will be making the product for the noise wall under this contract. The samples must be representative of those which will be tested per this specification.

The initial submittal shall include three (3) sets of shop plans and one set of calculations. One set of plans will be returned to the Contractor with any corrections indicated. The Contractor shall do no work or ordering of materials for the structure until the Engineer has approved the submittal.

Design Criteria: The wall system shall be designed to withstand wind pressure, applied perpendicular to the panels in either direction, according to the AASHTO Guide Specifications for Structural Design of Sound Barriers (latest edition) including interims. The concrete and steel components shall be designed according to the AASHTO Standard Specifications to Highway Bridges (17<sup>th</sup> Edition and as specified herein). The wall supplier shall be responsible for the structural adequacy of the panels, posts, foundations and connections as well as overall wall overturning stability.

A design wind loading of 25 psf shall be used.

The concrete post shall be connected to the foundation by the use of base plates and anchor bolts. The minimum number of anchor bolts per post shall be 4 - (1 inch) diameter bolts with a minimum embedment of 24 inches. Shaft reinforcement shall be in accordance with AASHTO specifications. The maximum allowable post spacing shall be as shown on the plans but not to exceed 15 feet center to center.

The foundation dimensions shall be determined using Broms method of analysis.

The soil boring logs are included in the contract plans and were determined from previous soil investigations. The design shall utilize an ultimate factor of safety of 2.0 applied to the soil shear strength if cohesive or the unit weight if granular, and account for the effects of a sloping ground surface and water table indicated on the plans.

The material and construction of the foundations (drilled shafts) shall be in accordance with the Standard Specifications for Drill Shafts except that drilled shafts and reinforcement shall be paid for as Noise Abatement Wall, Precast Concrete.

The design shall account for the presence of all appurtenances mounted on or passing through the wall such as drainage structures, utilities, fire or access doors or other items.

Any bolts or fasteners used to connect material to the supporting panel, posts, or foundations shall be recessed or embedded in concrete, hidden from view and weather exposure. No external mechanical fastening devices such as frames or clips shall be used for these connections. The post to foundation connection (base plate, anchor bolts, nuts and washers) shall be hot dip galvanized in accordance with AASHTO M-111 and ASTM A-385.

Materials: The wall materials shall conform to the supplier's standards, AASHTO Specifications for noise walls and the following:

- a) Reinforcement bars for panels shall be per AASHTO M 31M, M 42M, or M 53M Grade 60. Welded wire fabric shall be according to AASHTO M 55M.
- b) The concrete for the precast face panels shall be Class PC according to Section 1020 of the Standard Specifications. Cement shall be Type I, II, or III and shall conform to the requirement of AASHTO M-85. Additives containing chloride shall not be used without the approval of the Engineer. The compressive strength at 28 days shall not be less than 4500 psi, according to Article 1042.03 of the Standard Specification.
- c) Testing for resistance to deicing chemicals shall be performed according to modified ASTM Standard C 672-84. After 50 cycles of freezing and thawing in a minimum 3% solution of sodium chloride, the noise wall concrete shall not exhibit excessive

deterioration in the form of cracks, spalls, aggregate disintegration, or other objectionable features.

- d) The Contractor shall submit a test report from an independent testing laboratory which indicates that the concrete noise wall material exhibits no significant deterioration when subjected to 250 cycles of freezing and thawing according to ASTM Standard C666-84 (procedure A).
- e) Steel plates shall conform to AASHTO M270M Grade 36 OR 50. Exposed steel plates and buried base plates shall be hot dip galvanized in accordance with AASHTO M-111 and ASTM A-385.
- f) Non shrink grout shall be according to ASTM C 1107.

Fabrication: All precast units shall be manufactured according to Section 1042 of the Standard Specifications and the following requirements and tolerances with respect to the dimensions shown on the approved shop plans.

- a) The minimum reinforcement bar cover shall be 1½ inches.
- b) The panel reinforcement shall be epoxy coated.
- c) The alignment of horizontal joints and appearances of the wall shall be judged along a distance of 100 feet.
- d) Panel dimensions shall be within ¼ inch.
- e) All hardware embedded in panels or posts shall be within ¼ inch.
- f) Angular distortion with regard to panel squareness, defined as the difference between the two diagonals, shall not exceed ½ inch.
- h) Posts shall be installed plumb to within ½ inch of vertical of every 15 feet of height and to within ½ inch of the station and offset indicated on the approved shop plans.
- i) Drilled foundations shall be placed within 2 inches of the station and offset indicated on the approved shop plans.

The date of manufacture, the production lot number, and the piece-mark shall be clearly marked on the side of each panel.

Panel reinforcement and lifting devices shall be set in place to the dimension and tolerances shown on the plans and these special provisions prior to casting.

The color and texture pattern of the panel and post shall be based on matching existing concrete wall panels as described below unless otherwise stated on the contract plans. Both sides of the panels shall have a texture finish. The proposed pattern shall be submitted for the Engineer's approval before commencing work. The textured surface is required on the face of the concrete posts.

Colors shall be achieved through the use of pigments or a pigmented penetrating concrete stain. The wall supplier shall match closely the colors and finish of existing wall panels and

posts located along Route 34 and Boulder Hill Pass in Oswego, Illinois. All integrally colored panels and posts shall have approved pigments, which are in compliance with the environmental regulation of the State of Illinois. Components manufactured with integral pigment shall be tested and certified in conformance to ASTM C979. The maximum number of colors is two. The maximum number of panel types with respect to patterns shall not exceed three. No panel shall have more than one color. Four unscored samples shall be prepared for each barrier component. One shall be set aside for reference; the other three shall be under weatherometer exposure in accordance with the requirements of ASTM Standard G26 or G23. The test shall be conducted in equipment operating at +/- 55°C (+/- 131°F) using a cycle of 102 minutes of light followed by minutes of light and water spray. Software specimen spray shall be alternated weekly with tap water. Evaluation shall be done after 800, 1600, and 2400 hours of exposure. After each evaluation, one panel of each system shall be removed from the weatherometer and retained. When removed, the panel shall be photographed in color. A color reference (18% gray) shall be included with each photograph. The photograph shall be kept for reference. A color change greater than five NBS units when measured according to ASTM D2244, using illuminant D65 of the 1964 ten degree standard observer shall be considered a failure. The Contractor shall submit a test report from an independent testing laboratory; documenting that the above requirements have been met.

Colors achieved through the use of pigmented concrete stain applied to exposed concrete surfaces as indicated on the plans including the posts and top of the panels shall conform to the following:

- a) Surface Preparation: Ensure that the surface is free of graffiti and contaminants such as dust, dirt, form oil, grease, wax, curing compounds, grime, and loose paint. Clean the surface by any of the following methods, as appropriate:
  - 1) Waterblasting: Use water at a minimum pressure of 2,500 psi.
  - 2) Steam cleaning: Using high, medium or low pressure depending on the condition of the surface.
  - 3) Sandblasting: As required for a clean surface, remove sand with water rinse.
  - 4) Cleaning solution: Scrub with a low residue, easily rinsed solution to remove all grease and wax build-up.
  - 5) Solvent wash: Use an approved solvent to remove all existing graffiti before applying the stain.
  - 6) Sand paper or wire wool: Lightly etch surface, then remove all residue.
  - 7) Acid etch: Rinse with appropriate acid, then neutralize and rinse surface thoroughly.

Allow the surface to dry thoroughly for a minimum of 24 to 48 hours after rinsing.

- b) Application:

- 1) Apply the stain when the ambient temperature is between 45°F and 100°F.

- 2) Ensure that surface is thoroughly clean and dry before applying stain. (Concrete and mortar shall have cured for a minimum of 28 days before being coated).
  - 3) Mix stain according to manufacturer's specifications for 15 minutes prior to application.
  - 4) Apply stain by roller or airless spray. Ensure that areas to be stained are adequately ventilated, and that operators are protected from exposure to fumes and chemicals. Comply with the manufacturer's recommendations.
- c) Clean Up: Clean drippings, runs and smudges from the Finished Work surface with an appropriate solvent as recommended by the manufacturer,
- d) Quality Assurance: Mock-up Test Surfaces: Prepare the test wall surfaces with the penetrating concrete stain to represent the standard appearance and workmanship for the project. Stain the surface as specified herein and in accordance with the manufacturer's specifications.
- e) Submittals: Notarized Certificates of Compliance from the stain manufacturer for all stain products installed on work.

Technical data/installation procedures for stain material and all material safety data sheets.

A notarized certificate confirming that the stain has performed satisfactorily for at least five years in work similar to the specified herein. The certificate shall provide clear concise details on projects with locations where stain has previously been performed.

- f) Product Data: The penetrating architectural concrete stain consisting of silicone acrylic material copolymer resinous system containing toning pigments in solution by a chemical suspension agent and solvent. One to two coat application depending on color, wall texture and porosity.

#### Estimate Coverage

Concrete	- 175-200 square feet/coat
Brick	- 125-150 square feet/coat
Brick/Stucco	- 75-100 square feet/coat

Any chipping, cracks, honeycomb, or other defects, to be allowed, shall be within acceptable standards for precast concrete as determined by the Engineer.

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 unite price bid for this item.

Site excavation and/or fill construction shall be completed to plan elevations and profiles prior to the start of wall construction. All underground utility or drainage structure installation shall be completed prior to foundation installation. Buried utilities shall be marked to verify proper clearance from the drilled foundations. The Contractor should consider overhead obstruction such as electric and telephone wires prior to wall erection.

If the soils encountered during drilling of the foundations do not satisfy the design strengths shown on the contract plans, the Engineer shall be notified to evaluate required foundation modifications. The shaft foundation will normally require additional length, which may be paid separately under Article 104.03 of the Standard Specifications. All drilled shaft excavations shall be filled with concrete within 6 hours of their initiation. The concrete for the drilled shaft foundations shall be Class DS in accordance with Section 1020 of the Standard Specifications and shall be placed against undisturbed, in-place soils. The concrete at the top of the shaft shall be shaped to provide the panels on each side of the post adequate bearing area and correct elevation per the approved shop plans.

The panels shall be delivered to the project site in full truckload quantities. They may be off-loaded individually or by forklift with a solid steel plate spanning between the forks. Providing uniform, fully distributed bearing support to the underside of the panels. Units shall be shipped, handled and stored in such a manner as to minimize the danger of staining, shipping, spalling, development of crack, fractures, and excessive bending stresses. Panels shall be stored and shipped in bundles, on edge. Any touch up and repair is at the Contractor's expense and shall be carried out according to the manufacturer's recommendations or as directed by the Engineer.

Method of Measurement: The noise abatement wall will be measured by the square foot from the wall envelope, defined by the theoretical top of wall line to the theoretical bottom of panel line for the length of the wall as shown on the contract plans and includes the drilled shafts.

Basis of Payment: The work will be paid for at the contract unit price per square meter (square foot) for NOISE ABATEMENT WALL, PRECAST CONCRETE.

### **SEGMENTAL CONCRETE BLOCK WALL, SPECIAL**

Description: This work shall consist of furnishing the design computations, shop plans, materials, equipment and labor to construct a Segmental Concrete Block Retaining Wall with a maximum height of 7.5 ft. as measured from the top of block elevation to the finished grade line at the wall face (difference in elevation between the finished grade in front of and behind the wall is less than 7.0 ft typically).

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

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

(a) Plan, elevation, and cross-section sheet(s) for each wall showing the following:

- (1) A plan view of the wall indicating the offsets from the construction centerline to the first course of blocks at all changes in horizontal alignment. These shall be calculated using the offsets to the front face of the block shown on the contract plans and the suppliers proposed wall batter. The plan view shall indicate bottom (and top course of block when

battered), the excavation and select granular backfill limits as well as any soil reinforcing required by the design. The centerline of any drainage structure or pipe behind or passing through/under the wall shall also be shown.

- (2) An elevation view of the wall, indicating the elevation and all steps in the top course of blocks along the length of the wall. The top of these blocks shall be at or above the theoretical top of wall line shown on the contract plans unless approved otherwise by the Engineer. This view shall also show the steps and proposed top of leveling pad elevations as well as the finished grade line at the wall face specified on the contract plans. These leveling pad elevations shall be located at or below the theoretical top of leveling pad shown on the contract plans unless approved otherwise by the Engineer. The location, size, and length of any soil reinforcing connected to the blocks shall be indicated. This view shall also show the location and size of pipe drains required to alleviate hydrostatic pressure behind the wall.
- (3) Typical cross-section(s) showing the limits of the select granular backfill, drain pipe and soil reinforcement. The right-of-way limits shall be indicated as well as the proposed excavation, cut slopes, and the elevation relationship between existing ground conditions and proposed grades.
- (4) All general notes required for constructing the wall.
- (b) All details for the leveling pads, including the steps, shall be shown. The theoretical top of the leveling pad shall either be below the anticipated frost depth or 1.5 feet below the finished grade line at the wall face, whichever is greater, unless otherwise shown on the plans. The minimum leveling pad thickness shall be 6 in..
- (c) Cap blocks shall be used to cover the top of the standard block units. The top course of blocks and cap blocks shall be stepped to satisfy the top of block line shown on the contract plans.
- (d) All details of the block and/or soil reinforcement placement around all appurtenances located behind, on top of, or passing through the wall shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular design arrangement shall also be submitted.
- (e) All details of the blocks, including color and texture shall be shown. The exterior face shall preferably be straight, textured with a "split rock face" pattern, and dark gray in color unless otherwise stated on the plans.
- (f) All block types (standard, cap, corner, and radius turning blocks) shall be detailed showing all dimensions.
- (g) All blocks shall have alignment/connection devices such as shear keys, leading/trailing lips, or pins. The details for the connection devices between adjacent blocks and the block to soil reinforcement shall be shown. The block set back or face batter shall be limited to 20 degrees from vertical, unless otherwise shown by the plans.
- (h) The Contractor shall also submit sample blocks matching the finish, color and pattern to be used.

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

Materials: The materials shall meet the following requirements.

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

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

1. Fly ash shall be according to Article 1010.02.
2. Ground granulated blast-furnace slag shall be according to AASHTO M 302.
3. Aggregate shall be according to Articles 1003.02 and 1004.02, with the exception of gradation. Chert gravel may be used based on past in-service satisfactory performance, in the environment in which the product was used.
4. Water shall be according to Section 1002.
5. Testing for freeze-thaw durability will not be required. However, unsatisfactory field performance as determined by the Department will be cause to prohibit the use of the block on Department projects.

- (b) Select Granular Backfill: The material behind the blocks and above a 1:1 slope extending upward from either the back of the bottom block or soil reinforcement (whichever is greater) shall consist of either a coarse aggregate according to Article 1004.05(a), or a fine aggregate according to the first sentence of Article 1003.04(a). The aggregate used shall also meet the following:

Coarse Aggregate Gradation	CA 6 thru CA 16 (Article 1004.01(c))
Fine Aggregate Gradation	FA 1, FA 2, FA 20 (Article 1003.01(c))
Coarse Aggregate Quality	Minimum Class C (Article 1004.01(b))
Fine Aggregate Quality	Minimum Class C (Article 1003.01(b))
Internal Friction Angle	34° minimum (AASHTO T 236)
pH	4.5 to 9 (AASHTO T 289)

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

- (c) Leveling pad: The material shall be either Class SI concrete according to Article 1020.04 or compacted coarse aggregate according to Articles 1004.04, (a) and (b). The compacted coarse aggregate gradation shall be CA 6 to CA 10.

- (d) Soil Reinforcement. If soil reinforcement is required by the approved design, the Contractor shall submit a manufacturer's certification for the soil reinforcement properties which equals or exceeds those required in the design computations. The soil reinforcement shall be manufactured from high density polyethylene (HDPE) uniaxial or polypropylene biaxial resins or high tenacity polyester fibers with a PVC coating, stored between  $-29$  and  $60^{\circ}$  C ( $-20$  and  $140^{\circ}$  F). The following standards shall be used in determining and demonstrating the soil reinforcement capacities.

ASTM D-638 Test Method for Tensile Properties of Plastic  
ASTM D-1248 Specification for Polyethylene Plastics Molding and Extrusion Materials  
ASTM D-4218 Test Method for Carbon Black Content in Polyethylene Compounds  
ASTM D-5262 Test Method for Evaluating the Unconfined Tension Creep Behavior of  
Geosynthetics  
GG-1-Standard Test Method for Geogrid Rib Tensile Strength  
GG-2-Standard Test Method for Geogrid Junction Strength

GG4-Standard Practice for Determination of the Long Term Design Strength of Geogrid  
GG5-Standard Practice for Evaluating Geogrid Pullout Behavior

- (e) Pipe Drains shall conform to Section 600 of the Standard Specifications except that payment for pipe drains shall be included in the unit cost for Segmental Concrete Block Wall.

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

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

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

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

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

The select granular backfill lift placement shall closely follow the erection of each course of blocks. All aggregate shall be swept from the top of the block prior to placing the next block lift. If soil reinforcement is used, the select granular backfill material shall be leveled and compacted

before placing and attaching the soil reinforcement to the blocks. The soil reinforcement shall be pulled taut, staked in place, and select fill placed from the rear face of the blocks outward. The lift thickness shall be the lesser of 10 inches loose measurement or the proposed block height.

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

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

Method of Measurement: Segmental Concrete Block Wall will be measured by the square foot of face from the top of block line to the theoretical top of the leveling pad for the length of the wall in a vertical plane, as shown on the contract plans and shall include all materials and labor required for fabrication and installation of the work described herein.

Basis of Payment: This work will be paid for at the contract unit price per square foot for SEGMENTAL CONCRETE BLOCK WALL.

#### **ANIT-GRAFFITI COATING**

Description: This work shall consist of furnishing and applying the anti-graffiti coating system formulated to provide permanent graffiti protection compatible with the surfaces and materials specified for graffiti protection in the contract plans.

Submittals: The contractor shall submit the following prior to application.

1. A test panel with anti-graffiti coating applied (surface area of test panel shall not be less than 10 ft. by 8 ft.). The application and curing of the product shall follow the manufacturer's requirements. The Resident Engineer shall apply various types of paints and colors of his choice. The graffiti shall cure for one (1) week minimum. The Contractor will demonstrate the removal of the graffiti according to the manufacturer's instructions to ensure compatibility with various substrates and verify that the coating meets the specified requirements. A manufacturer's certified applicator shall apply the anti-graffiti coating to the test panel.
2. Documentation of the applicators certification with the manufacturer of the anti-graffiti coating product.
3. Manufacturer's and Contractor's warranty meeting the requirements stated herein.  
Contractor's application warranty: ten (10) years.  
Manufacturer's product warranty: ten (10) years.

#### **Materials:**

1. Anti-Graffiti Coating
  - a. Clear finish with the top coating reading not to exceed 8 gloss units on a 60 degree Gardner Gloss Meter, permanent, water-clear, non-yellowing graffiti coating with added chemical and abrasion resistance for painted or stained surfaces, and porous cementitious surfaces.

- b. Allow 100% removal of all types of paint and graffiti materials from treated surfaces without damage to the coating or substrate.
- c. Withstand 120 cleanings over the same area with no measurable deterioration.
- d. No evidence of graffiti shall remain, (ghosting, staining or shadowing).
- e. The two layer coating system shall not require re-application regardless of the number of graffiti taggings during the 10 year warranty period.
- f. Graffiti coatings and graffiti removal product shall not increase dirt pickup of the substrate.

2. Graffiti Removal Product

- a. Graffiti removal products used to clean graffiti from coated surfaces will be non-toxic, biodegradable with a pH of 7 – 8.5, nonflammable, and in compliance with all environmental regulations and not require special containment or disposal procedures.
- b. Must facilitate graffiti removal through application and light agitation of the affected area with an artificial bristle brush followed by a low pressure (80-100 psi) water rinse to achieve total graffiti removal with no damage to color, stain or substrate.

3. Below is the pre-approved Anti-Graffiti Coating product that shall be used.

- a. American Polymer GSS10 process; minimum of two (2) base coats and two (2) top coats.
- b. Or equal, and adhering to the specifications herein.

Application:

1. Start of work specified herein confirms acceptance of all surfaces, substrates, and project conditions. Start of application means the Contractor has accepted the existing substrate conditions.
2. Contractor will notify the Engineer and the manufacturer no less than 72 hours prior to the commencement of application.
3. Anti-Graffiti Coating shall be applied according to the manufacturer's recommendations and by a manufacturer certified applicator.
4. Ensure solid coating – pinhole free. Apply as many coats of stain and graffiti coating as necessary to satisfy warranty requirements.
5. Only apply the coating when the ambient and surface temperature is 45 degrees Fahrenheit and rising. Do not apply coating when temperatures are above 95 degrees Fahrenheit. Do not apply coating when winds are 5 mph or greater. Do not apply coating when there are dust conditions, or rain, snow, fog, mist, or sleet are present; neither when the relative humidity exceeds 85% or at temperatures less than 5 degrees above the dew point. Do not apply coating when precipitation is imminent.
6. Provide drop cloths or other forms of protections for surrounding surfaces from overspray and splashing. Protect traffic and pedestrians from overspray.
7. Manufacturer's representative will observe all treated surfaces after work is complete to verify proper application. Remove, refinish or recoat work that does not comply with the specified requirements.

8. Contractor shall purchase and provide five (5) gallons of unopened graffiti removal product(s) as specified by the manufacturer at the project close out and provide to the Village for their use.

Method of Measurement: Anti-Graffiti Coating will be measured by the square foot of surface area to be coated. Measured surface area does not include any allowances for increases in the surface area related to corrugations of the noise abatement wall or segmental concrete block wall. If more than two (2) base coats or more than two (2) top coats are required for correct coverage rates, the additional coats shall be measured and paid for according to Article 109.04 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per square foot for Anti-Graffiti Coating.

### **CONDUIT PUSHED**

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

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

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

### **INDUCTIVE LOOP DETECTOR**

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

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

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

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

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

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

### **FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL**

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

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

At the preconstruction meeting, the Contractor shall provide the names and phone numbers of two technicians who would be able to respond to controller malfunctions that occur within the 30 day acceptance period after the controller is turned on. If neither person can be reached at the time of the malfunction nor be at the location within 2 hours of receiving the call, any available electrician capable of evaluating and correcting the malfunction may be called at the State's discretion. Any and all bills resulting from defective operation of the controller or cabinet shall be the responsibility of the Contractor.

#### **CONTROLLER:**

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

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

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

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

A clear distinction among the phases receiving detection.

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

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

The color of all operating overlaps.

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

## CONTROLLER CABINET

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

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

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

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

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

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

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

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

## HANDHOLE OR DOUBLE HANDHOLE

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

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

### FIBER OPTIC CABLE IN CONDUIT

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

"The trench carrying the fiber optic cable conduit between intersections shall be marked with a one-polymer warning stake placed equidistant between handholes. The warning stake shall be a solid orange color with a warning sign at the top of the stake. The stake shall have a sign at the top stating BURIED FIBER OPTIC CABLE ↔ CALL VILLAGE OF OSWEGO PUBLIC WORKS AT 630-554-3242 BEFORE DIGGING. The sign shall have a nominal dimension of 14 inches (350 mm) by 3 inches (75 mm). The stake shall have a nominal dimension of 3 inches (75 mm) wide by 0.25 inch (6 mm) thick by 5.5 feet (1.67 m) long. Fifty percent of the stake length shall be buried leaving approximately 30 inches (760 mm) exposed above ground displaying the sign. The stake shall be of such design as to deflect upon impact by a vehicle and flex back to original position. The stake shall have a factory-attached anchor. The anchor shall catch soil around the stake and prevent unauthorized removal."

This work will not be paid for separately, but shall be included in the cost of the fiber optic cable in conduit.

### RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM

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

After the new signalized intersection is added or the existing signal is modified, the traffic signal system shall be re-optimized by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District 3 of the Illinois Department of Transportation. The Contractor shall contact the Area Traffic Signal Operations Engineer at 815-434-8505 for a listing of approved Consultants.

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

Traffic counts shall be taken at the subject intersection. Seven day/twenty-four hour automatic traffic recorder counts will be required and manual turning movement counts shall be conducted from 6:30 a.m. to 9:30 a.m., 11:00 a.m. to 1:00 p.m., and 3:30 p.m. to 6:30 p.m. on a typical weekday from midday Monday to midday Friday, and if necessary, on the weekend. Additional manual turning movement counts may be necessary if heavy traffic flows exist during off peak

hours. The turning movement counts shall identify cars, heavy vehicles, buses, and pedestrian movements.

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

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

The Consultant shall furnish to IDOT an original and two copies of the revised SCAT Report for the re-optimized system. The report shall contain the following: turning movement and automatic traffic recorder counts, capacity analyses for each count period, computer optimization analyses for each count period, proposed implementation plans and summaries including system description, analysis methodology, method of effectiveness comparison results and special recommendations and/or observations. The new report shall follow the format of the old report and shall incorporate all data from the old report which remains unchanged. Copies of the entire database including intersection displays and any other displays which the system software allows shall be furnished to the Department and to the Department's Traffic Signal Maintenance Contractor.

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

#### **SERVICE INSTALLATION, GROUND MOUNTED**

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

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

Materials.

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

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

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

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

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

#### Installation.

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

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

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

Add the following to Article 1078.01(c)(3) of the Standard Specifications:

- e. Warranty. The LED modules shall be warrantied according to Article 801.14."

#### **EMERGENCY VEHICLE PRE-EMPTION**

The emergency vehicle pre-emption equipment for this project shall be Opticom as required by the Village of Oswego.

#### **RELOCATE LIGHTING UNITS AND POLES**

This work shall consist of relocating existing lighting units and poles and shall be performed in accordance with Sections 836, 842 and 844 of the Standard Specifications. The lighting units and poles shall be inspected prior to relocation. This work will include all labor, materials, transportation, handling, and incidental work necessary to relocate and re-install the existing lighting units and poles on new pole foundations at locations marked on the plans. This work will also include removal of the existing pole foundations according to Section 842.04

This work will be paid for at the contract unit price per each for RELOCATE LIGHTING UNITS AND POLES, which shall include all labor, materials, and incidental work necessary to install new pole foundations, relocate and re-install lighting units and poles, and remove existing pole foundations.

## **CONNECTING TO EXISTING STORM SEWER**

### *Proposed Manholes:*

This work shall consist of constructing manholes with frames and grates or lids to connect to the existing storm sewer at the locations indicated on the plans. The existing storm sewer shall be removed to the nearest joints both upstream and downstream of the proposed structure. New class A storm sewer shall be provided between the existing storm sewer and the new manhole structure in accordance with Section 550 of the Standard Specifications. The Contractor shall verify the size and depth of the existing storm sewer before ordering the new pipe. This work shall be paid for at the contract unit price each for MANHOLES, of the type and diameter specified, and with the type of frame and grate or frame and lid specified.

### *Proposed Storm Sewer:*

This work shall consist of connecting new storm sewer to existing storm sewer at the locations indicated on the plans. The existing storm sewer shall be removed to the nearest joint and the new storm sewer extended as necessary. All joints between new and existing storm sewer shall be sealed in accordance with Section 550 of the Standard Specifications. This work shall be included in the contract unit price per foot for STORM SEWERS, of the class, type, and diameter specified.

## **REMOVING MANHOLES, CATCH BASINS, OR INLETS ADJACENT TO EXISTING WATERMAIN:**

The Contractor shall exercise extreme caution when removing manholes so as not to damage existing watermain (that is not to be removed or abandoned) running through or adjacent to the structure to be removed. Any watermain to remain in operation that is damaged as a result of the Contractor's operations shall be replaced at the Contractor's expense.

## **INLETS WITH SPECIAL FRAME AND GRATE**

This work shall be performed in accordance with Section 602 of the Standard Specifications. The purpose of this work is to install inlets at locations as shown on the plans with a Neenah Type R-3222-LA frame and grate or equivalent.

This work will be paid for at the contract unit price per each for INLET, of the type specified, WITH SPECIAL FRAME AND GRATE.

## **PLANTING TREES**

### 1. General Criteria

- a. Contractor to contact Village of Oswego Public Works at 630-554-3242 prior to ordering trees.
- b. Final location to be determined by Village of Oswego Public Works prior to planting.
- c. All trees shall be grown in a nursery located in the northern half of the State of Illinois and licensed by the State of Illinois.
- b. Trees selected for planting in Oswego shall be healthy, free of insects and diseases, bark bruises, and scrapes on the trunk of limbs before and after planting. Selected trees shall have a straight trunk with limbs not lower than five (5) feet above the ground.
- c. Tree holes may be machine dug, provided that all sides of holes dug in such manner shall be scored to prevent glazing. If any existing lawn is damaged, it shall be the responsibility of the contractor to restore said lawn to its original

condition. All trees shall be hand planted and planted straight. (Ordinance No. 89-84, 08.22.89)

- d. The planting season shall be approximately September 15, to December 1, and March 15, to June 1 as determined by the Village of Oswego Public Works.
- e. Trees shall have a trunk diameter of not less than two (2) inches. Caliper of the trunk of nursery stock shall be measured six (6) inches above the ground for up to and including four (4) inch caliper size, and twelve (12) inches above the ground for larger sizes. The root system of all trees shall be BALLED AND BURLAPPED with a minimum ball diameter of twenty-eight (28) inches for two (2) inch caliper trees.
- f. Trees shall be planted in the parkway along all streets no closer than five (5) feet from driveways and forty (40) feet from intersections, as measured from the right of way lines extended. In addition, no trees shall be planted within five (5) feet of a fire hydrant or underground utility or 15 feet from above ground utility structure or pole.  
Final determination of the quantity and location of parkway trees necessary to meet the above requirements shall be made by the village representative.
- g. The Contractor shall provide the Village Engineer with a minimum 24-hour notice prior to beginning of planting.
- h. All trees planted by an contractor shall be guaranteed for two (2) years from the date of acceptance and shall be replaced by the contractor at no charge to the Village, should they die or be in a declining condition in the opinion of the Village arborist. The replacement tree shall be of the same size, species and quality, and shall carry the same two (2) year guarantee.

## 2. Planting Requirements

- a. Trees shall normally be planted on the centerline of the parkway. Also, all newly planted trees shall be staked if needed.
- b. The perimeter of the planting hole shall extend a minimum of two (2) feet beyond the sides of the root ball on all sides. The sides of the hole shall slope gradually, making the hole saucer-shaped or bowl-shaped. The hole shall be no deeper than necessary to cover the root ball.
- c. A doughnut-like circle of soil shall be cultivated eight (8) to twelve (12) inches deep and eighteen (18) inches wide around the root ball. A three (3) inch layer of organic mulch shall be spread over the planting hole coming no closer to the trunk than six (6) inches. The trees shall be initially watered to remove air pockets from the soil and later as necessary to maintain a healthy, vigorous condition. The
- d. Each tree will be properly pruned back to compensate for any root loss. Such pruning may include roots and lateral branches (up to 1/3 of their length) but in no case may the main leader be cut. Any tree which has the main leader cut in any way will be removed and replaced. Any damaged or broken branches shall be removed at this time.
- e. Any excess soil, clay, or construction debris shall be removed from the planting site, prior to planting of individual tree.
- f. All tags, wires, plastic ties and rope shall be removed from each tree to prevent girdling the tree. The burlap shall be removed from the upper third of the rootball. If plastic "burlap" is used, it shall be removed in its entirety from the rootball.
- g. All trees shall have their trunk protected with tree wrap paper, from the base of the trunk up to the first branch. In addition, all trees shall be planted straight and shall be maintained in an upright position. Trees greater than three (3) inch caliper shall be staked for a minimum of one growing season to provide for the

trees' support and prevent the tree from leaning. Trees with a caliper of three (3) inches or less do not have to be staked unless environmental factors (such as exposure to high winds) predispose the trees to leaning. The Village engineer shall determine whether or not staking is required in these cases.

This work will not be paid for separately but included in the unit price for TREE, of the type and size specified.

#### **HOT-MIX ASPHALT SIDEWALK**

This work shall be performed in accordance with Section 406 of the Standard Specifications. The purpose of this work is to install a hot-mix asphalt sidewalk at locations as shown on the plans. The excavation required for the installation of hot-mix asphalt sidewalk to a minimum thickness of 2" surface course, 2" binder course and 6" aggregate base course will be paid for separately per cubic yard for EARTH EXCAVATION. The aggregate base course, 6" will be paid for separately per ton for AGGREGATE BASE COURSE, TYPE B.

This work will be paid for at the contract unit price per square foot for HOT-MIX ASPHALT SIDEWALK.

#### **SAWCUT**

This work, when required, shall be performed in accordance with Section 442 of the Standard Specifications except that this work will not be paid for separately, but included in the unit price for the associated items.

#### **CONCRETE MEDIAN REMOVAL**

This work shall be performed in accordance with Section 440 of the Standard Specifications. This item will include all necessary labor and materials to remove and dispose of concrete median as shown on the plans. This work will be paid for at the contract unit price per square foot for CONCRETE MEDIAN REMOVAL.

#### **FENCE TO BE REMOVED AND RE-ERECTED**

This work shall be performed in accordance with Sections 201, 664, and 665 of the Standard Specifications. This item will include all necessary labor and materials to remove, salvage and re-erect the fence. This work shall be paid for at the contract unit price per foot for FENCE TO BE REMOVED AND RE-ERECTED.

#### **REMOVAL AND REPLACEMENT OF CONCRETE DRIVEWAY**

This work shall be performed in accordance with Sections 423 and 440 of the Standard Specifications. This item will include all necessary labor and materials to remove and dispose of the existing concrete driveway and base course and to install new concrete driveway pavement and base course, consisting of 4" CA-6 Base Course and 6" Portland Cement Concrete Driveway Pavement as shown on the plans. This work shall be paid for per square yard for REMOVAL AND REPLACEMENT OF CONCRETE DRIVEWAY.

**SIDEWALK REMOVAL AND REPLACEMENT**

This work shall be performed in accordance with Sections 424 and 440 of the Standard Specifications. This item will include all necessary labor and materials to remove and dispose of the existing concrete sidewalk and base course and to install new concrete sidewalk pavement and base course, consisting of 4" CA-6 Base Course and 5" Portland Cement Concrete Sidewalk (6" through residential driveways and 8" through non-residential driveways) as shown on the plans. This work shall be paid for per square foot for SIDEWALK REMOVAL AND REPLACEMENT.

**CURB AND GUTTER REMOVAL AND REPLACEMENT**

This work shall be performed in accordance with Sections 440 and 606 of the Standard Specifications. This item will include all necessary labor and materials to remove and dispose of the existing curb and gutter and to install new concrete curb and gutter as shown on the plans. The new curb and gutter shall match the existing type of curb and gutter. This work shall be paid for per foot for CURB AND GUTTER REMOVAL AND REPLACEMENT.

**FENCE REMOVAL**

This work shall be performed in accordance with Section 201 of the Standard Specifications. If an existing fence is determined to be in conflict with the proposed improvements, the contractor shall notify the appropriate resident(s) by certified mail at least seven calendar days in advance in order to allow the resident to relocate and salvage the fence at his own cost. Should the resident decide to not salvage the fence, the contractor will be responsible for removing the portions that conflict with the proposed improvements. This item will include all necessary labor and materials to remove and dispose of the fence. This work shall be paid for at the contract unit price per foot for FENCE REMOVAL.

**INSURANCE**

Insurance shall be carried according to Article 107.27 of the Standard Specifications, except the Commercial General Liability limit shall be a minimum of \$4,000,000 for general aggregate limit.

This will not be paid for separately, but included in the contract unit prices.

**TEMPORARY RAMP REMOVAL**

This work shall be performed in accordance with Section 440 of the Standard Specifications. This item will include all necessary labor and materials to remove and dispose of the temporary ramps as shown on the plans. This work will be paid for at the contract unit price per square yard for TEMPORARY RAMP REMOVAL.

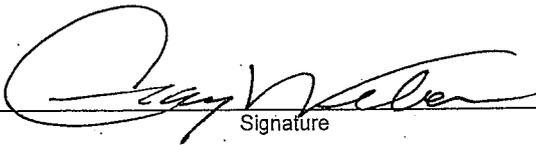


Route FAU 2508  
Section 02-00039-00-PV  
County Kendall

Marked Douglas Road  
Project No. \_\_\_\_\_

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

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

  
\_\_\_\_\_  
Signature  
  
\_\_\_\_\_  
Village President  
Title

3-26-07  
\_\_\_\_\_  
Date

1. Site Description

- a. The following is a description of the construction activity which is the subject of this plan (use additional pages, as necessary):  
This project consists of resurfacing the existing pavement from the southern project limit to approximately Old Post Road, reconstructing and widening from approximately Old Post Road to US Route 30, installing curb and gutter, storm sewer, and regrading the existing ditches. The proposed improvements include enhancements to the various side road intersections within the project limits. Also included in the proposed improvements is the replacement of various portions of existing watermain, the replacement of the existing bridge over Waubonsee Creek with a pre-cast three-sided box culvert, installation of noise abatement wall, retaining wall, pavement marking, and the installation and/or modification of traffic signals at various locations throughout the project along Douglas Road in Oswego, Illinois.
- b. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading (use additional pages, as necessary):  
Phase I - Long Beach Road to US Route 30 - Install temporary traffic signals, remove existing traffic signals and channelizing islands. Install temporary pavement as needed. Remove existing pavement and construct new pavement and curb and gutter according to the maintenance of traffic plans. Install proposed drainage structures.  
Phase II - North of Old Post Road to Long Beach Road - Install temporary pavement as needed. Remove existing pavement and construct new pavement and curb and gutter according to the maintenance of traffic plans. Grade the proposed ditches and install proposed drainage structures. Remove existing structure over Waubonsee Creek and replace with three-sided precast concrete box culvert.  
Phase III - Mill and resurface from south of Old Post Road to north of Old Post Road. Place surface course over entire project limits. Grade proposed ditches. Install permanent pavement marking, sidewalk, noise wall, landscaping, and permanent traffic signals at applicable locations throughout the entire project.
- c. The total area of the construction site is estimated to be 19.20 acres.

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities is 19.20 acres.

- d. The estimated runoff coefficients of the various areas of the site after construction activities are completed are contained in the project drainage study which is hereby incorporated by reference in this plan. Information describing the soils at the site is contained either in the Soils Report for the project, which is hereby incorporated by reference, or in an attachment to this plan.
- e. The design/project report, hydraulic report, or plan documents, hereby incorporated by reference, contain site map(s) indicating drainage patterns and approximate slopes anticipated after major grading activities, areas of major soil disturbance, the location of major structural and nonstructural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands), and locations where storm water is discharged to a surface water.
- f. The names of receiving water(s) and areal extent of wetland acreage at the site are in the design/project report or plan documents which are incorporated by reference as a part of this plan.

## 2. Controls

This section of the plan addresses the various controls that will be implemented for each of the major construction activities described in 1.b. above. For each measure discussed, the contractor that will be responsible for its implementation is indicated. Each such contractor has signed the required certification on forms which are attached to, and a part of, this plan:

### a. Erosion and Sediment Controls

- (i) Stabilization Practices. Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided in 2.a.(i).(A) and 2.b., stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased on all disturbed portions of the site where construction activity will not occur for a period of 21 or more calendar days.
  - (A) where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

Description of Stabilization Practices (use additional pages, as necessary):

Permanent erosion control measures consisting of Seeding, Class 2A (Salt Tolerant Roadside Mixture) and Erosion Control Blanket shall be placed as soon as practical during construction in accordance with Sections 250 and 252 of the Standard Specifications.

(ii) **Structural Practices.** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

Description of Structural Practices (use additional pages, as necessary):

**All temporary erosion control shall be in accordance with Section 280 of the Standard Specifications.**

Prior to commencement of grading activities, the following structural practices will be implemented:

**Perimeter Erosion Barrier** - A continuous silt fence placed adjacent to construction areas to intercept sheet flow of water borne silt and sediment, and prevent it from leaving the construction site. The locations requiring Perimeter Erosion Barrier are designated on the Erosion Control Plans.

As construction progresses, the following structural practices will be implemented as soon as practical.

**Inlet Filters** - These filters will be placed in every inlet, catch basin, or manhole with an open lid. All structures requiring Inlet Filters are listed in the Schedule of Quantities

**Inlet and Pipe Protection** - This system consists of surrounding pipe inlets and inlet structures (within the proposed ditch) to intercept water borne silt and sediment and prevent it from entering the drainage system.

**Temporary Ditch Checks** - Temporary ditch checks shall be constructed at the locations shown on the Erosion Control Plan to prevent siltation, erosion, or scour of newly graded ditches and drainageways.

b. Storm Water Management

Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

(i) Such practices may include: storm water detention structures (including wet ponds); storm water retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff on site; and sequential systems (which combine several practices). **The practices selected for implementation were determined on the basis of the technical guidance in Section 10-300 (Design Considerations) in Chapter 10 (Erosion and Sedimentation Control) of the Illinois Department of Transportation Drainage Manual. If practices other than those discussed in Section 10-300 are selected for implementation or if practices are applied to situations different from those covered in Section 10-300, the technical basis for such decisions will be explained below.**

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

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

Permanent erosion control measures consisting of Seeding, Class 2A (Salt Tolerant Roadside Mixture) and Erosion Control Blanket shall be placed as soon as practical during construction in accordance with Sections 250 and 252 of the Standard Specifications.

**c. Other Controls**

- (i) Waste Disposal. No solid materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- (ii) The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.

**d. Approved State or Local Plans**

The management practices, controls and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual, 1995. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans or site permits or storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI to be authorized to discharge under permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

### 3. Maintenance

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, vegetation, erosion and sediment control measures and other protective measures identified in this plan (use additional pages, as necessary):

Maintenance of the various temporary erosion control systems shall be in accordance with Section 280.05 of the Standard Specifications. The Engineer shall inspect the project daily during construction activities for problems pertaining to erosion control and report any deficiencies to the Contractor for subsequent repair.

The temporary erosion control systems shall be left in place with proper maintenance until the permanent erosion controls are in place and working properly and seeding has taken hold. Once the permanent erosion control systems are functional and established, the temporary items shall be removed along with any trapped sediment and any disturbed areas reseeded.

### 4. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not been finally stabilized, structural control measures, and locations where vehicles enter or exit the site. Such inspections shall be conducted at least once every seven (7) calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater or equivalent snowfall.

- a. Disturbed areas and areas used for storage of materials that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- b. Based on the results of the inspection, the description of potential pollutant sources identified in section 1 above and pollution prevention measures identified in section 2 above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within 7 calendar days following the inspection.
- c. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section 4.b. shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- d. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer or Resident Technician shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The Resident Engineer or Resident Technician shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The report of noncompliance shall be mailed to the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Attn: Compliance Assurance Section  
1021 North Grand East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

**5. Non-Storm Water Discharges**

Except for flows from fire fighting activities, sources of non-storm water that is combined with storm water discharges associated with the industrial activity addressed in this plan must be described below. Appropriate pollution prevention measures, as described below, will be implemented for the non-storm water component(s) of the discharge. (Use additional pages as necessary to describe non-storm water discharges and applicable pollution control measures).

**Good Housekeeping:**

1. All material stored on site will be stored in a neat, orderly manner in appropriate containers, and if possible, under a roof or other enclosure. An effort will be made to store only enough product required to do the job. Products will be kept in their original containers with the original manufacturer label. Substances will not be mixed with one another unless recommended by the manufacturer. The site superintendent will inspect daily to ensure proper use and disposal of materials on the site. Whenever possible, all of the product must be used up prior to dispensing the container. At all times the superintendent shall follow the manufacturer's recommendations of practices when using and disposing a product or container, unless otherwise directed by the field engineer.





Project Description

Existing S.N. 047-3070 County Kendall  
Proposed S.N. 047-6306 Route F.A.U. 2508  
Contract Number \_\_\_\_\_ Section 02-00039-00-PV  
Proposed Letting June 15, 2007 Designer Smith Engineering Consultants

Deck / Superstructure Removal

Existing Superstructure Description:  
Existing concrete deck on steel stringers with concrete parapets.

The existing structure is:  Composite  Non Composite  Other \_\_\_\_\_

Concrete in existing deck to be removed: 23.7  Cu Yd.  Cu. m.  
PPC Deck Beams to be removed: \_\_\_\_\_  Sq. Ft.  Sq. m.  
PPC I-Beams to be removed: \_\_\_\_\_  Ft.  m.  
Weight of existing structural steel to be removed: 50,000  Lb.  kg.  
Wearing surface to be removed (thickness 4  in.  mm.): 12  Cu. Yd.  Cu. m.

Other items not listed above: (List items, Quantities and Units)  
Concrete Parapets = 12 Cu. Yd.

Substructure Removal

(Substructure removal according to Standard Specifications Article 501)

Existing Substructure Description:  
Closed concrete abutments founded on an unknown foundation (no existing foundation information was available at the time of design).

Total existing substructure concrete: 100  Cu. Yd.  Cu. m.  
Concrete in existing substructure to be removed: 100  Cu. Yd.  Cu. m. Percent removal: N/A\*

\*=Existing foundation information not available at the time of design. Concrete Removal includes 8'-2" of stem above existing grade, another 4' below grade, a 2' stem thickness and a footing of approximately 15 Cu. Yd. at each abutment.

Box Culvert Removal

(Culvert removal according to Standard Specifications Article 501)

Existing Box Culvert Description:

Fill Height: \_\_\_\_\_  Ft.  m.  
Total Existing Box Culvert Concrete Volume \_\_\_\_\_  Cu. Yd.  Cu. m.  
Concrete in existing Box Culvert to be removed: \_\_\_\_\_  Cu. Yd.  Cu. m. Percent removal: \_\_\_\_\_

(Proposed SN 047-6306 )

**Temporary Support System / Temporary Shoring or Bracing**

Temporary Support, Shoring, or Bracing System Description:  
Temporary Soil Retention System with an exposed area of 1,046 Sq. Ft.

Struts, Wales, etc. total weight (if applicable): N/A  Lb.  kg.  
 Concrete (if applicable): N/A  Cu. Yd.  Cu. m.  
 Reinforcement Bars (if applicable): N/A  Lb.  kg.  
 Sheet Piling (if applicable): N/A  Sq. Ft.  Sq. m.

**Cofferdam / Underwater Structure Excavation Protection**

Cofferdam / Structure Excavation Protection Description:

Cofferdam Top Elevation: \_\_\_\_\_ Bottom of cofferdam excavation elevation: \_\_\_\_\_  
 Total Cofferdam / Structure Excavation Protection Sheeting Area: \_\_\_\_\_  Sq. Ft.  Sq. m.  
 Struts, Wales, etc. Total Weight (if applicable): \_\_\_\_\_  Lb.  kg.

**Cleaning and Painting Existing Steel Structures**

Total Surface Area of Steel \_\_\_\_\_  Sq. Ft.  Sq. m.  
 Area to be Blast Cleaned per SSPC-SP 10 \_\_\_\_\_  Sq. Ft.  Sq. m.  
 Area to be Power Tool Cleaned per SSPC-SP 3 (Mod) \_\_\_\_\_  Sq. Ft.  Sq. m.  
 Area to be Power Tool Cleaned per SSPC-SP 15 \_\_\_\_\_  Sq. Ft.  Sq. m.  
 Feature(s) Crossed  Waterway  Roadway  Railroad  Other \_\_\_\_\_

**Drainage System**

Approximate Length of Drainage System \_\_\_\_\_  Ft.  m

**Other Major Lump Sum Items and/or Each Major Item**

(Be sure to include any pertinent information needed to estimate the Lump Sum or Each Item not listed above.)

Precast Concrete Substructure = the precast concrete headwalls to be supplied by the Three Sided Precast Concrete Structure supplier and paid for as Precast Concrete Substructure (lump sum). Concrete quantity = 14.3 Cu. Yd.

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DEPARTMENT OF THE ARMY  
ROCK ISLAND DISTRICT, CORPS OF ENGINEERS  
CLOCK TOWER BUILDING - P.O. BOX 2004  
ROCK ISLAND, ILLINOIS 61204-2004

REPLY TO  
ATTENTION OF

<http://www.mvr.usace.army.mil>

May 8, 2007

Operations Division

SUBJECT: CEMVR-OD-P-2007-627

Mr. Stephen Chu  
Smith Engineering Consultants, Inc.  
4500 Prime Parkway  
McHenry, Illinois 60050

Dear Mr. Chu:

Our office reviewed your application dated April 23, 2007, concerning the proposed bridge replacement project over Waubensee Creek in Section 3, Township 37 North, Range 8 East, Kendall County, Illinois.

Your project is covered under Nationwide Permit No. 14, as published in the enclosed pages of the Federal Register, dated March 12, 2007, provided you meet the Regional Conditions for this nationwide permit, which are also included as Special Conditions described below. The Corps has also made a determination of no effect on federally threatened and endangered species or critical habitat. The decision regarding this action is based on information found in the administrative record, which documents the District's decision-making process, the basis for the decision, and the final decision.

Special Conditions:

Bank and shoreline protection shall consist of suitable clean materials, free from debris, trash, and other deleterious materials. If broken concrete is used as riprap, all reinforcing rods must be cut flush with the surface of the concrete, and individual pieces of concrete shall not exceed 3 feet in any dimension. Asphalt and broken concrete containing asphalt are specifically excluded from this authorization.

As of this date, we have not received the Illinois Environmental Protection Agency's (IEPA) Section 401 Water Quality Certification decision for this nationwide permit. You have the option of either waiting for the IEPA's final decision (which may be to certify, certify with conditions, or deny general certification), or immediately requesting individual water quality certification from the IEPA for your project. No work may begin until you have Section 401 Water Quality Certification for your project.

This verification is valid for a period of two (2) years from the date of this letter, unless the nationwide permit is modified, reissued, or revoked. It is your responsibility to remain informed of changes to the nationwide permit program. We will issue a public notice announcing the changes if and when they occur. If the activity is not undertaken within the two year period, or the project specifications have changed, you must immediately notify this office to determine the need for further approval or reverification.

This letter contains an approved jurisdictional determination for the subject site. If you object to this jurisdictional determination, you may request an administrative appeal under Corps regulations found at 33 CFR Part 331. Enclosed is a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this approved jurisdictional determination, you must submit a completed RFA form to the Mississippi Valley Division Office at the following address:

Administrative Appeals Officer  
U.S. Army Corps of Engineers  
Mississippi Valley Division  
ATTN: CEMVD-PD-KM  
Post Office Box 80  
Vicksburg, Mississippi 39181-0080

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by July 6, 2007.

*It is not necessary to submit an RFA form to the Division Office if you do not object to the approved jurisdictional determination contained in this letter.*

Although an individual Department of the Army permit and individual IEPA 401 certification may not be required for this project, this does not eliminate the requirement that you must still acquire other applicable Federal, state, and local permits. If you have not already coordinated your project with the Illinois Department of Natural Resources – Office of Water Resources, please contact them at 217/782-3863 to determine if a floodplain development permit is required for your project.

You are required to complete and return the enclosed "Completed Work Certification" upon completion of your project, in accordance with General Condition No. 26 of the enclosed Federal Register.

Should you have any questions, please contact our Regulatory Branch by letter, or telephone me at 309/794-5369.

Sincerely,



Jeffrey W. Sniadach  
Project Manager  
Enforcement Section

When the structure 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 are still in existence at the time the property is transferred, the terms and 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

Enclosures

Copies Furnished: (w/o enclosures)

Mr. Mike Diedrichsen, P.E.  
Office of Water Resources  
IL Department of Natural Resources  
One Natural Resources Way  
Springfield, Illinois 62701-1271

Mr. Bruce Yurdin  
Illinois Environmental Protection Agency  
Watershed Management Section, Permit Sec. 15  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Mr. Peter J. Frantz/Ms. Kathy Ames  
Bureau of Location and Environment  
Illinois Department of Transportation  
Division of Highways  
2300 South Dirksen Parkway  
Springfield, Illinois 62754

U.S. Army Corps of Engineers  
Illinois Waterway Project Office  
257 Grant Street  
Peoria, Illinois 61603

## COMPLETED WORK CERTIFICATION

Permit Number: CEMVR-OD-P-

Name of Permittee:

Date of Issuance:

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Engineer District,  
Rock Island  
ATTN: Regulatory Branch  
Clock Tower Building  
Post Office Box 2004  
Rock Island, Illinois 61204-2004

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above reference permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date

JS

JURISDICTIONAL DETERMINATION  
U.S. Army Corps of Engineers

Revised 8/13/04

DISTRICT OFFICE: Rock Island  
FILE NUMBER: 2007-627

PROJECT LOCATION INFORMATION:

State: IL  
County: Kendall  
Center coordinates of site (latitude/longitude): UTM N- 4618285 E- 390362  
Approximate size of area (parcel) reviewed, including uplands: unknown acres.  
Name of nearest waterway: Waubensee Creek  
Name of watershed: Illinois River

JURISDICTIONAL DETERMINATION

Completed: Desktop determination  Date: 05/03/07  
Site visit(s)  Date(s):

Jurisdictional Determination (JD):

- Preliminary JD - Based on available information,  there appear to be (or)  there appear to be no "waters of the United States" and/or "navigable waters of the United States" on the project site. A preliminary JD is not appealable (Reference 33 CFR part 331).
- Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331).  
Check all that apply:
- There are "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: acres.
- There are "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area: unknown acres.
- There are "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.  
 Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

BASIS OF JURISDICTIONAL DETERMINATION:

- A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":  
 The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
- B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":
- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands<sup>1</sup>.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
- (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
- (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
- (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) - (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent<sup>2</sup> to other waters of the US, except for those wetlands adjacent to other wetlands.

Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above). If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination: Waubensee Creek connects to navigable waters of the U.S. through a tributary system.

**Lateral Extent of Jurisdiction: (Reference: 33 CFR parts 328 and 329)**

- Ordinary High Water Mark indicated by:
- clear, natural line impressed on the bank
  - the presence of litter and debris
  - changes in the character of soil
  - destruction of terrestrial vegetation
  - shelving
  - other:
- High Tide Line indicated by:
- oil or scum line along shore objects
  - fine shell or debris deposits (foreshore)
  - physical markings/characteristics
  - tidal gages
  - other:
- Mean High Water Mark indicated by:
- survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
- Wetland boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:

**Basis For Not Asserting Jurisdiction:**

- The reviewed area consists entirely of uplands.
- Unable to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
- Headquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
- The Corps has made a case-specific determination that the following waters present on the site are not Waters of the United States:
- Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
  - Artificially irrigated areas, which would revert to upland if the irrigation ceased.
  - Artificial lakes and ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
  - Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
  - Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
  - Isolated, intrastate wetland with no nexus to interstate commerce.
  - Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
  - Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
  - Other (explain):

**DATA REVIEWED FOR JURISDICTIONAL DETERMINATION (mark all that apply):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant.
- Data sheets prepared/submitted by or on behalf of the applicant.
- This office concurs with the delineation report, dated \_\_\_\_\_, prepared by (company):
  - This office does not concur with the delineation report, dated \_\_\_\_\_, prepared by (company):
- Data sheets prepared by the Corps.
- Corps' navigable waters' studies:
- U.S. Geological Survey Hydrologic Atlas:
  - U.S. Geological Survey 7.5 Minute Topographic maps:
  - U.S. Geological Survey 7.5 Minute Historic quadrangles:
  - U.S. Geological Survey 15 Minute Historic quadrangles:
  - USDA Natural Resources Conservation Service Soil Survey:
  - National wetlands inventory maps:
  - State/Local wetland inventory maps:
  - FEMA/FIRM maps (Map Name & Date):
  - 100-year Floodplain Elevation is: \_\_\_\_\_ (NGVD)
  - Aerial Photographs (Name & Date): GIS DOQ
  - Other photographs (Date):
  - Advanced Identification Wetland maps:
  - Site visit/determination conducted on:
  - Applicable/supporting case law:
  - Other information (please specify):

<sup>1</sup>Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS  
AND REQUEST FOR APPEAL**

Applicant: Oswego, Illinois		File Number: CEMVR-OD-P-2007-627	Date: 05/08/07
Attached is:			See Section below
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)		A
	PROFFERED PERMIT (Standard Permit or Letter of Permission)		B
	PERMIT DENIAL		C
X	APPROVED JURISDICTIONAL DETERMINATION		D
	PRELIMINARY JURISDICTIONAL DETERMINATION		E

**SECTION I** - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

**A: INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Jeff Sniadach  
U.S. Army Corps of Engineers District, Rock Island  
ATTN: OD-P  
Clock Tower Building  
Post Office Box 2004  
Rock Island, Illinois 61204-2004

Telephone: 309/794-5369

If you only have questions regarding the appeal process you may also contact:

Appeals Officer  
U.S. Army Corps of Engineers  
Mississippi Valley Division  
ATTN: CEMVD-PD-KM  
Post Office Box 80  
Vicksburg, Mississippi 39181-0080

Telephone: 601/634-5821  
Fax: 601/634-5816

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15-day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date: \_\_\_\_\_

Telephone number: \_\_\_\_\_

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 - (217) 782-3397  
JAMES R. THOMPSON CENTER, 100 WEST RANDOLPH, SUITE 11-300, CHICAGO, IL 60601 - (312) 814-6026

ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

217/782-3362

OCT - 9 2007

Rock Island District  
Corps of Engineers  
Post Office Box 2004  
Clock Tower Building  
Rock Island, IL 61204-2004

Re: Village of Oswego (Kendall County)  
Bridge Replacement (Douglas Road) - Waubensee Creek  
Log # C-0106-05 [CoE appl. # 2007-627]

Gentlemen:

This Agency received a request on October 4, 2007 from the Village of Oswego requesting necessary comments concerning replacement of the bridge carrying Douglas Road over Waubensee Creek. We offer the following comments.

On June 12, 2007 the Corps of Engineers accepted the Section 401 certification issued by the Illinois EPA for the category of activities under which this project falls. This project is therefore authorized under the Nationwide Permit system, subject to the attached Section 401 certification conditions.

If you have any questions on these matters, please contact Thaddeus Faught at the address or telephone number listed above. Please include the above referenced log number (C-0106-05) on all correspondence.

Sincerely,

*Alan Keller*  
Alan Keller, P.E.  
Manager, Permit Section  
Division of Water Pollution Control

SAK:TJF:0106-05.doc

Attachment

cc: IEPA, Records Unit ✓  
IEPA, DWPC, FOS, Des Plaines  
Mr. Jerry Weaver, Village of Oswego (with attachment)  
Mr. Stephen Chu, Smith Engineering Consultants, Inc. (with attachment)

ROCKFORD - 4302 North Main Street, Rockford, IL 61103 - (815) 987-7760 • DES PLAINES - 9511 W. Harrison St., Des Plaines, IL 60016 - (847) 294-4000  
ELGIN - 595 South State, Elgin, IL 60123 - (847) 608-3131 • PEORIA - 5415 N. University St., Peoria, IL 61614 - (309) 693-5463  
BUREAU OF LAND - PEORIA - 7620 N. University St., Peoria, IL 61614 - (309) 693-5462 • CHAMPAIGN - 2125 South First Street, Champaign, IL 61820 - (217) 278-5800  
SPRINGFIELD - 4500 S. Sixth Street Rd., Springfield, IL 62706 - (217) 786-6892 • COLLINSVILLE - 2009 Mall Street, Collinsville, IL 62234 - (618) 346-5120  
MARION - 2309 W. Main St., Suite 116, Marion, IL 62959 - (618) 993-7200

PRINTED ON RECYCLED PAPER

56

FILE <OSWE-010742>

Nationwide Permit Regional Conditions  
Log # C-0106-05 [CoE appl. # 2007-627]

Attachment

**ILLINOIS EPA WATER QUALITY CERTIFICATION  
REGIONAL CONDITIONS FOR NATIONWIDE PERMIT 14**

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 statues, 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 Illinois EPA will be required for projects that involve dredge and fill activities in bogs, fens or forested wetlands defined as follows:

Nationwide Permit Regional Conditions  
Log # C-0106-05 [CoE appl. # 2007-627]

- 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*.
- 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*.

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/14/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY <u>KENDALL</u>		Depth	N/6"	Qu tsf	W %	G.W. DURING DRILLING <u>8.0'</u>		Depth	N/6"	Qu tsf	W %
BORING <u>NW-1</u>						GROUND WATER AT COMPLETION <u>9.7'</u>					
STATION <u>79+30</u>		M (Ft)									
OFFSET <u>30' W of EOP</u>		M (Ft)									
GROUND SURFACE EL.											
Dark Brown Clay LOAM, A-6: FILL											
Brown Silty Clay LOAM, A-6: FILL, stiff		5									
		6		2.87	25						
		8		B							
Black Silty CLAY/TOPSOIL, A-7-6											
Dark Grey to Yellow-Brown and Grey Silty CLAY, A-7-6, possible Clay tile, stiff c=2000psf, k=250pci Eso=.006, γ=125pcf		3									
		4		2.29	31						
		4		B							
Grey CLAY, A-7-6, firm c=1000psf, k=130pci Eso=.009, γ=60pcf (submerged)		2									
		2		1.09	24						
		3		B							
Grey SAND (f-c) and GRAVEL, A-1, wet, dense φ=45°, k=125pci, γ=70pcf (sudm.)		21									
		10		3.10	22						
		7		B							
Grey Silty CLAY, A-6, very stiff to hard c=4000psf, k=500pci Eso=.005, γ=60pcf (submerged)		7									
		12		4.38	20						
		16		B							
		7									
		12		4.94	21						
		18		B							
		5									
		7		2.72	24						
		11		B							
		7									
		11		3.14	21						
		12		B							

End of Boring @ 20.0'

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
Eso=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/4/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	none						
BORING STATION	NW-2 78+20	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION	dry	Depth	N/6"	Qu tsf	W %	
OFFSET	31' W of EOP					AFTER	1 DAY					10.2'
GROUND SURFACE EL.		M (Ft)			M (Ft)							
6" Black Silty CLAY, A-6: FILL												
Brown Silty Clay LOAM, A-6: FILL												
Black Silty CLAY, A-7-6, stiff c=2000psf, k=250pci Eso=.006; γ=120pcf		1	6 7 7	2.12 B	24			Z				
Brown and Grey Silty CLAY, A-6, firm to stiff c=1000psf, k=130pci Eso=.009; γ=120pcf		(5)	2 3 3	1.33 B	21			(25)				
Yellow-Brown and Brown Sandy LOAM, A-4 to A-2, slighly dense φ=26°, k=25pci, γ=120pcf		2	5 4 4		11			8				
Grey Silty CLAY, A-6, stiff to very stiff c=1250psf, k=150pci Eso=.008, γ=60pcf (submerged)		3 (10)	4 5 7	1.94 B	25			9 (30)				
c=4000psf, k=500pci Eso=.005, γ=60pcf (submerged)		4	7 10 12	1.37 B	25			10				
		(15)	7 11 14	3.92 B	21			(35)				
		5	7 11 12	4.92 B	21			11				
End of Boring @ 20.0'		6 (20)	8 12 14	3.78 B	19			12 (40)				

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
Eso=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/4/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

SECTION \_\_\_\_\_

COUNTY	KENDALL	G.W. DURING DRILLING <u>none</u>			Depth	N/6"	Qu tsf	W %	G.W. AT COMPLETION <u>dry</u>	Depth	N/6"	Qu tsf	W %
BORING	NW-3	AFTER <u>1</u> DAY <u>9.0'</u>											
STATION	77+10	Depth	N/6"	Qu tsf	W %	M (Ft)							
OFFSET	31' W of EOP												
GROUND SURFACE EL. <u>±21" Dark Brown Silty Clay LOAM, A-6: FILL</u>		M (Ft)											
			6										
Black Silty CLAY, A-6 to A-7-6, very stiff c=2500psf, k=300pci E50=.006, g=120pcf		1	7	2.91	18								
			10	B									
Yellow-Brown and Grey Silty CLAY, A-6 c=1000psf, k=130pci E50=.009, γ=120pcf		(5)	3	1.37	29					(25)			
			3	B						8			
Yellow-Brown Sandy LOAM, A-4 to A-2, medium dense φ=28°, k=90pci, γ=125pcf		2	5		10								
			5										
Grey Silty CLAY, A-6, very stiff to hard c=4000psf, k=500pci E50=.005, γ=60pcf (submerged)		3	6	4.15	22					9			
		(10)	6	B						(30)			
			9	6.95	20					10			
		4	11	BS									
			6	6.17	21					(35)			
		(15)	10	B						11			
			12										
		5	6	4.91	22								
			7	B									
			11										
			5	4.31	19					12			
		6	8	B						(40)			
End of Boring @ 20.0'		(20)	11	B									

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/4/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	10.5'			
BORING	NW-4				GROUND WATER AT				
STATION	76+10		Qu	W	COMPLETION	15.8'		Qu	W
OFFSET	32' W of EOP		tsf	%	AFTER	1 DAY	12.1'	tsf	%
Depth	N/6"				Depth	N/6"			
GROUND SURFACE EL.			M (Ft)		M (Ft)				
±12" Black Silty CLAY/TOPSOIL									
Yellow-Brown and Grey Silty CLAY, A-6, very stiff to stiff c=2000psf, k=250pci E <sub>50</sub> =.006, γ=120pcf	1	5							
		4	2.99	24					
		7	B						
(5)	3	3							
		4	1.90	26			(25)		
Yellow-Brown SAND and GRAVEL, A-1, dense to medium dense φ=45°, k=225pci, γ=140pcf	2	8							
		18		8					
		22							
(10)	3	9							
		11		8			9 (30)		
Grey Silty CLAY, A-6, very stiff to hard c=4000psf, k=500pci E <sub>50</sub> =.005, γ=60pcf (submerged)	4	7							
		10	3.78	20					
		14	B				10		
(15)	5	8							
		20	5.00	20			(35)		
5	7	9	4.54	20					
		11	B						
6	6	6							
		12	3.26	20			12 (40)		
End of Boring @ 20.0'									

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/4/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL			G.W. DURING DRILLING	8.0'		
BORING	NW-5			GROUND WATER AT COMPLETION			
STATION	75+00	Qu	W	8.4', 8.9' WCI			
OFFSET	33' W of EOP	tsf	%	AFTER <u>1</u> DAY <u>8.0'</u>		Depth	N/6"
GROUND SURFACE EL.		M (Ft)				M (Ft)	
±8" Black Silty Clay LOAM/TOPSOIL							
Brown SAND and GRAVEL, A-1, medium dense φ=40°, k=90pci, γ=135pcf	1	8 11 11	5			7	
	(5)	12 10 15	8			(25)	
damp @ 4.5'	2	8 10 7	7			8	
	3	9 12 13	10			9 (30)	
wet @ 8.0' φ=38°, k=60pci, γ=65pcf (submerged)	(10)	8 10 14	11			10	
	4	7 8 11	1.55 B	23		(35)	
Grey Silty CLAY, A-6 c=1500psf, k=200pci E <sub>so</sub> =.007, γ=60pcf (submerged)	(15)	7 9 11	2.12 B	22		11	
	5	6 8 11	1.86 B	23		12 (40)	
End of Boring @ 20.0'		(20)					

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>so</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/21/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	8.0'			
BORING	NW-6				GROUND WATER AT				
STATION	73+90		Qu	W	COMPLETION	8.3', 11.5' WCI		Depth	N/6"
OFFSET	28' W of EOP		tsf	%	AFTER	1	DAY	8.5'	Qu
		Depth	N/6"	tsf	%			Depth	N/6"
GROUND SURFACE EL.		M (Ft)						M (Ft)	
±6" Dark Brown Silty CLAY/TOPSOIL									
Yellow-Brown SAND and GRAVEL, A-1, medium dense to dense $\phi=40^\circ$ , $k=90\text{pci}$ , $\gamma=135\text{pcf}$		1	6 10 14		12			7	
		(5)	13 16 19		7		(25)		
		2	10 14 19		7		8		
		3	7 12 16	3.41 B	23		9 (30)		
		4	11 14 15	3.53 B	23		10		
Grey Silty CLAY, A-6, very stiff to stiff, $c=3000\text{psf}$ , $k=400\text{pci}$ $E_{50}=.006$ , $\gamma=60\text{pcf}$ (submerged)		(10)							
		5	5 7 8	1.33 B	21		(35)		
		6	6 9 12	1.83 B	25		11		
c=1500psf, k=200pci $E_{50}=.007$ , $\gamma=60\text{pcf}$ (submerged)		(15)							
		6	6 8 11	2.31 B	24		12 (40)		
End of Boring @ 20.0'		(20)							

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
 $\gamma$ =wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
 $E_{50}$ =soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/21/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING			
BORING	NW-7	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION		
STATION	72+80					dry	Depth	N/6"
OFFSET	55' E OF CL					AFTER	1 DAY	13.2'
GROUND SURFACE EL.		M (Ft)			M (Ft)			
±7" Dark Brown Silty CLAY/ TOPSOIL: FILL								
Brown and Black Silty CLAY, A-6: FILL			4	1.12				
Brown Silty Clay LOAM to LOAM, A-4: FILL, stiff			7	B	25			
			10	-			7	
Black to Dark Brown Silty CLAY, A-6, stiff c=1500psf, k=200pci E50=.007, γ=120pcf			6					
		(5)	6	1.75	25		(25)	
Brown and Yellow-Brown Sandy LOAM, A-4, medium dense φ=35°, k=90pci, γ=130pcf			7					
		2	8		15		8	
Cobble or small Boulder @ 9.0' Limestone Fragments			10					
		3	50/5"		7		9 (30)	
damp @ 12.0'			17					
			23			9		10
Brown-Grey Silty CLAY, A-6, verystiff to hard c=4000psf, k=500pci E50=.005, γ=60pcf (submerged) to Grey			8	B				
		4	12	4.91	18		(35)	
			14	B				
		(15)	14				11	
			8					
		5	11	5.32	19			
			11	S				
			11					12
End of Boring @ 20.0'			10					
		6	11	4.10	21		(40)	
		(20)	13	B				

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/21/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	none					
BORING	NW-8		Qu	W	GROUND WATER AT		Depth	N/6"	Qu	W	
STATION	71+80				COMPLETION						dry
OFFSET	31' W of CL		Depth	N/6"	tsf	%	AFTER	DAY	17.6'		
GROUND SURFACE EL.	M (Ft)								M (Ft)		
±6" Dark Brown Silty CLAY/TOPSOIL											
Brown Silty CLAY, A-6, very stiff to stiff c=2000psf, k=250pci E <sub>50</sub> =.007, γ=120pcf to Brown and Grey	1	6									
		7	2.21	26							
		9	B								
Yellow-Brown SAND (f-c) and GRAVEL, A-1, dense φ=45°, k=225pci, γ=140pcf	2	3									
		4	2.06	24							
		(5) 4	B								
Grey Silty CLAY, A-6, very stiff c=2000psf, k=250pci E <sub>50</sub> =.006, γ=120pcf	3	6									
		7	2.83	13							
		(10) 10	B								
hard	4	10									
		12	5.28	14							
		15	B								
very stiff	5	5									
		9	3.54	21							
		(15) 11	B								
γ=60pcf (submerged)	5	5									
		7	1.94	25							
		9	B								
End of Boring @ 20.0'	6	5									
		7	2.73	22							
		(20) 8	B								

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

*lde*

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/21/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	none			
BORING	NW-9				GROUND WATER AT				
STATION	70+80		Qu	W	COMPLETION	dry		Depth	N/6"
OFFSET	52' E OF CL		tsf	%	AFTER	1 DAY	11.7'	tsf	W %
GROUND SURFACE EL.	M (Ft)						M (Ft)		
±16" Dark Brown Silty CLAY/ TOPSOIL									
Brown Silty CLAY, A-6, stiff to very stiff c=2000psf, k=250pci E <sub>50</sub> =.006, γ=120pcf	1	5							
		6	2.10	27					
		7	B						
to Brown and Grey	(5)	8							
		9	2.10	26					
		11	B						
Yellow-Brown Silty LOAM, A-4 to A-2-4, very stiff c=2000psf, k=250pci E <sub>50</sub> =.006, γ=120pcf	2	7							
		9		12					
		9							
Grey Silty CLAY, A-6, hard to stiff c=6000psf, k=800pci E <sub>50</sub> =.004, γ=60pcf (submerged)	3	13							
		12	7.02	18					
		14	B						
c=2500psf, k=300pci E <sub>50</sub> =.006, γ=60pcf (submerged)	4	9							
		12	6.44	18					
		18	B						
c=2500psf, k=300pci E <sub>50</sub> =.006, γ=60pcf (submerged)	5	8							
		11	6.79	19					
		14	B						
End of Boring @ 20.0'	6	7							
		9	2.68	24					
		10	B						
		6							
		8	2.72	23					
		11	B						

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/21/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL	Depth	N/6"	Qu tsf	W %	G.W. DURING DRILLING	Depth	N/6"	Qu tsf	W %
BORING	NW-10					8.0'				
STATION	70+00					GROUND WATER AT COMPLETION <u>6.9', 7.8' WCI</u>				
OFFSET	32' W OF CL					AFTER <u>1</u> DAY <u>7.0'</u>				
GROUND SURFACE EL.	M (Ft)					M (Ft)				
±8" Dark Brown Silty CLAY/TOPSOIL										
Brown and Yellow-Brown mottled Silty CLAY, A-6, very stiff c=2000psf, k=250pci E <sub>so</sub> =.006, γ=120pcf	1	6			31					
		8								
		11								
Brown and Yellow-Brown Silt LOAM, A-4 to A-2-4, very stiff c=2000psf, k=250pci, E <sub>so</sub> =.006, γ=120pcf	(5)	4			19					
		7								
		13								
Grey Silty CLAY, A-7-6, stiff c=1000psf, k=130pci E <sub>so</sub> =.004, γ=60pcf (submerged)	2	26		1.12	8					
		6		B						
		7								
Brown SAND (f-c) and GRAVEL, A-1, saturated, dense φ=45°, k=125pci, γ=70pcf (submerged)	(10)	17			11					
		29								
		20								
Grey Silty CLAY, A-6, very stiff to hard c=3500psf, k=450pci E <sub>so</sub> =.005, γ=60pcf (submerged)	4	8		3.71	22					
		12		B						
		17								
	(15)	8		3.89	20					
		13		B						
		19								
5	7									
	12									
	18									
6	7		4.11	23						
	14		B							
	17									
End of Boring @ 20.0'										

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>so</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/19/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL			G.W. DURING DRILLING	6.5'				
BORING	NW-11	Depth	N/6"	Qu	W	GROUND WATER AT COMPLETION		Qu	W
STATION	69+10					tsf	%		
OFFSET	52' E OF CL					M (Ft)			
GROUND SURFACE EL.		M (Ft)				M (Ft)			
13" Dark Brown Silty CLAY: FILL									
8" Black Silty CLAY/TOPSOIL									
Brown and Yellow-Brown mottled Silty CLAY, A-6, stiff c=1250psf, k=150pci, E <sub>so</sub> =.008, γ=120pcf to Brown and Grey		1		6					
				9	1.78	28			
				12	B				
Yellow-Brown and Grey Silt LOAM, A-4, very stiff c=2000psf, k=250pci E <sub>so</sub> =.006, γ=115pcf				6	B				
				8	2.54	29			
		(5)		9	B	17		(25)	
Brown SAND (f-c) and GRAVEL, A-2, wet, medium dense φ=38°, k=60pci, γ=60pcf (submerged)		2		11					
				12		13			
				14					
Grey Silty CLAY, A-6, stiff to very stiff c=1750psf, k=225pci E <sub>so</sub> =.007, γ=60pcf (submerged)		3		6					
				8	1.96	10			
		(10)		9	B			(30)	
c=3000psf, k=400pci E <sub>so</sub> =.006, γ=60pcf (submerged)				7					
				8	1.94	22			
		4		13	B			10	
c=3000psf, k=400pci E <sub>so</sub> =.006, γ=60pcf (submerged)				7					
				14	3.40	22			
		(15)		18	B			(35)	
End of Boring @ 20.0'		5		7					
				11	3.14	20			
				13	B			11	
End of Boring @ 20.0'				10					
				16	3.61	20			
		(20)		20	B			(40)	

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrrometer  
E<sub>so</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/25/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL		G.W. DURING DRILLING		none			
BORING	NW-12		GROUND WATER AT COMPLETION		dry			
STATION	67+70		AFTER <u>1</u> DAY		<u>12.2'</u>			
OFFSET	32' W of EOP		Depth	N/6"	Qu	W		
			tsf	%	Depth	N/6"		
					tsf	W		
GROUND SURFACE EL.			M (Ft)					
±14" Black Silty CLAY/TOPSOIL								
Dark Grey to Yellow-Brown and Grey Silty CLAY, A-6, very stiff c=2500psf, k=300pci E <sub>50</sub> =.006, γ=120pcf	1	5	2.69	24	7			
		7						
		9						
(5)	6	7	2.52	25	(25)	8		
							9	B
Brown-Grey Silty CLAY, A-6, hard c=5000psf, k=650pci E <sub>50</sub> =.004, γ=120pcf	2	8	5.63	20				
		14						
		21						
3	14	18	7.54	20	9	(30)		
							25	B
4	13	17	8.30	18	10			
							26	BS
(15)	13	18	4.94	20	(35)	11		
							25	B
5	10	11	4.24	19				
							13	B
6	7	10	3.57	18	12	(40)		
							13	B
End of Boring @ 20.0'								

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/25/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	5.5'		
BORING	NW-13				GROUND WATER AT COMPLETION	4.2', 17.9' WCI		
STATION	65+10		Qu	W	AFTER 1 DAY	4.0'		
OFFSET	25' S of Staked Location		tsf	%	Depth	N/6"	Qu	W
GROUND SURFACE EL.	M (Ft)							
±19" Black Silty CLAY/TOPSOIL								
Brown and Grey Silty CLAY, A-6, stiff to firm c=1500psf, k=200pci E <sub>50</sub> =.007, γ=68pcf to Grey and Yellow-Brown	1	5	2.17	25	Z	(25)	8	
		6						
		5	1.55	25				
		3						
		4						
(5)	4	0.81	25					
	2							
	3							
c=750psf, k=100pci E <sub>50</sub> =.01, γ=60pcf (submerged)	2	3	0.81	25				
		3						
		3						
		3						
Brown SAND and GRAVEL, A-1, wet, dense φ=45°, k=125pci, γ=70pcf	3	21		11	9	(30)		
		33						
		16						
Grey Silty Clay LOAM, A-6, hard c=4500psf, k=550pci E <sub>50</sub> =.005, γ=60pcf (submerged)  to Silty CLAY	(10)	10	4.67	12	10			
		16						
		19						
	4	12	5.13	20				
		17						
		26						
		26						
(15)	11	4.28	18					
	16							
	20							
5	11	4.07	22	11	(35)			
	16							
	20							
6	11	4.07	22	12	(40)			
	15							
	17							
End of Boring @ 20.0'	(20)	17	B					

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain



# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/25/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	5.5'					
BORING	NW-15				GROUND WATER AT						
STATION	63+25		Qu	W	COMPLETION	4.0', 15.8' WCI		Depth	N/6"	tsf	W
OFFSET	55' W OF CL		%		AFTER	1 DAY 4.0'					
GROUND SURFACE EL.	M (Ft)							M (Ft)			
±18" Black Silty CLAY/TOPSOIL											
		5									
		7	1.94	29							
		8	B								
Dark Grey to Yellow-Brown and Grey Silty CLAY, A-6, stiff c=1250psf, k=150pci E <sub>50</sub> =.008, γ=120pcf	1		1.04					7			
Yellow-Brown and Grey Sandy LOAM		3	B								
Brown-Grey Silt LOAM, A-6 c=5000psf, k=0pci E <sub>50</sub> =.02, γ=55pcf (submerged)	(5)	4	=	15				(25)			
		2	0.51	27				8			
Brown SAND (f-c) and GRAVEL, A-2, saturated, medium dense φ=38°, k=60pci, γ=65pcf (submerged)	2										
		9									
		12		9							
		14									
Brown-Grey Clay LOAM, A-6, very stiff c=3500psf, k=450pci E <sub>50</sub> =.005, γ=60pcf (submerged)	3							9			
	(10)	12	3.78	13				(30)			
		14	B								
		15									
Grey Silty CLAY, A-6, very stiff to hard c=3500psf, k=450pci E <sub>50</sub> =.005, γ=60pcf (submerged)	4							10			
		11									
		13	3.87	11							
		16	B								
	(15)	11						(35)			
		14	3.86	21							
		21	B								
	5							11			
		10									
		13	5.20	20							
		18	B								
	6							12			
	(20)	7						(40)			
		9	2.86	24							
		11	B								
End of Boring @ 20.0'											

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/19/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

SECTION \_\_\_\_\_

COUNTY	KENDALL	G.W. DURING DRILLING <u>none</u>			GROUND WATER AT COMPLETION <u>dry</u>						
BORING STATION	NW-16 62+20	Depth	N/6"	Qu tsf	W %	Depth	N/6"	Qu tsf	W %		
OFFSET	52' E OF CL				AFTER <u>1</u> DAY <u>12.7'</u>						
GROUND SURFACE EL.	M (Ft)								M (Ft)		
±14" Black Silty CLAY/TOPOSIL											
Brown and Yellow-Brown mottled Silty CLAY, A-6, stiff to very stiff c=2000psf, k=250pci E50=.006, γ=120pcf.	1	8	8	1.94	27						
	(5)	8	10	3.31	27						
			10	B							
to Silty Clay LOAM c=3000psf, k=400pci E50=.006, γ=120pcf	2	6	8	3.92	12						
			12	B							
				3.07							
Grey Silty CLAY, A-6 c=3000psf, k=400pci E50=.006, γ=60pcf (submerged)	3	8	14	8.07	19						
	(10)		22	B							
	4	7	9	3.45	19						
			12	B							
	5	6	8	3.30	20						
	(15)		13	B							
	6	6	9	2.21	23						
			12	B							
End of Boring @ 20.0'	(20)	7	9	2.54	23						
			12	B							

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/26/05

PROJECT 05MC227, NOISE WALL

BORED BY VI

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL	G.W. DURING DRILLING <u>none</u>			GROUND WATER AT COMPLETION <u>dry</u>			G.W. DURING DRILLING <u>none</u>			
BORING	NW-17	Depth	N/6"	Qu	W	tsf	%	Depth	N/6"	Qu	W
STATION	61+20										
OFFSET	58' SW OF CL	M (Ft)			M (Ft)			M (Ft)			
GROUND SURFACE EL. $\pm 7"$ Dark Brown Silty CLAY/TOPSOIL											
Brown Silty CLAY, A-6, stiff c=1500psf, k=200pci E <sub>50</sub> =.007, $\gamma$ =120pcf		1	3 3 7	1.67 B	26			7			
very stiff		(5)	11 13 14	3.96 B	23			(25)			
hard c=4000psf, k=500pci E <sub>50</sub> =.005, $\gamma$ =120pcf		2	12 15 20	6.74 B	19			8			
		3	15 16 19	5.51 BS	21			9 (30)			
		(10)									
		4	8 12 14	4.42 S	21			10			
to Grey Silty CLAY, A-6 c=4000psf, k=500pci E <sub>50</sub> =.005, $\gamma$ =60pcf (submerged)		(15)	9 10 11	4.19 B	21			(35)			
		5	10 10 12	5.32 B	20			11			
very stiff								12			
End of Boring @ 20.0'		6	8 11 13	2.75 B	23			(40)			

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
 $\gamma$ =wet soil unit weight (effective)

Qu- Unconfined Compressive Strength (tsf)  
W- Water Content-percentage of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/18/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY <u>KENDALL</u>		Depth	N/6"	Qu tsf	W %	G.W. DURING DRILLING <u>19.0'</u>	Depth	N/6"	Qu tsf	W %	
BORING <u>NW-18</u>	STATION <u>60+30</u>					GROUND WATER AT COMPLETION <u>18.8'</u>					
OFFSET <u>58' NW OF CL</u>						AFTER <u>1</u> DAY <u>9.7'</u>					
GROUND SURFACE EL. <u>M (Ft)</u>											
<u>±11" Dark Brown Silty CLAY/TOPSOIL</u>											
Brown Silty CLAY, A-6, very stiff to hard c=2500psf, k=300pci E50=.006, γ=120pcf	1	5 6 11		2.56 B	23		7				
	(5)	5 9 14		2.71 B	20	(25)					
	2	6 7 12		3.34 B	23	8					
Brown-Grey c=4000psf, k=500pci E50=.005, γ=120pcf	3	10 15 18		5.55 B	20	9 (30)					
	(10)	10 15 13		4.07 2.0	23	10					
	4	5 7 10		2.40 BS	26	(35)					
Grey Silty CLAY, A-6, hard to very stiff c=4000psf, k=500pci E50=.005, γ=60pcf (submerged)	5	4 8 11		2.51 B	23	11					
	(15)	5 9 10		2.33 B	23	12 (40)					
	6	5 9 8		2.33 B	23						
End of Boring @ 20.0'		(20)									

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/26/05

PROJECT 05MC227, NOISE WALL

BORED BY VI

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL			G.W. DURING DRILLING	none		
BORING STATION	NW-19	Depth	N/6"	Qu	W	tsf	%
OFFSET	59+25						
GROUND SURFACE EL.		M (Ft)		GROUND WATER AT COMPLETION		dry	
±12" Dark Brown CLAY/TOPSOIL				AFTER 1 DAY		10.7'	
						M (Ft)	
Brown Silty CLAY, A-6, stiff to very stiff c=1000psf, k=130pci E50=.009, γ=120pcf		1	4 6 8	1.31 B	25		7
		(5)	5 8 11	2.12 B	13		(25)
		2	18 12 14	3.61 BS	15		8
c=2500psf, k=300pci E50=.006, γ=120pcf		3	14 15 20	2.78 B	20		9 (30)
		(10)					
		4	10 12 15	3.07 B	21		10
Grey Silty CLAY, A-6, very stiff c=2500psf, k=300pci E50=.006, γ=60pcf (submerged)		(15)	10 14 14	2.83 B	21		(35)
		5	8 8 11	3.41 B	21		11
		6	6 11 14	3.65 B	19		12 (40)
End of Boring @ 20.0'		(20)					

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

m

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/18/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	4.8'					
BORING STATION	NW-20 58+30	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION	16.1', 17.5' WCI	Depth	N/6"	Qu tsf	W %
OFFSET	58' NW OF CL					AFTER	1 DAY				
GROUND SURFACE EL.		M (Ft)			M (Ft)						
±16" Dark Brown Silty CLAY/ TOPSOIL											
Brown Silty CLAY, A-6, stiff c=2000psf, k=250pci E50=.006, γ=120pcf		1	3 3 6	2.29 B	25			7			
		(5)	8 8 10	2.12 B	23			(25)			
		2	8 13 18	3.80 B	19			8			
Brown SAND (f-c), A-2, wet		3	13 17 26	4.03 B	18			9			
		(10)	11 16 12	3.80 B	19			(30)			
		4	5 7 9	1.59 B	21			10			
stiff c=1500psf, k=200pci E50=.007, γ=60pcf (submerged)		5	7 9 14	1.98 B	21			(35)			
		(15)	6 9	2.37 B	23			11			
		6	6 9 13	2.37 B	23			12			
End of Boring @ 20.0'		(20)						(40)			

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penétrometer  
E50=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/26/05

PROJECT 05MC227, NOISE WALL

BORED BY VI

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL			G.W. DURING DRILLING	4.5'					
BORING STATION	NW-21 57+30	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION				
OFFSET	56' SW OF CL					dry				
				AFTER 1 DAY		Depth	N/6"	Qu tsf	W %	
GROUND SURFACE EL.				M (Ft)		M (Ft)				
±11" Dark Brown CLAY/TOPSOIL										
Brown Silty CLAY, A-6, stiff c=1500psf, k=200pci E <sub>50</sub> =.007, γ=120pcf				5						
				6	1.56	26				
				6	BS					
hard c=4000psf, k=500pci E <sub>50</sub> =.005, γ=120pcf				4						
				5	1.83	29				
				6	B			(25)		
Grey Silty CLAY, A-6, hard to very stiff c=4000psf, k=500pci E <sub>50</sub> =.005, γ=60pcf (submerged)				8						
				16	5.24	14				
				22	B			8		
c=2500psf, k=300pci E <sub>50</sub> =.006, γ=60pcf (submerged)				14						
				18	4.35	21				
				21	B			9	(30)	
				7						
				12	2.76	22				
				14	B			10		
				7						
				11	2.79	22				
				12	B			(35)		
				8						
				8	3.26	21				
				11	B			11		
				7						
				12	3.45	20				
				15	B			12	(40)	

End of Boring @ 20.0'

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentages  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/18/05

PROJECT 05MC227, NOISE WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY		KENDALL		G.W. DURING DRILLING		9.0'	
BORING		NW-22		GROUND WATER AT		COMPLETION	
STATION		56+30		9.0', 17.3' WCI		AFTER 1 DAY 8.3'	
OFFSET		58' NW OF CL		Qu	W	Depth	N/6"
		tsf	%	tsf	%	M (Ft)	M (Ft)
Brown Silty CLAY LOAM, A-6: FILL, very stiff c=2000psf, k=250pci E50=.006, γ=120pcf		8			7	7	
Brown LOAM to Sandy LOAM, A-4: FILL, medium dense φ=30°, k=60pci, γ=130pcf		6			10	(25)	
Brown SAND and GRAVEL, A-1: FILL		8			4	8	
Yellow-Brown and Grey Silty CLAY with intermittent wet Sand seams, A-6; stiff c=1500psf, k=200pci E50=.007, γ=60pcf (submerged)		10			17	9	(30)
Grey Silty Clay LOAM, A-6, very stiff to hard c=4000psf, k=500pci E50=.005, γ=60pcf (submerged)		8		3.95	15	10	
Cobble or Boulder @ 15.5'		11		4.82	20	(35)	
End of Boring @ 20.0'		12		4.25	22	11	
		14		5.24	17	12	(40)

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/26/05

PROJECT 05MC227, NOISE WALL

BORED BY VI

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	none					
BORING STATION	NW-23 55+30	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION		Depth	N/6"	Qu tsf	W %
OFFSET	58' SW OF CL					dry	11.7'				
GROUND SURFACE EL.		M (Ft)						M (Ft)			
±11" Dark Brown CLAY/TOPSOIL											
Brown Silty CLAY, A-6, very stiff to hard c=3000psf, k=400pci E <sub>50</sub> =.006, γ=120pcf	1	5 6 12		3.03 B	25			7			
	(5)	6 7 9		3.72 S	19			(25)			
	2	7 11 20		6.32 S	20			8			
c=6000psf, k=800pci E <sub>50</sub> =.004, γ=120pcf	3	12 18 24		7.45 BS	19			9 (30)			
	(10)										
Grey Silty CLAY, A-6, very stiff to hard c=3000psf, k=400pci E <sub>50</sub> =.006, γ=60pcf (submerged)	4	6 7 7		3.00 BS	19			10			
	(15)	5 8 11		4.25 B	20			(35)			
	5	8 11 12		6.55 S	17			11			
End of Boring @ 20.0'	6	4 7 11		2.70 B	10			12 (40)			

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu-Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

PROJECT 05MC227, NOISE WALL

DATE 4/18/05

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

BORED BY SPE

CHECKED BY CJD

COUNTY				G.W. DURING DRILLING				
KENDALL				10.5'				
BORING				GROUND WATER AT				
NW-24				COMPLETION				
STATION				10.0', 10.9' WCI				
54+30				AFTER				
OFFSET				1 DAY				
45' NW of CL	Depth	N/6"	Qu tsf	W %	Depth	N/6"	Qu tsf	W %
	M (Ft)				M (Ft)			
GROUND SURFACE EL.								
Black Silty CLAY, A-6: FILL								
Yellow-Brown mottled Silty CLAY, A-6, firm to very stiff c=1500psf, k=200pci E50=.007, γ=120pcf	1	4	0.78					
		5	B	31				
		6	1.59			7		
to Brown and Grey, A-6 c=3500psf, k=450pci E50=.005, γ=120pcf	(5)	5						
		6	1.75	27		(25)		
		7	B			8		
to Grey @ 9.5'	2	6						
		12	3.57	23				
		13	B					
Brown-Grey Silt LOAM, A-4 to A-2-4, wet, dense φ=40°, k=125pci, γ=60pcf (submerged)	3	5						
	(10)	8	4.50	22		9		
		15	B			(30)		
Grey Silty Clay LOAM, A-6, few Cobbles or small Boulders @ 13.8' and 15.2' stiff to firm damp c=500psf, k=100pci E50=.02, γ=60pcf (submerged)	4	15						
		19		9		10		
		29						
End of Boring @ 20.0'	(15)	50/3"		13		(35)		
	5	29				11		
		13	0.98	11				
	7	B						
	6					12		
	(20)	7	0.64	9		(40)		
		13	B					

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/16/05

PROJECT 05MC227, MAST ARM

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

NORTHWEST CORNER OF TOWNES CROSSING

COUNTY	KENDALL		G.W. DURING DRILLING		8.5'			
BORING	MA-1		GROUND WATER AT		COMPLETION			
STATION	83+80		5.8', 19.3' WCI		AFTER			
OFFSET	49' W OF CL		Qu	W	1 DAY 8.5'			
Depth	N/6"	tsf	%	Depth	N/6"	Qu	W	
GROUND SURFACE EL.			M (Ft)				M (Ft)	
Dark Brown Silty CLAY, A-6: FILL, stiff c=1000psf, k=130pci E <sub>50</sub> =.009, γ=120pcf			5					
Brown Silty Clay LOAM, A-6, stiff to very stiff c=2500psf, k=300pci E <sub>50</sub> =.006, γ=120pcf			6	1.24	27			
			10	S				
Grey Silty CLAY, A-6, very stiff c=3000psf, k=400pci E <sub>50</sub> =.005, γ=60pcf (submerged)			11					
			12	2.58	31			
			(5) 18	B				
firm c=750psf, k=100pci E <sub>50</sub> =.01, γ=60pcf (submerged)			10					
			12	2.71	18			
			16	B				
few thin Sand seams, wet @ 19.0'			5					
			6	3.18	21			
			(10) 8	B				
			4					
			6	3.18	21			
			7	B				
			3					
			4	0.97	28			
			(15) 4	B				
			4					
			5	0.78	28			
			7	B				
			5					
			6	1.74	26			
			(20) 8	B				

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/17/05

PROJECT 05MC227, MAST ARM

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

NORTHWEST CORNER OF TOWNES CROSSING ENTRANCE

COUNTY				G.W. DURING DRILLING					
KENDALL				none					
BORING	MA-2	Qu	W	GROUND WATER AT COMPLETION	dry	Depth	N/6"	Qu	W
STATION	83+75	tsf	%	AFTER	1 DAY	10.7'		tsf	%
OFFSET	45' N of EOP	Depth	M (Ft)						
GROUND SURFACE EL.									
Brown Silty CLAY, A-6: FILL, very stiff to stiff c=1750psf, k=250pci E <sub>50</sub> =.007, γ=125pcf	1	4	2.13	17	Grey Silty CLAY, A-6, stiff c=1750psf, k=250pci E <sub>50</sub> =.007, γ=60pcf (submerged)	7	4	1.98	23
		5	B			5	B		
		8				5			
Grey Limestone, CA-6, medium dense φ=35°, k=90pci, γ=140pcf	(5)	5	1.8	21		8	4	2.21	23
		5	B			6	B		
Brown and Yellow-Brown mottled Silty CLAY, A-6, very stiff to stiff c=1750psf, k=250pci E <sub>50</sub> =.007, γ=120pcf	2	4	2.17	22		End of Boring @ 25.0'	9		
		5	BS		(30)				
		7							
Brown-Grey	3	3	1.86	23	10				
	(10)	5	B						
Grey Silty CLAY, A-6, hard to very stiff c=4000psf, k=530pci E <sub>50</sub> =.005, γ=60pcf (submerged)	4	5	4.24	25	11				
		9	S						
		12			(35)				
	5	6	4.54	20	12				
	(15)	10	BS		(40)				
		11							
	6	6	4.15	22					
		9	B						
	6	5	2.37	23					
	(20)	5	B						
		8							

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:

B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/17/05

PROJECT 05MC227, MAST ARM

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

BORED BY SPE

SOUTHEAST CORNER OF TOWNES CROSSING

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	none				
BORING	MA-3				GROUND WATER AT					
STATION	82+80		Qu	W	COMPLETION	dry		Depth	N/6"	
OFFSET	72' E OF CL		tsf	%	AFTER	1 DAY	11.4'			
GROUND SURFACE EL.	M (Ft)						M (Ft)			
Dark Brown and Black Silty CLAY, A-6: FILL, stiff		3 4 5		18	Grey Silty CLAY, A-6, very stiff c=250psf, k=300pci E <sub>so</sub> =.006, γ=60pcf (submerged)			6 8 11	3.38 B	23
Black Silty CLAY, A-7-6, firm c=750psf, k=100pci E <sub>so</sub> =.01, γ=120pcf	1	3 3	0.78	25				6 7	2.57 B	23
Yellow-Brown and Grey Silty CLAY, A-6, firm c=750psf, k=100pci E <sub>so</sub> =.01, γ=120pcf	(5)	3 4	B				(25)	10	B	
Brown and Grey Silty CLAY, A-6, hard c=7000psf, k=930pci E <sub>so</sub> =.004, γ=125pcf	2	6 10 11	7.60	19	End of Boring @ 25.0'			8		
		9 13 15	7.29	19				9 (30)		
Grey Silty CLAY, A-6, hard c=5500psf, k=700pci E <sub>so</sub> =.005, γ=60pcf (submerged)	4	8 10 14	5.71	20				10		
		6 9 12	6.01	22				(35)		
	5	6 9 11	5.60	22				11		
very stiff	6	6 8 12	2.87	21				12 (40)		

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>so</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/16/05

PROJECT 05MC227, MAST ARM

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

NORTHWEST CORNER OF FERNWOOD ROAD AND DOUGLAS ROAD

COUNTY	KENDALL				G.W. DURING DRILLING	22.5'														
BORING	MA-4	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION														
STATION	80+80					20.3', 21.0' WCI	Depth	N/6"	Qu tsf	W %										
OFFSET	60' W OF CL				AFTER	1 DAY					12.2'									
GROUND SURFACE EL.		M (Ft)			M (Ft)															
Dark Brown Silty CLAY, A-6: FILL, stiff c=1200psf, k=150pci E <sub>50</sub> =.009, γ=125pcf		1	5	1.42 B	22	Grey Silty CLAY, A-6, hard c=4000psf, k=500pci E <sub>50</sub> =.005, γ=65pcf (submerged)				8	4.38 B	21								
			5										10							
			6										10							
		Brown and Grey Silty CLAY, A-6, stiff to very stiff c=1200psf, k=150pci E <sub>50</sub> =.009, γ=125pcf		(5)	7	1.81 B	25	Grey SILT, A-4, intermittent fine Sand, medium dense φ=30°, k=60pci, γ=60pcf (submerged)				6		20						
					8										7					
					13										8					
				c=4500psf, k=550pci E <sub>50</sub> =.005, γ=130pcf			9					4.43 B			23	End of Boring @ 25.0'				8
						(10)	11													
			13				(30)													
		Grey Silty CLAY, A-6, hard to very stiff c=4500psf, k=550pci E <sub>50</sub> =.005, γ=65pcf (submerged)		4	8	4.64 B	23					10								
	12																			
	12																			
(15)	9			5.51 B	20							(35)								
	11																			
	14																			
5	6			5.82 B	19											11				
	10																			
	11																			
6	7	4.11 B	21							12										
	11																			
(20)	11															(40)				

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive Strength (tsf)  
W- Water Content-percentage of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/17/05

PROJECT 05MC227, MAST ARM

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

FERNWOOD ROAD, NORTHEAST CORNER

COUNTY	KENDALL					G.W. DURING DRILLING	21.0'					
BORING	MA-5	Depth	N/6"	Qu tsf	W %	GROUND WATER AT		Depth	N/6"	Qu tsf	W %	
STATION	80+40					COMPLETION						17.9', 20.3' WCI
OFFSET	70' E OF CL											
GROUND SURFACE EL.		M (Ft)				M (Ft)						
Dark Brown Silty CLAY, A-6: FILL, firm to stiff c=400psf, k=0pci Eso=.02, γ=120pcf some Crushed Limestone, CA-6: FILL		1	4			19	Grey SILT, A-4, wet, medium dense φ=35°, k=60pci, γ=6pcf (submerged)		8			20
			4						10			
			4						11			
Yellow-Brown and Grey Silty CLAY, A-6, firm c=400psf, k=0pci Eso=.02, γ=120pcf		(5)	6			27	Grey SAND, A-3, medium dense φ=35°, k=60pci, γ=60pcf (submerged)		6			24
			3	0.87					11			
			3	B					13			
Grey Silty CLAY, A-6, hard to stiff c=4000psf, k=500pci Eso=.005, γ=60pcf (submerged)		2	2			35	End of Boring @ 25.0'		8			
			2	0.39								
			3	B								
c=3000psf, k=400pci Eso=.006, γ=60pcf (submerged)		3	3	0.70		33			9			
			5	B					(30)			
			7	4.27								
c=3000psf, k=400pci Eso=.006, γ=60pcf (submerged)		(10)	8			18			10			
			9	5.74								
			14	B								
c=3000psf, k=400pci Eso=.006, γ=60pcf (submerged)		4	6			17			11			
			9	4.58					(35)			
			14	B								
c=3000psf, k=400pci Eso=.006, γ=60pcf (submerged)		5	6			20			12			
			8	3.03								
			10	BS								
c=3000psf, k=400pci Eso=.006, γ=60pcf (submerged)		6	5			22			(40)			
			7	3.26								
			9	B								

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
Eso=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/16/05

PROJECT 05MC227, MAST ARM

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

SOUTHWEST CORNER OF FERNWOOD ROAD AND DOUGLAS ROAD

COUNTY	KENDALL				G.W. DURING DRILLING	0.5'					
BORING STATION	MA-6 79+90		Qu	W	GROUND WATER AT COMPLETION	4.8', 19.2' WCI		Depth	N/6"	Qu	W
OFFSET	87' W OF CL		tsf	%	AFTER	1 DAY 5.1'				tsf	%
GROUND SURFACE EL.	M (Ft)						M (Ft)				
±15" Dark Brown Silty CLAY, A-6: FILL					Grey Silty CLAY, A-1, very stiff						
Brown-Grey Silty CLAY, A-6, stiff c=1500psf, k=200pci E50=.007, γ=125pcf	1		5								
			5	1.67	25						
			6	B							
Brown and Grey Silty CLAY, A-6, very stiff c=3500psf, k=450pci E50=.005, γ=60pcf (submerged)	(5)		3								
			4	1.51	23						
			5	B							
Grey Silty CLAY, A-6, hard to very stiff c=3500psf, k=450pci E50=.005, γ=60pcf (submerged)			10								
			11	3.67	18						
			16	B							
c=4500psf, k=550pci E50=.005, γ=65pcf (submerged)	(10)		10								
			13	3.76	20						
			18	B							
c=2000psf, k=250pci E50=.006, γ=60pcf (submerged)			11								
			12	5.12	19						
			19	B							
End of Boring @ 25.0'	(15)		10								
			15	4.73	27						
			22	B							
End of Boring @ 25.0'			10								
			12	2.78	21						
			15	BS							
End of Boring @ 25.0'	(20)		11								
			13	2.10	22						
			18	B							

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/16/05

PROJECT 05MC227, MAST ARM

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

SOUTHEAST CORNER OF FERNWOOD ROAD AND DOUGLAS ROAD

COUNTY	KENDALL				G.W. DURING DRILLING	1.5'			
BORING	MA-7				GROUND WATER AT				
STATION	79+70		Qu	W	COMPLETION	6.8', 21.0' WCI		Depth	N/6"
OFFSET	58' E. OF CL		tsf	%	AFTER	1 DAY 7.9'		tsf	%
GROUND SURFACE EL.	M (Ft)						M (Ft)		
Dark Brown Silty CLAY to Silty Clay LOAM, A-6: FILL c=2500psf, k=300pci E <sub>50</sub> =.006, γ=125pcf	1	6 12 15	2.71 B	12 25	Grey Silty CLAY, A-6		7	6 8 10	20
Dark Brown Clay LOAM, A-6, stiff c=1250psf, k=160pci E <sub>50</sub> =.008, γ=120pcf	(5)	10 8 5	1.81 B	26	Grey SILT, A-4, medium dense φ=35°, k=60pci, γ=60pcf (submerged)		(25)	4 7 11	20
Brown Silty Clay LOAM, A-6 c=1250psf, k=160pci E <sub>50</sub> =.008, γ=120pcf	2	4 4 5	1.33 B	26	End of Boring @ 25.0'		8		
Grey Silty CLAY, A-6, hard to very stiff c=4500psf, k=550pci E <sub>50</sub> =.005, γ=60pcf (submerged)	3	4 6 7	1.68 B	18			9 (30)		
	4	8 12 17	4.60 BS	21			10		
	(15)	12 15 22	5.43 S	21			(35)		
	5	7 8 11	3.37 B	22			11		
	6	8 8 11	2.82 B	25			12 (40)		

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/25/05

PROJECT 05MC227, MAST ARM

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

BORED BY SPE

NORTHWEST CORNER OF DOUGLAS AND LONG BEACH

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	22.5'				
BORING	MA-8	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION <u>16.4', 17.8' WCI</u> AFTER <u>1</u> DAY <u>12.9'</u>	Depth	N/6"	Qu tsf	W %
STATION	67+10									
OFFSET	11'N EOP Longbeach, 22'W EOP Douglas									
GROUND SURFACE EL.		M (Ft)			M (Ft)					
±9" Black Silty CLAY/TOPSOIL										
Brown and Black Silty CLAY, A-7-6			4				8			
Yellow-Brown Silty CLAY, A-6; very stiff c=1750psf, k=225pci E50=.007, γ=120pcf			8	2.60	23	Grey Silty CLAY, A-6, very stiff c=3000psf, k=400pci E50=.006, γ=60pcf (submerged)	10	3.54	20	
			11	B			10	B		
Yellow-Brown and Grey		1				Grey SAND, A-3, wet, medium dense φ=35°, k=60pci, γ=60pcf (s) Grey SILT, A-4 φ=35°, k=60pci, γ=60pcf (submerged)	7			
			4				9			
		(5)	5	1.67	25		8		.19	
Brown-Grey, hard c=6000psf, k=800pci E50=.004, γ=125pcf			6	B			(25)	10		
						8				
		2	10							
			14	6.79	17					
Grey Silty CLAY, A-6 c=6000psf, k=800pci E50=.004, γ=60pcf (submerged)			20	BS						
		3	11				9			
		(10)	22	5.93	15		(30)			
very stiff			26	S						
			12				10			
			20	7.47	16					
very stiff		4	22	B						
			13				(35)			
very stiff		(15)	19	7.80	18					
			23	B			11			
very stiff		5								
			10							
very stiff			15	5.19	19					
			18	B						
very stiff		6					12			
		(20)	8				(40)			
			11	3.37	20					
			13	S						

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E50=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/19/05

PROJECT 05MC227, MAST ARM

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

BORED BY SPE

NORTHEAST CORNER OF LONGBEACH AND DOUGLAS ROAD

CHECKED BY CJD

COUNTY	KENDALL					G.W. DURING DRILLING	6.3'								
BORING	MA-9	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION		Depth	N/6"	Qu tsf	W %				
STATION	65+75					8.4'									
OFFSET	64' E OF CL					AFTER 1 DAY		12.9'							
GROUND SURFACE EL.		M (Ft)				M (Ft)									
Brown and Black Silty Clay LOAM, A-6: FILL, very stiff						Grey Silty CLAY, A-6, very stiff.									
		7										10			
		8	2.72	23	11							2.55	23		
±6" Black Silty CLAY/TOPOSIL		13	B			10	B								
Grey and Yellow-Brown mottled Silty CLAY, A-6, stiff c=1250psf, k=150pci E <sub>50</sub> =.009, γ=120pcf						Grey SAND, A-2, medium dense φ=30°, k=130pci, γ=60pcf									
		4										7			
		5	1.37	20	8								17		
to Yellow-Brown and Grey		(5)	B			Grey SILT, A-4		(25)	7						
Brown SAND (f-c), A-2, wet, dense φ=45°, k=125pci, γ=135pcf						End of Boring @ 25.0'									
		13										8			
		17		10	29										
Grey Silty CLAY, A-6, very stiff to hard c=3000psf, k=400pci E <sub>50</sub> =.006, γ=120pcf															
		4										9			
		8	2.37	15	(10)							22			
		14				9									
		16	5.08	17		(30)									
		30	B			10									
		10				(35)									
		19	4.83	20		11									
		(15)	B			(40)									
		10				12									
		18	3.24	19											
		20	B												
		10													
		18	3.58	21											
		(20)	B												

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentages  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:

B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/8/05

PROJECT 05MC227, MAST ARM

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

SOUTHWEST CORNER OF DOUGLAS AND LONG BEACH

COUNTY	KENDALL				G.W. DURING DRILLING	4.5'			
BORING	MA-10				GROUND WATER AT				
STATION	66+20		Qu	W	COMPLETION	6.1', 13.7' WCI		Depth	N/6"
OFFSET	28'S EOP Longbeach, 23'W EOP Douglas		tsf	%	AFTER	1 DAY	6.7'		
GROUND SURFACE EL.			M (Ft)					M (Ft)	
10" Brown and Black Silty CLAY, A-6:					Grey Silty CLAY, A-6				
FILL over									
10" Black Silty CLAY/TOPSOIL			4	B	28			7	
Yellow-Brown and Grey Silty CLAY, A-6, stiff c=1250psf, k=150pci E <sub>50</sub> =.009, γ=120pcf wet @ 4.5'			5	1.55	26	Grey SAND, A-3, medium dense φ=35°, k=60pci, γ=60pcf (submerged)	7	9	18
			6	B				11	
			3						
Brown SAND (f-c), A-2, wet, medium dense φ=30°, k=60pci, γ=130pcf			3					8	
			(5) 3	1.37	24			11	18
Grey Silty CLAY, A-6, very stiff c=3500psf, k=450pci E <sub>50</sub> =.005, γ=60pcf (submerged)			3	B		End of Boring @ 25.0'	8	11	
			11						
			15	3.78	15				
c=2000psf, k=250pci E <sub>50</sub> =.006, γ=60pcf (submerged)			12	B				9	
			(10) 16					(30)	
			18	3.28	15				
c=2000psf, k=250pci E <sub>50</sub> =.006, γ=60pcf (submerged)			18	3.89	19			10	
			23	B					
			11						
c=2000psf, k=250pci E <sub>50</sub> =.006, γ=60pcf (submerged)			(15) 15	3.61	22			(35)	
			22	B					
			8						
c=2000psf, k=250pci E <sub>50</sub> =.006, γ=60pcf (submerged)			11	2.37	24			11	
			15	B					
			7						
c=2000psf, k=250pci E <sub>50</sub> =.006, γ=60pcf (submerged)			6					12	
			(20) 12	2.54	22			(40)	
			15	B					

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/19/05

PROJECT 05MC227, MAST ARM  
 ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS  
SOUTHEAST CORNER OF LONGBEACH AND DOUGLAS ROAD

BORED BY SPE  
 CHECKED BY CJD

COUNTY	KENDALL		G.W. DURING DRILLING		5.5'		
BORING	MA-11		GROUND WATER AT		COMPLETION		
STATION	65+70		18.5', 22.5' WCI		AFTER		
OFFSET	43' E OF CL		1 DAY		5.0'		
Depth	N/6"	Qu	W	Depth	N/6"	Qu	
	tsf	%			tsf	W	
						%	
GROUND SURFACE EL.	M (Ft)		M (Ft)				
10" Dark Brown Silty CLAY, A-6: FILL							
±9" Black Silty CLAY/TOPOSIL	5	2.21	34		10		
Dark Grey and Yellow-Brown mottled Silty CLAY, A-6, stiff c=1500psf, k=200pci E50=.007, γ=120pcf to Yellow-Brown and Grey	8	B		7	11	2.99	
	13	B			13	B	21
	4	1.13	22		5		21
Brown-Grey Silty CLAY, A-6, hard c=6000psf, k=800pci E50=.004, γ=60pcf (submerged)	5	B		(25)	6	18	
	6	B			7		
	11	4.98	17		8		
to Grey	14	5.84	19	9			
	22	B			(30)		
	14	7.98	19		10		
c=450psf, k=550pci E50=.005, γ=60pcf (submerged)	20	B		11			
	23	B			(35)		
	15	8.37	20		11		
End of Boring @ 25.0'	20	B		12			
	26	B			(40)		
	15	4.79	19				
	17	B					
	18	B					
	10	4.94	21				
	18	B					
	19	B					

N-Standard Penetration Test-  
 Blows per foot to drive 2 inch  
 O.D. Split Spoon Sampler 12 inches  
 with 140 lbs. hammer falling 30 inches  
 c=soil cohesion  
 γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
 Strength (tsf)  
 W- Water Content-percentage  
 of oven dry weight (%)  
 k=lateral modulus cyclic

Type failure:  
 B- Bulge Failure  
 S- Shear Failure  
 E- Estimated Value  
 P-Penetrometer  
 E50=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/29/05

PROJECT 05MC227, MAST ARM

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

NORTHWEST CORNER OF OLD POST ROAD AND DOUGLAS

COUNTY	KENDALL		G.W. DURING DRILLING		5.6'	
BORING	MA-12		GROUND WATER AT		COMPLETION	
STATION	23+60		8.6', 8.8' WCI		AFTER 1 DAY	
OFFSET	52' W OF CL		6.2'		Depth	N/6"
Qu	W	Qu	W	tsf	tsf	%
Depth	N/6"	tsf	%	Depth	N/6"	tsf
GROUND SURFACE EL.				M (Ft)		
±8" Dark Brown Silty Clay LOAM/TOPSOIL				M (Ft)		
Brown Sandy LOAM, A-4, medium dense φ=40°, k=90pci, γ=130pcf				7		
Brown SAND (f-m), A-2 φ=35°, k=60pci, γ=130pcf				8		
φ=35°, k=60pci, γ=60pcf (submerged)				18		
End of Boring @ 25.0'				8		
φ=35°, k=60pci, γ=60pcf (submerged)				17		
φ=35°, k=60pci, γ=60pcf (submerged)				23		
φ=35°, k=60pci, γ=60pcf (submerged)				19		
φ=35°, k=60pci, γ=60pcf (submerged)				9		
φ=35°, k=60pci, γ=60pcf (submerged)				17		
Grey SAND (f-c), A-2, medium dense φ=35°, k=60pci, γ=60pcf (submerged)				14		

Qu- Unconfined Compressive Strength (tsf)  
 W- Water Content-percentage of oven dry weight (%)  
 k=lateral modulus cyclic

Type failure:  
 B- Bulge Failure  
 S- Shear Failure  
 E- Estimated Value  
 P-Penetrometer  
 Es0=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/11/05

PROJECT 05MC227, RETAINING WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	5.5'			
BORING	RW-1				GROUND WATER AT				
STATION	51+10		Qu	W	COMPLETION				
OFFSET	45' W of CL		tsf	%	3.8', 18.9' WCI				
			Depth	N/6"	tsf	W	%		
			Depth	N/6"	tsf	W	%		
GROUND SURFACE EL.			M (Ft)		M (Ft)				
Black Clay LOAM, A-7-6: FILL, firm c=250psf, k=0pci E <sub>so</sub> =.025, γ=115pcf	1	2	0.61 B	51	Grey Silty Clay LOAM, A-6, hard c=350psf, k=450pci E <sub>so</sub> =.005, γ=60pcf (submerged)	7	22	3.88 BS	8
		3					27		
		3					37		
		4							
Yellow-Brown SAND (f-c) and GRAVEL, A-1, wet, medium dense φ=38°, k=60pci, γ=65pcf (submerged)	(5)	11	0.27 B	36	Yellow-Brown Fractured Limestone, A-1	8	40	4.8 BS	8
		14					31		
							32		
Grey SILT, A-4, medium dense φ=28°, k=60pci, γ=60pcf (submerged)	2	8	17	17	End of Boring @ 29.1'	9	37	9	9
		7					35		
		7					31		
Grey SAND (f-c) and GRAVEL, A-2, medium dense φ=38°, k=60pci, γ=65pcf (submerged) Grey Silty CLAY, A-6	3	5	17	17	End of Boring @ 29.1'	9	48	12	12
		5					50/1"		
		7							
Grey SAND (f-c) and GRAVEL, A-2, medium dense to dense φ=45°, k=125pci, γ=70pcf (submerged)	4	11	1.18 B	7	End of Boring @ 29.1'	10		10	10
		4							
		3							
Grey SAND (f-c) and GRAVEL, A-2, medium dense to dense φ=45°, k=125pci, γ=70pcf (submerged)	(15)	8	10	10	End of Boring @ 29.1'	10		10	10
		16							
		22							
Yellow-Brown Silt LOAM to Silty Clay LOAM, A-4, very stiff to hard c=250psf, k=300pci E <sub>so</sub> =.006, γ=60pcf (submerged)	5	9	10	10	End of Boring @ 29.1'	11		11	11
		9							
		7							
	6	28	15	15	End of Boring @ 29.1'	12		12	12
		36							
		42							
			(20)	42		(40)			

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>so</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/11/05

PROJECT 05MC227, RETAINING WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	5.5'							
BORING STATION	RW-2				GROUND WATER AT COMPLETION	2.9', 7.4' WCI							
OFFSET	46' W of CL		Depth	N/6"	Qu	W	%	Depth	N/6"	Qu	W	%	
GROUND SURFACE EL.	M (Ft)								M (Ft)				
Black Silty CLAY, A-6 to A-7-6: FILL, firm c=100psf, k=50pci E <sub>50</sub> =.03, γ=1.15pcf	1	3											
		3	3	0.42	17				14	4.95	9		
		3	3	B					17	B			
		3	4	0.18	48				27	B			
		(5)	5	B					15	4.46	9		
Yellow-Brown SAND (f-c) and GRAVEL, A-2, saturated, medium dense φ=38°, k=60pci, γ=65pcf (submerged)	2	8											
		8	8		16				18				
		8	8						27		10		
Grey Silty CLAY, A-6, hard to very stiff c=5000psf, k=800pci E <sub>50</sub> =.004, γ=60pcf (submerged)	3	7											
		(10)	11	7.14	17				26		8		
			15	B					86				
			15						15				
Yellow-Brown SAND (f-c) and GRAVEL, A-2, medium dense φ=38°, k=60pci, γ=60pcf (submerged)	4	10											
			12	6.89	18								
			16	B									
		(15)	8	2.89	20								
			11	B									
Yellow-Brown Silt LOAM to Silty Clay LOAM, A-4, very stiff to hard	6		22										
		(20)	18	3.03	10								
			20	BS									

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive Strength (tsf)  
W- Water Content-percentage of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/11/05

PROJECT OSMC227, RETAINING WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY WJW

COUNTY	KENDALL			G.W. DURING DRILLING	5.5'				
BORING	RW-3	Depth	N/6"	Qu tsf	W %	GROUND WATER AT COMPLETION			
STATION	49+90					3.3', 26.6' WCI			
OFFSET	47' W of CL			AFTER 1 DAY		Depth	N/6"	Qu tsf	W %
GROUND SURFACE EL. 654.5±		M (Ft)				M (Ft)			
Black Silty CLAY, A-6 to A-7-6: FILL, firm to stiff c=750psf, k=100pci E <sub>50</sub> =.02, γ=115pcf to Grey and Black	1					Grey Silty CLAY, A-6, stiff			
		5				8			
		7	1.0	32		10	1.5	18	
Black Silty Clay LOAM, A-7-6	(5)	8		P					
		3				7			
		3	0.75	18		11			9
Grey coarse SAND, A-2, saturated, with Gravel and occasional Cobbles and Boulders, medium dense φ=38°, k=60pci, γ=65pcf (submerged)	2	3		P					
		3				(25)			
		3				13			
Grey Silty CLAY, A-6, hard to very stiff c=3000psf, k=400pci E <sub>50</sub> =.006, γ=60pcf (submerged)	3					8			
		4			18				
		8				30			8
Grey Silty CLAY, A-6, hard to very stiff c=1750psf, k=225pci E <sub>50</sub> =.007, γ=60pcf (submerged)	4	17							
		22				9			
		8			18	(30)	32		10
Grey Silty CLAY, A-6, hard to very stiff c=3000psf, k=400pci E <sub>50</sub> =.006, γ=60pcf (submerged)	(10)	12		B					
		12				14			
		16	3.37	19		29			
Grey Silty CLAY, A-6, hard to very stiff c=3000psf, k=400pci E <sub>50</sub> =.006, γ=60pcf (submerged)	5	21		B					
		12				10			
		16	3.45	19		(35)			
Grey Silty CLAY, A-6, hard to very stiff c=1750psf, k=225pci E <sub>50</sub> =.007, γ=60pcf (submerged)	(15)	21		B					
		12				11			
		16	2.33	21					
Grey Silty CLAY, A-6, hard to very stiff c=1750psf, k=225pci E <sub>50</sub> =.007, γ=60pcf (submerged)	6								
		11				12			
		12	1.66	18		(40)			
	(20)	17		B					

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

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# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/8/05

PROJECT 05MC227, RETAINING WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY WJW

COUNTY	KENDALL				G.W. DURING DRILLING	5.5'					
BORING	RW-4	Depth	N/6"	Qu tsf	W %	GROUND WATER AT	Depth	N/6"	Qu tsf	W %	
STATION	49+10					COMPLETION					4.9', 6.9' WCI
OFFSET	60' W of CL	AFTER	1 DAY	5.1'							
GROUND SURFACE EL.	657±	M (Ft)									M (Ft)
Black Silty Clay LOAM, A-6 to A-7-6: FILL, stiff to firm c=500psf, k=0pci E <sub>50</sub> =.016, γ=115pcf	1	5				Grey Silty CLAY, A-6 Grey Silt LOAM, A-4	12				
		4	1.5	12			14		15		
		5	P				22				
		3					7	20			
		2	0.5	13				27		14	
	(5)	3	P			(25)	28				
Yellow-Brown SAND (f-c), A-2, slightly dense	2	4				8	29				
		5		16			28		8		
		6					12				
Grey coarse SAND, A-1-a, with Gravel and occasional Cobbles and Boulders, dense φ=38°, k=125pci, γ=65pcf (submerged)	3	7			8	9	100/3"				
		14	*				(30)	No Recovery			
	(10)	20									
Grey Silty CLAY, A-6, hard to very stiff c=1750psf, k=225pci E <sub>50</sub> =.007, γ=60pcf (submerged)		20			18	10					
		15									
		12	2.72	B							
		5									
	(15)	8	2.5	22			(35)				
	11	P									
	5	6			21	11					
		12	1.78	B							
		16	B								
	6	7			20	12					
		11	1.90								
	(20)	14	B			(40)					

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/8/05

PROJECT 05MC227, RETAINING WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY WJW

COUNTY	KENDALL	G.W. DURING DRILLING	6.5'		GROUND WATER AT COMPLETION	5.4', 21.7' WCI		AFTER	1 DAY 5.9'		Depth	N/6"	Qu	W
BORING	RW-5												tsf	%
STATION	48+30													
OFFSET	45' W of CL													
GROUND SURFACE EL.	656±	M (Ft)									M (Ft)			
Black Silty Clay LOAM, A-6: FILL, very stiff c=2000psf, k=250pci E <sub>so</sub> =.006, γ=125pcf. over Brown and Black	1	8									5			
		11	3.5	21							7	1.54	26	
		13	P								7	B		
Grey Silty CLAY, A-6 c=2000psf, k=250pci, E <sub>so</sub> =.006, γ=125pcf Yellow-Brown SAND (f-c) and GRAVEL, A-1, saturated φ=35°, k=60pci, γ=60pcf (submerged) Yellow-Brown SAND (f-m), A-2-4 φ=35°, k=60pci, γ=60pcf (submerged) Dark Grey SILT, A-4	2	5									8			
		5	2.0	17							22	2.17	23	
Grey Silty CLAY, A-6, stiff to very stiff c=1750psf, k=225pci E <sub>so</sub> =.007, γ=60pcf (submerged)	4	6									21			
		3	1.82	22							22		10	
		6	B								37			
Grey Silty CLAY, A-6, stiff to very stiff c=1750psf, k=225pci E <sub>so</sub> =.007, γ=60pcf (submerged)	5	9									20			
		13	2.5	20							18		10	
Grey Silty CLAY, A-6, stiff to very stiff c=1750psf, k=225pci E <sub>so</sub> =.007, γ=60pcf (submerged)	6	15									44			
		6	1.90	22										
Grey Silty CLAY, A-6, stiff to very stiff c=1750psf, k=225pci E <sub>so</sub> =.007, γ=60pcf (submerged)	6	4												
		4	1.34	24										
		4												
		4												
		6												

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>so</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/7/05

PROJECT 05MC227, RETAINING WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL		G.W. DURING DRILLING		5.9'			
BORING	RW-6		GROUND WATER AT		COMPLETION			
STATION	47+40		6.0', 18.4' WCI		AFTER 1 DAY			
OFFSET	51' W of CL		Qu	W	Depth	N/6"	Qu	W
			tsf	%	5.8'		tsf	%
GROUND SURFACE EL.			M (Ft)		M (Ft)			
Brown and Black Silty CLAY, A-6: FILL					Grey Silty CLAY, A-6, very stiff to hard			
Black Silty Clay LOAM, A-7-6: FILL; very stiff to hard c=1500psf, k=200pci E <sub>50</sub> =.007, γ=120pcf			10		7	7		
			15	2.60		13	2.44	22
			21	B		17	B	
Grey and Black Silty Clay LOAM, A-6: FILL; very stiff c=1500psf, k=200pci, E <sub>50</sub> =.007, γ=120pcf			8		(25)	15		
			6	1.67		14	3.0	24
			8	B		18	P	
Black Clay LOAM, A-7-6					8			
Yellow-Brown SAND (f-c), A-2, wet, medium dense φ=40°, k=60pci, γ=60pcf (submerged)			11			13		20
			12			15		
to SAND (f-c) and GRAVEL, A-1, dense			17	1	9	15		9
			18			18		
						18		
Grey SILT, A-4, medium dense φ=40°, k=60pci, γ=60pcf (submerged)			5		10			
			12	20				
			21	11				
Grey SAND (f-c), A-2, dense φ=40°, k=60pci, γ=60pcf (submerged)			30		(35)			
			20	4.86				
			11	B				
Grey Silty CLAY, A-6, hard to very stiff c=2000psf, k=250pci E <sub>50</sub> =.006, γ=60pcf (submerged)			7		11			
			8	2.37				
			12	B				
			8		12			
			11	2.75				
			15	B				
					(20)			

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 4/7/05

PROJECT 05MC227, RETAINING WALL

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY CJD

COUNTY	KENDALL				G.W. DURING DRILLING	6.5'				
BORING	RW-7	Depth	N/6"	Qu tsf	W %	GROUND WATER AT	Depth	N/6"	Qu tsf	W %
STATION	46+50±					COMPLETION				
OFFSET	47' W of CL				AFTER	1 DAY				
GROUND SURFACE EL.		M (Ft)			M (Ft)					
Brown and Black Silty CLAY, A-6: FILL					Grey SAND, A-3, dense to very dense					
Black Clay LOAM, A-7-6: FILL, very stiff c=1500psf, k=200pci, E <sub>50</sub> =.007, γ=125pcf		7				φ=35°, k=125pci, γ=60pcf (submerged)	14			
Brown and Black Silty CLAY LOAM, A-6: FILL, stiff c=1500psf, k=200pci E <sub>50</sub> =.007, γ=125pcf Black Clay LOAM, A-7-6.		8	2.89	24	Z		19		19	
		10	B				22			
							(25)	16		21
Grey SAND (f-c), A-2, medium dense φ=30°, k=60pci, γ=60pcf (submerged) to Yellow-Brown, wet		7			8	Grey Silty CLAY, A-6	24			
		8	1.72	19			29			
		(5)	8	B						
Grey SILT, A-4, medium dense φ=30°, k=60pci, γ=60pcf (submerged)		6			9	Yellow-Brown SAND (f-c) and GRAVEL, A-1, medium to very dense φ=40°, k=125pci, γ=70pcf (submerged)	8			
		7		13			10		14	
		10					14			
Grey Silty CLAY, A-6, very stiff to stiff c=3000psf, k=400pci E <sub>50</sub> =.006, γ=60pcf (submerged)		7			(30)	End of Boring @ 30.0'	12			
		8		17			24		7	
		(10)	13				35			
Grey SAND (f), A-3; medium dense		7			10					
		13	3.34	22						
		17	B							
		8			(35)					
		15	3.78	20						
		(15)	22	B						
		7			11					
		8	1.33	24						
		8	B							
		7			12					
		10		17						
		(20)	10					(40)		

N-Standard Penetration Test  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches  
c=soil cohesion  
γ=wet soil unit weight (effective)

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)  
k=lateral modulus cyclic

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer  
E<sub>50</sub>=soil strain

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

DATE 5/26/05

PROJECT 05MC227, CULVERT BORING

BORED BY SPE

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

CHECKED BY WJW

COUNTY <u>KENDALL</u>		WATER SURFACE EL. <u>15.5'</u>								
BORING <u>SB-1</u>	Depth	N/6"	Qu tsf	W %	GROUND WATER AT	Depth	N/6"	Qu tsf	W %	
STATION <u>49+80</u>					COMPLETION <u>13.7'</u>					
OFFSET <u>27' N of CREEK CL</u> <u>23' E of Douglas Rd. CL</u>	M (Ft)				M (Ft)					
GROUND SURFACE EL. <u>660.0</u> 9" Bit. Asphalt Pavement										
Grey Crushed Limestone, IDOT CA-6		5 6 7		6	Grey Silty CLAY, A-6, intermittent Silt seams					
Brown coarse SAND, with GRAVEL, A-2: FILL, slightly dense	1				Brown Sandy LOAM, A-4, medium dense					
		3 2 3		7			7 8 8			9
	(5)						(25)			/
	2	4 3 2		6			8			10
Black Organic Silty Clay LOAM, A-7-6, stiff	3	4 3 3		8	Grey weathered Limestone	9			11	
	(10)					(30)				
		5 5 7	1.0 P	21			10			17
wood piece	4	4 50/1"	1.0 P	16	End of Boring @ 33.8' Auger Refusal				16	
	(15)					(35)				
Grey Silty CLAY, A-6, very stiff	5	7 12 20	3.45 B	19		11				
	6	11 13 18	2.33 BS	21		12				
	(20)					(40)				

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer

# CHICAGO TESTING LABORATORY, INC.

## FOUNDATION BORING LOG

SHEET 1 OF 1

PROJECT 05MC227, CULVERT BORING

DATE 6/13/05

ROUTE DOUGLAS ROAD STRUCTURE BORINGS IN OSWEGO, ILLINOIS

BORED BY SPE

SECTION \_\_\_\_\_

CHECKED BY WJW

COUNTY	KENDALL		WATER SURFACE EL. 7.0'		GROUND WATER AT COMPLETION 10.0'		AFTER 1 DAY 7.7'				
BORING	SB-2		Qu	W	Qu	W	Qu	W			
STATION	49+00		tsf	%	tsf	%	tsf	%			
OFFSET	55'S, 33' W		Depth	N/6"	Depth	N/6"	Depth	N/6"			
GROUND SURFACE EL. 660.5	M (Ft)		M (Ft)		M (Ft)		M (Ft)				
5" Asphalt over 18" Grey Crushed Limestone Base Course, IDOT CA-6	-		-		-		-				
Brown coarse SAND, with GRAVEL, A-1: FILL, slightly dense	1	10 8 8		5	Grey Silty CLAY, A-6, very stiff	7	8 11 13	2.10 B	22		
	(5)	5 4 3		8		(25)	7 7 26	1.6 B	23		
	2	3 4 5		13		8	30 11 15		11		
Dark Brown Silty Clay LOAM, A-6: FILL	3	4 4 5		13	Grey SAND, A-2, dense to coarse SAND, with GRAVEL, A-1	9	11 15 16	2.14 B	9		
		(10)	6 7 8				13	(30)			
		4	3 11 54				19	10	6 7		25
Cobble or small Boulder @ 14.2'	(15)				Competent Rock @ 34.8'	(35)	100/4"				
	5	10 8 14	4.0 P	19	End of Boring @ 34.8'	11					
Grey Silty CLAY, A-6, hard to very stiff	6	5 6 10	2.79 B	20		12					
		(20)				(40)					

N-Standard Penetration Test-Blows per foot to drive 2 inch O.D. Split Spoon Sampler 12 inches with 140 lbs. hammer falling 30 inches

Qu- Unconfined Compressive Strength (tsf)  
W- Water Content-percentage of oven dry weight (%)

Type failure: B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer

# SCHLEEDE-HAMPTON ASSOCIATES, INC.

• CONSULTING ENGINEERS

## BRIDGE FOUNDATION BORING LOG

SHEET 1 OF 1

PROJECT DOUGLAS ROAD RECONSTRUCTION

DATE 2/20/03

BRIDGE WAUBONSEE CREEK BRIDGE, SOUTHWEST SIDE OF BRIDGE

BORED BY SPE

ROUTE \_\_\_\_\_ SECTION \_\_\_\_\_

CHECKED BY WJW

COUNTY	KENDALL				WATER SURFACE EL.	651.3			
BORING	SB-1				GROUND WATER AT				
STATION	49+00		Qu	W	COMPLETION	649.8		Depth	N/6"
OFFSET	.22 feet West of Road CL 43 feet South of Bridge CL		tsf	%	AFTER	0 HOURS		tsf	W
		Depth	N/6"	tsf	CAVE-IN	648.9		%	
GROUND SURFACE EL. 660.3		M (Ft)						M (Ft)	
±7" Grey Crushed Limestone, IDOTCA-6									
Dark Grey Clay LOAM to LOAM, A-6: FILL		1	21 14 7		16				
to Dark Brown, soft, trace Roots									
		(5)	2 2 3	0.5 P	26				
Dark Brown-Grey Sandy LOAM, slightly dense to medium dense, A-4: FILL, damp		2	4 5 5	-	10				
grades to A-2-4									
wet @ 10.5'		3	4 4 7	-	12				
		(10)							
Grey SAND and GRAVEL, medium dense, A-1		4	5 8 14	-	14 10				
Grey Silt LOAM to SILT, medium dense, A-4, intermittent Sand seams									
		(15)	11 8 10	-	8 17				
Grey SAND and GRAVEL, dense, A-1		5	10 20 26	-	6				
Grey Silty CLAY, very stiff, A-6		6	9 14 23	3.10 B	7 20				
End of Boring @ 20.0'		(20)							

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches

Qu- Unconfined Compressive  
Strength (tsf)  
W- Water Content-percentage  
of oven dry weight (%)

Type failure:  
B- Bulge Failure  
S- Shear Failure  
E- Estimated Value  
P-Penetrometer

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# SCHLEEDE-HAMPTON ASSOCIATES, INC.

• CONSULTING ENGINEERS

## BRIDGE FOUNDATION BORING LOG

SHEET 1 OF 1

PROJECT DOUGLAS ROAD RECONSTRUCTION

DATE 2/20/03

BRIDGE WAUBONSEE CREEK BRIDGE, NORTHEAST SIDE OF BRIDGE

BORED BY SPE

ROUTE \_\_\_\_\_ SECTION \_\_\_\_\_

CHECKED BY WJW

COUNTY	KENDALL				WATER SURFACE EL.	651.3			
BORING	SB-2				GROUND WATER AT				
STATION	49+75	Qu	W	COMPLETION	651.1	Depth	N/6"	Qu	W
OFFSET	±16 feet East of Road CL 60 feet North of Bridge CL	tsf	%	AFTER	0 HOURS			tsf	%
				CAVE-IN	648.9				
GROUND SURFACE EL. 660.6	M (Ft)								
Grey Crushed Limestone, IDOT CA-6 over Brown SAND & GRAVEL									
Black Silty CLAY, mixed with Gravel, A-7-6 and A-1: FILL	1	19							
		11	1.75	23					
		8	P						
Brown Silty Clay LOAM, stiff, A-6: FILL	(5)	2	1.25	17					
		3	P						
		3	1.0						
Dark Grey Silty LOAM, firm, A-7-6: FILL	2	5							
		5	0.75	3					
		5	P						
Grey SAND and GRAVEL, medium dense to dense, A-1, wet	3	4	0.75	25					
	(10)	4	P						
		9	-	9					
Grey Silty CLAY, hard, A-6	4	8		11					
		9	-						
		13							
Grey Silty CLAY, hard, A-6	(15)	18		8					
		12	-						
		29							
Grey Silty CLAY, hard, A-6	5	11	6.40	20					
		15	B						
		24							
End of Boring @ 20.0'	6	14	5.04	20					
	(20)	15	B						
		22							

N-Standard Penetration Test-  
Blows per foot to drive 2 inch  
O.D. Split Spoon Sampler 12 inches  
with 140 lbs. hammer falling 30 inches

Qu- Unconfined Compressive  
Strength (tsf)  
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Type failure: B- Bulge Failure  
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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:

Village of Oswego

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SEC Group, Inc.

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ComEd

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The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

### THREE SIDED PRECAST CONCRETE STRUCTURE

Effective: July 12, 1994

Revised: June 1, 2007

This work shall consist of furnishing and installing the three-sided precast concrete structure according to applicable portions of Sections 503 and 504 of the Standard Specifications. All three-sided precast concrete structures, precast headwalls, precast wingwalls and precast footings shall be produced according to the Department's latest Policy Memorandum "Quality Control/ Quality Assurance Program for Precast Products".

The three-sided concrete structure shall be designed according to the AASHTO specifications, shown on the structure plans, and shall include the effects of unyielding foundation conditions for the sequence of construction anticipated.

The Contractor shall be responsible for diverting the water from the construction area using a method meeting the approval of the Engineer. The cost of diverting the water shall be considered as included in the contract unit price bid for the three sided structure being constructed and no additional compensation will be allowed.

For structures over water, 3 in. (75mm) diameter drain openings, spaced at 8 ft (2.4 m) centers, 2 ft (600 mm) above the flow line shall be provided according to Article 503.11.

Except as follows, all joints between segments shall be sealed according to Article 540.06. When the minimum fill over the structure, between the edges of the shoulders, is less than or equal to 3 ft. (1 m), the sealing of the top joint shall be replaced by a grouted keyway or a previously approved mechanical connection between the segments. The grouted keyway or mechanical connection shall be used to connect a minimum length of 12 ft. (3.65 m) of exterior segments at each end of the structure. The keyway shall be cast in the top slab of the segments and grouted according to Article 504.06(e). If exterior mechanical connectors are used, there shall be a minimum of 4 mechanical connections per joint with a maximum spacing of 10 ft. (3 m). All plates, shapes, and hardware shall be galvanized or stainless steel.

Three sided precast concrete structures located in areas with a seismic acceleration coefficient  $A > 0.09$  shall satisfy the following requirements:

- 1) The structure shall be connected to the footing/pedestal 2 ft. (600 mm) from the outermost exterior edge of the structure at all four corners with a galvanized rigid mechanical connection subject to the approval of the Engineer. This connection shall be located on the interior face of the segment to allow for future inspection.
- 2) All top joints of exterior segments within a length of 12 ft. (3.65 m) at each end of the structure, regardless of the fill cover, shall be mechanically connected as previously described. The mechanical connection is subject to the approval of the Engineer.

Shop drawings for three sided precast concrete structures shall be submitted according to Article 1042.03(b) and Article 105.04 of the Standard Specifications. The supplier selected by

the Contractor shall submit complete design calculations and shop drawings, prepared and sealed by an Illinois Licensed Structural Engineer, for approval by the Engineer.

Prior approval by the Department for the structural feasibility and adequacy of proprietary systems will enhance the approval process of the final structure design but in no case shall relieve the Contractor of the design or QC/QA requirements stated herein. The following proprietary systems have been previously approved for the structural feasibility and adequacy only:

- 1) Hy-Span
- 2) Con Span
- 3) REDI-SPAN Bridge System
- 4) BEBO Arch System

The system chosen by the contractor shall provide a hydraulically equivalent waterway opening to that specified on the plans. Evidence of equivalency shall also be provided in writing to the Engineer for review and approval prior to ordering any materials.

When precast concrete substructure is specified, the Contractor may choose to substitute cast-in-place for precast headwalls, wingwalls and footings unless otherwise specified on the plans. No additional compensation for these substitutions will be allowed and the Contractor shall submit complete design calculations and shop drawings, prepared and sealed by an Illinois Licensed Structural Engineer, for approval by the Engineer.

When Cast-in-place concrete substructure is specified, the Contractor may choose to substitute precast for cast-in-place headwalls, wingwalls and footings unless otherwise specified on the plans. No additional compensation for these substitutions will be allowed and the Contractor/supplier shall submit complete design calculations and shop drawings prepared and sealed by an Illinois Licensed Structural Engineer, for approval by the Engineer.

If a precast footing is used, it shall be built to the manufacturers specifications and the Contractor shall prepare a 6 in. (150 mm) thick layer of compacted granular material placed below the bottom of the footing. The porous granular material shall be gradation CA 7, CA 11, or CA 18 and shall be placed to extend at least 2 ft. (600 mm) beyond the limits of the precast footing. There shall be no additional compensation for the porous granular bedding material.

The excavation and backfill for three sided precast concrete structures shall be according to Section 502 of the Standard Specifications and any additional backfilling requirements based on the precast supplier's design. All construction inspection and material certification necessary to verify these additional backfilling requirements in the field shall be the responsibility of the supplier. The three-sided precast concrete structure shall be placed according to applicable requirements of Article 542.04(d) of the Standard Specifications. When multi-spans are used a 3 in. (75 mm) minimum space shall be left between adjacent sections. After the precast units are in place and the backfill has been placed to midheight on each exterior side of the barrel, the space between adjacent units shall be filled with Class SI concrete. The Class SI concrete shall

be according to Section 1020, except the maximum size of the aggregate shall be 3/8 in. (9.5 mm).

Method of Measurement. Three sided precast concrete structures will be measured in feet (meters). The overall length shall be measured from out to out of headwalls along the centerline of each span of the structure. Class SI concrete placed between adjacent spans, grouted keyways or mechanical connections between precast units, and mechanical connections between the precast units and the substructure will not be measured for payment.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for THREE SIDED PRECAST CONCRETE STRUCTURES of the size specified. Rock excavation will be paid for separately according to Article 502.13 of the Standard Specifications.

The cost of specified cast-in-place headwalls, wingwalls and footings will not be included in this item but will be paid for separately.

When precast footings, wingwalls and headwalls are specified, this work will be paid for at the lump sum price for PRECAST CONCRETE SUBSTRUCTURE.

## TEMPORARY SOIL RETENTION SYSTEM

Effective: December 30, 2002

Revised : January 1, 2007

Description. This work shall consist of designing, furnishing, installing, adjusting for stage construction when required and subsequent removal of the temporary soil retention system according to the dimensions and details shown on the plans and in the approved design submittal.

General. The temporary soil retention system shall be designed by the Contractor as a minimum, to retain the exposed surface area specified in the plans or as directed by the Engineer.

The design calculations and details for the temporary soil retention system proposed by the Contractor shall be submitted to the Engineer for approval. The calculations shall be prepared and sealed by an Illinois Licensed Structural Engineer. This approval will not relieve the Contractor of responsibility for the safety of the excavation. Approval shall be contingent upon acceptance by all involved utilities and/or railroads.

Construction. The Contractor shall verify locations of all underground utilities before installing any of the soil retention system components or commencing any excavation. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The soil retention system shall be installed according to the Contractor's approved design, or as directed by the Engineer, prior to commencing any related excavation. If unable to install the temporary soil retention system as specified in the approved design, the Contractor shall have the adequacy of the design re-evaluated. Any reevaluation shall be submitted to the Engineer for approval prior to commencing the excavation adjacent to the area in question. The Contractor shall not excavate below the maximum excavation line shown in the approved design without the prior permission of the Engineer. The temporary soil retention system shall remain in place until the Engineer determines it is no longer required.

The temporary soil retention system shall be removed and disposed of by the Contractor when directed by the Engineer. When allowed, the Contractor may elect to cut off a portion of the temporary soil retention system leaving the remainder in place. The remaining temporary soil retention system shall be removed to a depth which will not interfere with the new construction, and as a minimum, to a depth of 12 in. (300 mm) below the finished grade, or as directed by the Engineer. Removed system components shall become the property of the Contractor.

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

Method of Measurement. The temporary soil retention system furnished and installed according to the Contractor's approved design or as directed by the Engineer will be measured for payment in place, in square feet (square meters). The area measured shall be the vertical exposed surface area envelope of the excavation supported by temporary soil retention system.

Any temporary soil retention system cut off, left in place, or installed beyond those dimensions shown on the contract plans or the approved contractor's design without the written permission of the Engineer, shall not be measured for payment but shall be done at the contractor's own expense.

Basis of Payment. This work will be paid for at the contract unit price per square foot (square meter) for TEMPORARY SOIL RETENTION SYSTEM.

Payment for any excavation, related solely to the installation and removal of the temporary soil retention system and/or its components, shall not be paid for separately but shall be included in the unit bid price for TEMPORARY SOIL RETENTION SYSTEM. Other excavation, performed in conjunction with this work, will not be included in this item but shall be paid for as specified elsewhere in this contract.

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

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**POROUS GRANULAR EMBANKMENT (SPECIAL)**

Effective: September 28, 2005

Revised: January 1, 2007

Description. This work shall consist of furnishing, and placing porous granular embankment (special) material as detailed on the plans, according to Section 207 except as modified herein.

Materials. The gradation of the porous granular material may be any of the following CA 8 thru CA 18, FA 1 thru FA 4, FA 7 thru FA 9, and FA 20 according to Articles 1003 and 1004.

Construction. The porous granular embankment (special) shall be installed according to Section 207, except that it shall be uncompacted.

Basis of Payment. This work will be paid for at the contract unit price per Cubic Yard (Cubic Meter) for POROUS GRANULAR EMBANKMENT (SPECIAL).

## BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006

Revised: January 2, 2007

Description. For projects with at least 1200 tons (1100 metric tons) of work involving applicable bituminous materials, cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and pavement preservation type surface treatments. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

$$CA = (BPI_p - BPI_L) \times (\%AC_v / 100) \times Q$$

Where: CA = Cost Adjustment, \$.

BPI<sub>p</sub> = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI<sub>L</sub> = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).

%AC<sub>v</sub> = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC<sub>v</sub> will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC<sub>v</sub> and undiluted emulsified asphalt will be considered to be 65% AC<sub>v</sub>.

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards:  $Q, \text{ tons} = A \times D \times (G_{mb} \times 46.8) / 2000$ . For HMA mixtures measured in square meters:  $Q, \text{ metric tons} = A \times D \times (G_{mb} \times 24.99) / 1000$ . When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different  $G_{mb}$  and % AC<sub>v</sub>.

For bituminous materials measured in gallons:  $Q, \text{ tons} = V \times 8.33 \text{ lb/gal} \times SG / 2000$   
For bituminous materials measured in liters:  $Q, \text{ metric tons} = V \times 1.0 \text{ kg/L} \times SG / 1000$

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

$G_{mb}$  = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the  $BPI_L$  and  $BPI_P$  in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(BPI_L - BPI_P) \div BPI_L\} \times 100$$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

**ILLINOIS DEPARTMENT  
OF TRANSPORTATION**

**OPTION FOR  
BITUMINOUS MATERIALS COST ADJUSTMENTS**

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.: \_\_\_\_\_

Company Name: \_\_\_\_\_

**Contractor's Option:**

Is your company opting to include this special provision as part of the contract?

Yes

No

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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## CEMENT (BDE)

Effective: January 1, 2007

Revised: November 1, 2007

Revise Section 1001 of the Standard Specifications to read:

### "SECTION 1001. CEMENT

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

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

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

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

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

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

For cast-in-place construction, portland-pozzolan cements shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-

reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

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

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

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

For cast-in-place construction, portland blast-furnace slag cements shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

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

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.

- (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.
- (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.
- (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.
- (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.

- (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to Illinois Modified AASHTO T 161, Procedure B. At 100 cycles, the specimens are measured and weighed at 73 °F (23 °C).
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used when specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide ( $Al_2O_3$ ), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide ( $SO_3$ ), 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."

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## DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (DBE)

Effective: September 1, 2000

Revised: January 1, 2007

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

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 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 firms performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of

DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 7 % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

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

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

- (a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven working days after the date of letting. To meet the seven day requirement, the bidder may send the Plan by certified mail or delivery service within the seven working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the

project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
  - (1) The name and address of each DBE to be used;
  - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;
  - (3) The price to be paid to each DBE for the identified work specifically stating the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
  - (4) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
  - (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five working day period in order to cure the deficiency.

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 firm does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE firm does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt to meet the goal. This means that the bidder must show

that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
  - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
  - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
  - (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.  
b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the

ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
  - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
  - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
  - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will designate a five working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.
- (c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five working days after the notification date of the determination by delivering the request to the Department of Transportation, Bureau of

Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to

find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.

- (c) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefor to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

## 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.

$$\text{FHWA hourly rate} = (\text{monthly rate}/176) \times (\text{model year adj.}) \times (\text{Illinois adj.}) + \text{EOC}$$

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:  $0.5 \times (\text{FHWA hourly rate} - \text{EOC})$ .

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

126B

## EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007

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

"(a) Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the deficiency. The Engineer will be the sole judge.

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

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day."

80180

## IMPACT ATTENUATORS, TEMPORARY (BDE)

Effective: November 1, 2003

Revised: January 1, 2007

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

Materials. Materials shall meet the requirements of the impact attenuator manufacturer and the following:

Item	Article/Section
(a) Fine Aggregate (Note 1).....	1003.01
(b) Steel Posts, Structural Shapes, and Plates .....	1006.04
(c) Rail Elements, End Section Plates, and Splice Plates.....	1006.25
(d) Bolts, Nuts, Washers and Hardware .....	1006.25
(e) Hollow Structural Tubing .....	1006.27(b)
(f) Wood Posts and Wood Blockouts .....	1007.01, 1007.02, 1007.06
(g) Preservative Treatment.....	1007.12
(h) Packaged Rapid Hardening Mortar .....	1018.01

Note 1. Fine aggregate shall be FA 1 or FA 2, Class A quality. The sand shall be unbagged and shall have a maximum moisture content of five percent.

## CONSTRUCTION REQUIREMENTS

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

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

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

Impact attenuators shall be installed according to the manufacturer's specifications and include all necessary transitions between the impact attenuator and the item to which it is attached.

When water filled attenuators are used between November 1 and April 15, they shall contain anti-freeze according to the manufacturer's recommendations.

Markings. Sand module impact attenuators shall be striped with alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes. There shall be at least two of each stripe on each module.

Other types of impact attenuators shall have a terminal marker applied to their nose and reflectors along their sides.

Maintenance. All maintenance of the impact attenuators shall be the responsibility of the Contractor until removal is directed by the Engineer.

Relocate. When relocation of temporary impact attenuators is specified, they shall be removed, relocated and reinstalled at the new location. The reinstallation requirements shall be the same as those for a new installation.

Removal. When the Engineer determines the temporary impact attenuators are no longer required, the installation shall be dismantled with all hardware becoming the property of the Contractor.

Surplus material shall be disposed of according to Article 202.03. Anti-freeze, when present, shall be disposed of/recycled according to local ordinances.

When impact attenuators have been anchored to the pavement, the anchor holes shall be repaired with rapid set mortar. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.

Method of Measurement. This work will be measured for payment as each, where each is defined as one complete installation.

Basis of Payment. This work will be paid for at the contract unit price per each for IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, WIDE); IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, RESETTABLE); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, NARROW); IMPACT ATTENUATORS, TEMPORARY (SEVERE USE, WIDE); or IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE) of the test level specified.

Relocation of the devices will be paid for at the contract unit price per each for IMPACT ATTENUATORS, RELOCATE (FULLY REDIRECTIVE); IMPACT ATTENUATORS, RELOCATE (SEVERE USE); or IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE); of the test level specified.

Regrading of slopes or approaches will be paid for according to Section 202 and/or Section 204 of the Standard Specifications.

80110

## **MAST ARM ASSEMBLY AND POLE (BDE)**

Effective: January 1, 2008

Revise Article 1077.03 of the Standard Specifications to read:

**"1077.03 Mast Arm Assembly and Pole.** Mast arm assembly and pole shall be as follows.

(a) Steel Mast Arm Assembly and Pole and Steel Combination Mast Arm Assembly and Pole. The steel mast arm assembly and pole and steel combination mast arm assembly and pole shall consist of a traffic signal mast arm, a luminaire mast arm or davit (for combination pole only), a pole, and a base, together with anchor rods and other appurtenances. The configuration of the mast arm assembly, pole, and base shall be according to the details shown on the plans.

(1) Loading. The mast arm assembly and pole, and combination mast arm assembly and pole shall be designed for the loading shown on the Highway Standards or elsewhere on the plans, whichever is greater. The design shall be according to AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 1994 Edition for 80 mph (130 km/hr) wind velocity. However, the arm-to-pole connection for tapered signal and luminaire arms shall be according to the "ring plate" detail as shown in Figure 11-1(f) of the 2002 Interim, to the AASHTO "Standard Specification for Structural Supports for Highway Signs, Luminaries and Traffic Signals" 2001 4<sup>th</sup> Edition.

(2) Structural Steel Grade. The mast arm and pole shall be fabricated according to ASTM A 595, Grade A or B, ASTM A 572 Grade 55, or ASTM A 1011 Grade 55 HSLAS Class 2. The base and flange plates shall be of structural steel according to AASHTO M 270 Grade 50 (M 270M Grade 345). Luminaire arms and trussed arms 15 ft (4.5 m) or less shall be fabricated from one steel pipe or tube size according to ASTM A 53 Grade B or ASTM A 500 Grade B or C. All mast arm assemblies, poles, and bases shall be galvanized according to AASHTO M 111.

(3) Fabrication. The design and fabrication of the mast arm assembly, pole, and base shall be according to the requirements of the Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals published by AASHTO. The mast arm and pole may be of single length or sectional design. If section design is used, the overlap shall be at least 150 percent of the maximum diameter of the overlapping section and shall be assembled in the factory.

The manufacturer will be allowed to slot the base plate in which other bolt circles may fit, providing that these slots do not offset the integrity of the pole. Circumferential welds of tapered arms and poles to base plates shall be full penetration welds.

(4) Shop Drawing Approval. The Contractor shall submit detailed drawings showing design materials, thickness of sections, weld sizes, and anchor rods to the Engineer

for approval prior to fabrication. These drawings shall be at least 11 x 17 in. (275 x 425 mm) in size and of adequate quality for microfilming.

- (b) Anchor Rods. The anchor rods shall be ASTM F 1554 Grade 105 according to Article 1006.09 and shall be threaded a minimum of 7 1/2 in. (185 mm) at one end and have a bend at the other end. The first 10 in. (250 mm) at the threaded end shall be galvanized. Two nuts, one lock washer, and one flat washer shall be furnished with each anchor rod. All nuts and washers shall be galvanized."

80196

## 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

**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

## RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007

Revised: August 1, 2007

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

Revise Section 1031 of the Standard Specifications to read:

### "SECTION 1031. RECLAIMED ASPHALT PAVEMENT

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

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

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

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

inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 3/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 3/8 in. (9.5 mm) or smaller screen. Conglomerate 3/8 RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

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

(e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

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

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

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

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

(a) Testing Conglomerate 3/8. In addition to the requirements above, conglomerate 3/8 RAP shall be tested for maximum theoretical specific gravity ( $G_{mm}$ ) at a frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

- (b) Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable  $G_{mm}$ . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

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

1/ The tolerance for conglomerate 3/8 shall be ± 0.3 %.

2/ Applies only to conglomerate 3/8. When variation of the  $G_{mm}$  exceeds the ± 0.02 tolerance, a new conglomerate 3/8 stockpile shall be created which will also require an additional mix design.

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

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

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

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

- (d) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

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

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

Max RAP Percentage

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

1/ For HMA Shoulder and Stabilized Sub-Base (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.

2/ Value of Max % RAP if 3/8 RAP is utilized.

- 3/ When RAP exceeds 20%, the high & low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25% RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

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

RAP designs shall be submitted for volumetric verification. If additional RAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

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

To remove or reduce agglomerated material, a scalping screen, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP and either switch to the virgin aggregate design or submit a new RAP design. When producing mixtures containing conglomerate 3/8 RAP, a positive dust control system shall be utilized.

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

(a) Dryer Drum Plants.

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- (4) Accumulated dry weight of RAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- (5) 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 material as a percent of the total mix to the nearest 0.1 percent.
- (8) Aggregate and RAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP are printed in wet condition.)

(b) Batch Plants.

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

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

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

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

## REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007

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

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

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

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

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

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

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

80183

## REINFORCEMENT BARS (BDE)

Effective: November 1, 2005

Revised: January 2, 2008

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

" (a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reinforcement Bar and/or Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.

(1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706 (A 706M), Grade 60 (420) for deformed bars and the following.

- a. For straight bars furnished in cut lengths and with a well-defined yield point, the yield point shall be determined as the elastic peak load, identified by a halt or arrest of the load indicator before plastic flow is sustained by the bar and dividing it by the nominal cross-sectional area of the bar.
- b. For bars without a well-defined yield point, including bars straightened from coils, the yield strength shall be determined by taking the corresponding load at 0.005 strain as measured by an extensometer (0.5% elongation under load) and dividing it by the nominal cross-sectional area of the bar.
- c. For bars straightened from coils or bars bent from fabrication, there shall be no upper limit on yield strength; and for bar designation Nos. 3 - 6 (10 - 19), the elongation after rupture shall be at least 9%.
- d. Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
- e. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706 (A 706M). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
- f. Spiral Reinforcement. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.

(2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284 (M 284M) and the following.

- a. Certification. The epoxy coating applicator shall be certified according to the current Bureau of Materials and Physical Research Policy Memorandum, "Epoxy Coating Plant Certification Procedure". The Department will maintain an approved list.
- b. Coating Thickness. The thickness of the epoxy coating shall be 7 to 12 mils (0.18 to 0.30 mm). When spiral reinforcement is coated after fabrication, the thickness of the epoxy coating shall be 7 to 20 mils (0.18 to 0.50 mm).
- c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 0.5 in. (13 mm) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

80151

**SEEDING (BDE)**

Effective: July 1, 2004

Revised: August 1, 2007

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

"Table 1 - SEEDING MIXTURES		
Class - Type	Seeds	lb/acre (kg/hectare)
2 Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	100 (110)
	Perennial Ryegrass	50 (55)
	Creeping Red Fescue	40 (50)
	Red Top	10 (10)
2A Salt Tolerant Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	60 (70)
	Perennial Ryegrass	20 (20)
	Red Fescue (Audubon, Sea Link, or Epic)	30 (20)
	Hard Fescue (Rescue 911, Spartan II, or Reliant IV)	30 (20)
	Fults Salt Grass 1/	60 (70)"

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

TABLE II						
Variety of Seeds	Hard Seed	Purity	Pure Live	Weed	Secondary *	Notes
	%	%	Seed %	%	No. per oz (kg)	
	Max.	Min.	Min.	Max.	Max. Permitted	
Alfalfa	20	92	89	0.50	6 (211)	1/
Clover, Alsike	15	92	87	0.30	6 (211)	2/
Red Fescue, Audubon	0	97	82	0.10	3 (105)	-
Red Fescue, Creeping	-	97	82	1.00	6 (211)	-
Red Fescue, Epic	-	98	83	0.05	1 (35)	-
Red Fescue, Sea Link	-	98	83	0.10	3 (105)	-
Tall Fescue, Blade Runner	-	98	83	0.10	2 (70)	-
Tall Fescue, Falcon IV	-	98	83	0.05	1 (35)	-
Tall Fescue, Inferno	0	98	83	0.10	2 (70)	-
Tall Fescue, Tarheel II	-	97	82	1.00	6 (211)	-
Tall Fescue, Quest	0	98	83	0.10	2 (70)	-
Fults Salt Grass	0	98	85	0.10	2 (70)	-
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/

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
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: January 1, 2007

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  $\pm 2$  in. ( $\pm 50$  mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) 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-5, SCC-6, and Illinois Modified AASHTO T 22, 23, 121, 126, 141, 152, 177, 196, and 309 shall be used for testing of self-consolidating concrete mixtures.

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 slump flow target range shall be submitted. In addition, the design mortar factor may exceed 1.10 and durability test data will be waived.

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

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

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, L-box blocking ratio, column segregation index, and hardened visual stability index.

Upon review of the test data from the trial batch, the Engineer will verify or deny the use of the mix design and notify the Contractor. Verification by the Engineer will include the Contractor's target slump flow range. If applicable, the Engineer will verify the Contractor's maximum J-ring value and minimum L-box blocking ratio.

A new trial batch will be required whenever there is a change in the source of any component material, proportions beyond normal field adjustments, dosage of the self-consolidating concrete admixture, batch sequence, mixing speed, mixing time, or as determined by the Engineer. The testing criteria for the new trial batch will be determined by the Engineer.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

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 consider the fluid nature of the concrete for designing the falsework and forms. Forms shall be tight to prevent leakage of fluid concrete.

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.”

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 plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed as needed to control production. The column segregation index test and hardened visual stability index test will not be required to be performed at the plant.

Quality Control by Contractor at Jobsite. The specified test frequencies for air content, strength, and temperature shall be performed as indicated in the contract plans.

Slump flow, visual stability index, and J-ring or L-box tests shall be performed on the first two truck deliveries of the day, and every 50 cu yd (40 cu m) thereafter. The Contractor shall select either the J-ring or L-box test for jobsite testing.

The column segregation index test will not be required to be performed at the jobsite. The hardened visual stability index test shall be performed on the first truck delivery of the day, and every 300 cu yd (230 cu m) thereafter. Slump flow, visual stability index, J-ring value or L-box blocking ratio, air content, and concrete temperature shall be recorded for each hardened visual stability index test.

The Contractor shall retain all hardened visual stability index cut cylinder specimens until the Engineer notifies the Contractor that the specimens may be discarded.

If mix foaming or other potential detrimental material is observed during placement or at the completion of the pour, the material shall be removed while the concrete is still plastic.

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 plans.

For slump flow, visual stability index, and J-ring or L-box tests, quality assurance independent sample testing and split sample testing will be performed as determined by the Engineer.

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 plans.

For slump flow, visual stability index, J-ring or L-box, and hardened visual stability index tests, quality assurance independent sample testing will be performed as determined by the Engineer.

For slump flow and visual stability index quality assurance split sample testing, the Engineer will perform tests at the beginning of the project on the first three tests performed by the Contractor. Thereafter, a minimum of ten percent of total tests required of the Contractor will be performed per plant, which will include a minimum of one test per mix design. The acceptable limit of precision will be 1.5 in. (40 mm) for slump flow and a limit of precision will not apply to the visual stability index.

For the J-ring or the L-box quality assurance split sample testing, a minimum of 80 percent of the total tests required of the Contractor will be witnessed by the Engineer per plant, which will

include a minimum of one witnessed test per mix design. The Engineer reserves the right to conduct quality assurance split sample testing. The acceptable limit of precision will be 1.5 in. (40 mm) for the J-ring value and ten per cent 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: January 1, 2007

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  $\pm 2$  in. ( $\pm 50$  mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The column segregation index shall be a maximum 15 percent.
- (j) The hardened visual stability index shall be a maximum of 1.

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

## **SILT FILTER FENCE (BDE)**

Effective: January 1, 2008

For silt filter fence fabric only, revise Article 1080.02 of the Standard Specifications to read:

**“1080.02 Geotextile Fabric.** The fabric for silt filter fence shall be a woven fabric meeting the requirements of AASHTO M 288 for unsupported silt fence with less than 50 percent geotextile elongation.”

Replace the last sentence of Article 1081.15(b) of the Standard Specifications with the following:

“Silt filter fence stakes shall be a minimum of 4 ft (1.2 m) long and made of either wood or metal. Wood stakes shall be 2 in. x 2 in. (50 mm x 50 mm). Metal stakes shall be a standard T or U shape having a minimum weight (mass) of 1.32 lb/ft (600 g/300 mm).”

80197

**STONE GRADATION TESTING (BDE)**

Effective: November 1, 2007

Revise the first sentence of note 1/ of the Erosion Protection and Sediment Control Gradations table of Article 1005.01(c)(1) of the Standard Specifications to read:

“A maximum of 15 percent of the total test sample by weight may be oversize material.”

80191

## SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

80143

## TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002

Revised: January 1, 2008

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."

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."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications:

80087

## THERMOPLASTIC PAVEMENT MARKINGS (BDE)

Effective: January 1, 2007

Revise Article 1095.01(a)(2) of the Standard Specifications to read:

"(2) Pigment. The pigment used for the white thermoplastic compound shall be a high-grade pure (minimum 93 percent) titanium dioxide (TiO<sub>2</sub>). The white pigment content shall be a minimum of ten percent by weight and shall be uniformly distributed throughout the thermoplastic compound.

The pigments used for the yellow thermoplastic compound shall not contain any hazardous materials listed in the Environmental Protection Agency Code of Federal Regulations (CFR) 40, Section 261.24, Table 1. The combined total of RCRA listed heavy metals shall not exceed 100 ppm when tested by X-ray fluorescence spectroscopy. The pigments shall also be heat resistant, UV stable and color-fast yellows, golds, and oranges, which shall produce a compound which shall match Federal Standard 595 Color No. 33538. The pigment shall be uniformly distributed throughout the thermoplastic compound."

Revise Article 1095.01(b)(1)e. of the Standard Specifications to read:

"e. Daylight Reflectance and Color. The thermoplastic compound after heating for four hours  $\pm$  five minutes at  $425 \pm 3$  °F ( $218.3 \pm 2$  °C) and cooled at 77 °F (25 °C) shall meet the following requirements for daylight reflectance and color, when tested, using a color spectrophotometer with 45 degree circumferential/zero degree geometry, illuminant C, and two degree observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm.

White: Daylight Reflectance .....75 percent min.  
\*Yellow: Daylight Reflectance .....45 percent min.

\*Shall meet the coordinates of the following color tolerance chart.

x	0.490	0.475	0.485	0.530
y	0.470	0.438	0.425	0.456"

Revise Article 1095.01(b)(1)k. of the Standard Specifications to read:

"k. Accelerated Weathering. After heating the thermoplastic for four hours  $\pm$  five minutes at  $425 \pm 3$  °F ( $218.3 \pm 2$  °C) the thermoplastic shall be applied to a steel wool abraded aluminum alloy panel (Federal Test Std. No. 141, Method 2013) at a film thickness of 30 mils (0.70 mm) and allowed to cool for 24 hours at room temperature. The coated panel shall be subjected to accelerated weathering

using the light and water exposure apparatus (fluorescent UV - condensation type) for 75 hours according to ASTM G 53 (equipped with UVB-313 lamps).

The cycle shall consist of four hours UV exposure at 122 °F (50 °C) followed by four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the panel shall not exceed 10 Hunter Lab Delta E units from the original material."

80176

**TRAFFIC SIGNAL GROUNDING (BDE)**

Effective: April 1, 2006  
Revised: January 1, 2007

Revise Article 873.02 of the Standard Specifications to read:

**"873.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Electric Cable – Signal, Lead-in, Communication, Service, and Equipment Grounding Conductor .....	1076.04
(b) Electrical Raceway Materials .....	1088.01"

Revise Article 873.04 of the Standard Specifications to read:

**"873.04 Grounding System.** All traffic signal circuits shall include an equipment grounding conductor according to Article 801.04. The equipment grounding conductor shall consist of a continuous, green, insulated conductor Type XLP, No. 6 AWG, stranded copper installed in raceways and bonded to each metal enclosure (handhole, post, mast arm pole, signal cabinet, etc.). All clamps shall be bronze or copper, UL approved.

A grounding cable with connectors shall be installed between each handhole cover and frame. The grounding cable shall be looped over cable hooks installed in the handholes and 5 ft (1.5 m) of extra cable shall be provided between the frame and cover.

All equipment grounding conductors shall terminate at the ground bus in the controller cabinet. The neutral conductor and the equipment grounding conductor shall be connected in the service installation. At no other point in the traffic signal system shall the neutral and equipment grounding conductors be connected."

Revise Article 873.05 of the Standard Specifications to read:

**"873.05 Method of Measurement.** Electric cable will be measured for payment in feet (meters) in place. The length of measurement shall be the distance horizontally and vertically measured between the changes in direction, including cables in mast arms, mast arm poles, signal posts, and extra cable length as specified in Article 873.03. The vertical cable length shall be measured according to the following schedule.

Location	Cable Length
Foundation (signal post, mast arm pole, controller cabinet)	3 ft (1 m)
Mast Arm Pole (mast arm mounted signal head)	20 ft (6 m)
Mast Arm Pole (bracket mounted signal head attached to mast arm pole)	13 ft (4 m)
Signal Post (bracket or post mounted signal head)	13 ft (4 m)
Pedestrian Push Button	6 ft (2 m)"

Add the following Article to Section 873 of the Standard Specifications:

**"873.06 Basis of Payment.** This work will be paid for at the contract unit price per foot (meter) for ELECTRIC CABLE, of the method of installation (IN TRENCH, IN CONDUIT, or AERIAL SUSPENDED), of the type, size, and number of conductors specified.

The type specified will indicate the method of installation and whether the electric cable is Service, Signal, Lead-in, Communication, or Equipment Grounding Conductor."

Revise the heading of Article 1076.04 of the Standard Specifications to read:

**"1076.04 Electric Cable -- Signal, Lead-in, Communication, Service, and Equipment Grounding Conductor."**

Add the following paragraph to the end of Article 1076.04 of the Standard Specifications:

"(e) Equipment Grounding Conductor. The cross linked polyethylene (XLP) insulated conductor shall be according to Articles 1066.02 and 1066.03. The stranded copper conductor shall be No. 6 AWG and the insulation color shall be green."

80161

**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 **5**. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather 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

**UNINTERRUPTABLE POWER SUPPLY (UPS) (BDE)**

Effective: April 1, 2006

Revised: January 1, 2007

Add the following paragraph to the end of Article 801.14 of the Standard Specifications:

"The warranty for an uninterruptable power supply (UPS) shall cover a minimum of two years from date the equipment is placed in operation; however, the batteries of the UPS shall be warranted for full replacement for a minimum of five years."

Add the following Section to the Standard Specifications:

**"SECTION 862. UNINTERRUPTABLE POWER SUPPLY (UPS)**

**862.01 Description.** This work shall consist of furnishing and installing an uninterruptable power supply (UPS).

**862.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Uninterruptable Power Supply .....	1074.04

**CONSTRUCTION REQUIREMENTS**

**862.03 General.** The UPS shall provide power for full run-time operation for an "LED-only" intersection (all colors red, yellow, and green) or flashing mode operation for an intersection using red LED's. A UPS that provides a minimum of two hours of full run-time operation will be designated as "standard". A UPS that provides a minimum of six hours of full run-time operation will be designated as "extended".

The UPS shall include, but not be limited to the following: inverter/charger, power transfer relay, batteries, a separate manually operated non-electronic bypass switch, and all necessary hardware and interconnect wiring according to the plans. The UPS shall provide reliable emergency power to the traffic signals in the event of a power failure or interruption. The transfer from utility power to battery power and visa versa shall not interfere with the normal operation of traffic controller, conflict monitor/malfunction management unit, or any other peripheral devices within the traffic controller assembly.

The UPS shall be designed for outdoor applications, and shall meet the environmental requirements of, "NEMA Standards Publication No. TS 2 – Traffic Controller Assemblies", except as modified herein.

**862.04 Installation.** When a UPS is installed at an existing traffic signal cabinet, the UPS cabinet shall partially rest on the lip of the existing controller cabinet foundation and be secured

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to the existing controller cabinet by means of at least four bolts. The UPS cabinet shall include a bottom constructed of the same material as the cabinet.

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

**862.05 Basis of Payment.** This work will be paid for at the contract unit price per each for UNINTERRUPTABLE POWER SUPPLY, STANDARD or UNINTERRUPTABLE POWER SUPPLY, EXTENDED."

Add the following article to Section 1074 of the Standard Specifications:

**"1074.04 Uninterruptable Power Supply (UPS).**

(a) Operation.

- (1) The UPS shall be line interactive and provide voltage regulation and power conditioning when utilizing utility power.

The UPS shall be sized appropriately for the intersection load. The total system load shall not exceed the manufacturer's specifications.

A standard UPS shall provide a minimum of two hours full run-time operation for LED signal modules load at 77 °F (25 °C) (minimum 700 W/1000 VA active output capacity, with 80 percent minimum inverter efficiency). An extended UPS shall provide a minimum of six hours full run-time operation for the same conditions.

- (2) The maximum transfer time from loss of utility power to switchover to battery backed inverter power shall be 65 milliseconds.
- (3) The UPS shall have four sets of normally open (NO) and normally closed (NC) single-pole double-throw (SPDT) relay contact closures, available on a panel-mounted terminal block, rated at a minimum 120 V/1 A, and labeled so as to identify each contact according to the plans.
  - a. The first set of NO and NC contact closures shall be energized whenever the unit switches to battery power. Contact shall be labeled or marked "On Batt".
  - b. The second set of NO and NC contact closures shall be energized whenever the battery approaches approximately 40 percent of remaining useful capacity. Contact shall be labeled or marked "Low Batt".
  - c. The third set of NO and NC contact closures shall be energized two hours after the unit switches to battery power. Contact shall be labeled or marked "Timer".

- d. The fourth set of NO and NC contact closures shall be energized in the event of inverter/charger failure. Contact shall be labeled or marked "UPS Fail".
- (4) Operating temperature for the inverter/charger, power transfer relay, and manual bypass switch shall be -35 to 165 °F (-37 to +74 °C).
  - (5) Both the power transfer relay and manual bypass switch shall be rated at 240 VAC/30 amps, minimum.
  - (6) The UPS shall use a temperature-compensated battery charging system. The charging system shall compensate over a range of 1.4 – 2.2 mV/°F (2.5 - 4.0 mV/°C) per cell. The temperature sensor shall be external to the inverter/charger unit. The temperature sensor shall come with 6.5 ft (2 m) of wire.
  - (7) Batteries shall not be recharged when battery temperature exceeds 122 °F ± 5 °F (50 °C ± 3 °C).
  - (8) The UPS shall bypass the utility line power whenever the utility line voltage is outside of the following voltage range: 100 VAC to 130 VAC (± 2 VAC).
  - (9) When utilizing battery power, the UPS output voltage shall be between 110 and 125 VAC, pure sine wave output, ≤ 3 percent THD, 60 Hz ± 3 Hz.
  - (10) The UPS shall be compatible with the Department's traffic controller assemblies utilizing NEMA TS 1 or NEMA TS 2 controllers and cabinet components for full time operation.
  - (11) When the utility line power has been restored at above 105 VAC ± 2 VAC for more than 30 seconds, the UPS shall dropout of battery backup mode and return to utility line mode.
  - (12) When the utility line power has been restored at below 125 VAC ± 2 VAC for more than 30 seconds, the UPS shall dropout of battery backup mode and return to utility line mode.
  - (13) The UPS shall be equipped to prevent a malfunction feedback to the cabinet or from feeding back to the utility service.
  - (14) In the event of inverter/charger failure, the power transfer relay shall revert to the NC state, where utility line power is reconnected to the cabinet. In the event of an UPS fault condition, the UPS shall always revert back to utility line power.
  - (15) Recharge time for the battery, from "protective low-cutoff" to 80 percent or more of full battery charge capacity, shall not exceed twenty hours.

- (16) The manual bypass switch shall be wired to provide power to the UPS when the switch is set to manual bypass.
- (17) When the intersection is in battery backup mode, the UPS shall bypass all internal cabinet lights, ventilation fans, and service receptacles.
- (18) As the battery reserve capacity reaches 50 percent, the intersection shall automatically be placed in all-red flash. The UPS shall allow the controller to automatically resume normal operation after the power has been restored. The UPS shall log an alarm in the controller for each time it is activated.
- (19) A blue LED indicator light shall be mounted on the front of the traffic signal cabinet or on the side of the UPS cabinet facing traffic and shall turn on to indicate when the cabinet power has been disrupted and the UPS is in operation. The light shall be a minimum 1 in. (25 mm) diameter, be viewable from the driving lanes, and able to be seen from 200 ft (60 m) away.
- (20) All 24 volt and 48 volt systems shall include an external component that monitors battery charging to ensure that every battery in the string is fully charged. The device shall compensate for the effects of adding a new battery to an existing battery system by ensuring that the charge voltage is spread equally across all batteries.

(b) Mounting/Configuration.

(1) General.

- a. The inverter/charger unit shall be rack or shelf-mounted.
- b. All interconnect wiring provided between the power transfer relay, manual bypass switch, and cabinet terminal service block shall be at least 6.5 ft (2 m) of #10 AWG wire.
- c. Relay contact wiring provided for each set of NO/NC relay contact closure terminals shall be 6.5 ft (2 m) of #18 AWG wire.
- d. To ensure interchangeability between all UPS manufacturers, the UPS power transfer relay and manual bypass switch shall be interconnected with Type IV or Type V NEMA cabinets as shown on the plans.

(2) Battery Cabinet.

- a. The inverter/charger and power transfer relay shall be installed inside the external battery cabinet and the manually bypass switch shall be installed inside the traffic signal cabinet.

- b. Batteries shall be housed in a separate NEMA Standard TS 2 rated Type II cabinet. This external battery cabinet shall be according to Article 1074.03 for the construction and finish of the cabinet.
- c. No more than two batteries shall be mounted on individual shelves for a cabinet housing four batteries and no more than four batteries per shelf for a cabinet housing eight batteries.
- d. A minimum of three shelves shall be provided. Each shelf shall support a load of 132 lb (60 kg) minimum for dual batteries.
- e. The battery cabinets housing four batteries shall have nominal outside dimensions according to a NEMA Type II cabinet; or alternatively, a width of 14 in. (355 mm), a depth of 9 in. (230 mm), and a height of 45 to 55 in. (1.14 to 1.4 m). The battery cabinets housing eight batteries shall have nominal outside dimensions according to a NEMA Type III cabinet; or alternatively, a width of 28 in. (710 mm), a depth of 9 in. (230 mm), and a height of 45 to 55 in. (1.14 to 1.4 m). Clearance between shelves shall be a minimum of 10 in. (250 mm).
- f. The battery cabinet shall be ventilated through the use of louvered vents, filters, and one thermostatically controlled fan as per NEMA TS 2 specifications. The cabinet fan shall not be energized when the traffic signals are on UPS power.
- g. The battery cabinet shall have a door opening to the entire cabinet. The door shall be attached to the cabinet through the use of a continuous stainless steel or aluminum piano hinge. The cabinet shall be provided with a main door lock which shall operate with a traffic industry conventional No. 2 key. Provisions for padlocking the door shall be provided.
- h. The UPS with battery cabinet shall come with all bolts, conduits and bushings, gaskets, shelves, and hardware needed for mounting.
- i. A warning sticker shall be placed on the outside of the cabinet indicating that there is an uninterruptable power supply inside the cabinet.

(c) Maintenance, Displays, Controls, and Diagnostics.

- (1) The UPS shall include a display and/or meter to indicate current battery charge status and conditions.
- (2) The UPS shall have lightning surge protection compliant with IEEE/ANSI C.62.41.
- (3) The UPS shall be equipped with an integral system to prevent battery from destructive discharge and overcharge.

- (4) The UPS hardware and batteries shall be easily replaced without requiring any special tools or devices.
- (5) The UPS shall include a resettable front-panel event counter display to indicate the number of times the UPS was activated and a front-panel hour meter to display the total number of hours the unit has operated on battery power.
- (6) The UPS shall be equipped with an RS-232 port.
- (7) The manufacturer shall include two sets of equipment lists, operation and maintenance manuals, board-level schematic and wiring diagrams of the UPS, and battery data sheets. The manufacturer shall include any software needed to monitor, diagnose, and operate the UPS. The manufacturer shall include any required cables to connect the UPS to a laptop computer.

(d) Battery System.

- (1) Individual batteries shall be 12 V type, 65 amp-hour minimum capacity at 20 hours, and shall be easily replaced and commercially available off the shelf.
- (2) Batteries used for the UPS shall consist of four to eight batteries with a cumulative minimum rated capacity of 240 amp-hours.
- (3) Batteries shall be premium gel cell, deep cycle, completely sealed, prismatic lead-calcium based, silver alloy, valve regulated lead acid (VRLA) requiring no maintenance.
- (4) Batteries shall be certified by the manufacturer to operate over a temperature range of -13 to 160 °F (-25 to + 71 °C).
- (5) The batteries shall be provided with appropriate interconnect wiring and corrosion-resistant mounting trays and/or brackets appropriate for the cabinet into which they will be installed.
- (6) Batteries shall indicate maximum recharge data and recharging cycles.
- (7) Battery interconnect wiring shall be via a modular harness. Batteries shall be shipped with positive and negative terminals pre-wired with red and black cabling that terminates into a typical power-pole style connector. The harness shall be equipped with mating power-pole style connectors for the batteries and a single, insulated plug-in style connection to the inverter/charger unit. The harness shall allow batteries to be quickly and easily connected in any order and shall be keyed and wired to ensure proper polarity and circuit configuration.
- (8) Battery terminals shall be covered and insulated so as to prevent accidental shorting."

**WATER BLASTER WITH VACUUM RECOVERY (BDE)**

Effective: April 1, 2006

Revised: January 1, 2007

Add the following to Article 783.02 of the Standard Specifications.

“(c) Water Blaster with Vacuum Recovery ..... 1101.12”

Revise Article 1101.12 of the Standard Specifications to read.

“**1101.12 Water Blaster with Vacuum Recovery.** The water blaster shall remove the stripe from the pavement using a high pressurized water spray with a vacuum recovery system to provide a clean, almost dry surface, without the use of a secondary cleanup process. The removal shall be to the satisfaction of the Engineer. The equipment shall contain a storage system that allows for the storage of the wastewater while retaining the debris. The operator shall be in immediate control of the blast head.”

80163

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 190 working days.

80071

**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**

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above

agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any

evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to

the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or quailifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

### III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

### IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

#### 1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the

contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

## 2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or

disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

## 3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

## 4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

### a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not

be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits

Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall, upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

**V. STATEMENTS AND PAYROLLS**

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan

or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period).

The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V.

This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all 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

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"Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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### **Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
- d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### **2. Instructions for Certification - Lower Tier Covered Transactions:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- e. The prospective lower 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.

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**Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier Covered Transactions:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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**XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**MINIMUM WAGES FOR FEDERAL AND FEDERALLY  
ASSISTED CONSTRUCTION CONTRACTS**

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

**NOTICE**

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <http://www.dot.state.il.us/desenv/delett.html>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <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.