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

#### **PREQUALIFICATION**

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

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

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

#### WHO CAN BID?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

**BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAI** 

See instructions inside front cover)

Proposal Submitted By		
Name		
Address		
City		

#### Letting March 9, 2007

#### NOTICE TO PROSPECTIVE BIDDERS

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

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



Springfield, Illinois 62764

Contract No. 91355 **VERMILION County** Section 05-00154-00-BR Routes FAU 7060 / FAS 507 (Webster Street) Project M-5016(33) **District 5 Construction Funds** 

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

Prepared by

Checked by

#### **INSTRUCTIONS**

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

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

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

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

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

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

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

Call

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

**Questions Regarding** 

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



#### **PROPOSAL**

#### TO THE DEPARTMENT OF TRANSPORTATION

Project M-5016(33)

**District 5 Construction Funds** 

1. Prop	osal of
	r Identification Number (Mandatory) e improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 91355 VERMILION County Section 05-00154-00-BR

Routes FAU 7060 / FAS 507 (Webster Street)

Project consists of realigning the existing roadway with a raised profile and removal of an existing concrete culvert and replacing it with a single-span precast, prestressed concrete deck beam bridge (27" depth) supported on steel H piles and all other work to complete the project on FAS Route 507/FAU Route 7060 (Webster Street) at the drainage structure over Butler Branch at the north edge of Catlin.

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

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

<u> </u>	Amount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount c	of Bid	Proposal <u>Guaranty</u>
Up to		\$5,000	\$150	\$2,000,000	to	\$3,000,000	\$100,000
\$5,000	to	\$10,000	\$300	\$3,000,000	to	\$5,000,000	\$150,000
\$10,000	to	\$50,000	\$1,000	\$5,000,000	to	\$7,500,000	\$250,000
\$50,000	to	\$100,000	\$3,000	\$7,500,000	to	\$10,000,000	\$400,000
\$100,000	to	\$150,000	\$5,000	\$10,000,000	to	\$15,000,000	\$500,000
\$150,000	to	\$250,000	\$7,500	\$15,000,000	to	\$20,000,000	\$600,000
\$250,000	to	\$500,000	\$12,500	\$20,000,000	to	\$25,000,000	\$700,000
\$500,000	to	\$1,000,000	\$25,000	\$25,000,000	to	\$30,000,000	\$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 i	s 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 dama	ages due to delay and other cause	es suffered by the State because of the
failure to execute said contract and contract bond; otherwise, the bid bond sha	all become void or the proposal g	uaranty check shall be returned to the
undersigned		·

Attach Cashier's Check or Cert	ified Check Here
In the event that one proposal guaranty check is intended to cover two or more proposit the proposal guaranties which would be required for each individual proposal. If the state below where it may be found.	
The proposal guaranty check will be found in the proposal for:	n
Section No.	
County	·

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

BD 354 (Rev. 11/2001)

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

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

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

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

Combination		Combination Bid	
No.	Sections Included in Combination	Dollars 0	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.

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 01/19/07 RUN TIME - 205454 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 91355

STATE JOB #- C-95-301-06 PPS NBR - 5-10206-0000

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IN NUMBER	UNIT OF MEASURE	EACH	SQ YD	co YD	SQ FT	SQ FT	SQ FT	WNS 7	LINO	WINS T	EACH		FOOT	LINN	TIND	ACRE
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0400800	FURNISHED EXCAV	CN YD	41.00		† 1 1
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25000200	SEEDING CL 2	ACRE			
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25000500	PHOSPHORUS FERT NUTR	POUND			1 1 1
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PAY ITEM DESCRIPTION	60605000 COMB CC&G TB6.24		PERMS	1 1	SHORT	PAINT PVT MK LIN	78001180 PAINT PVT MK LINE 24
NUMBER	60605000	66502300	66700205	67100100	70300100	78001110	78001180

# 1. EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE,

NOTE:

A DISCREPANCY BETWEEN THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY. 2

TOTAL

- IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE. . ო
- A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN. 4.

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

#### I. GENERAL

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

#### **II. ASSURANCES**

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

#### B. Felons

1. The Illinois Procurement Code provides:

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

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

#### C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

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

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

#### D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

#### E. Inducements

1. The Illinois Procurement Code provides:

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

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

#### F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

#### G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

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

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

#### H. Confidentiality

1. The Illinois Procurement Code provides:

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

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

#### I. Insider Information

1. The Illinois Procurement Act provides:

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

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

#### **III. CERTIFICATIONS**

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

#### B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

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

#### C. Educational Loan

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

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

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

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

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

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

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

#### E. International Anti-Boycott

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

#### F. Drug Free Workplace

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

#### G. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

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

1. The Illinois Procurement Code provides:

Section 50-60(c).

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

#### I. ADDENDA

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

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

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

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

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

NA - FEDERAL	

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

#### TO BE RETURNED WITH BID

#### **IV. DISCLOSURES**

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

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

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

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

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

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

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

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

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

#### **CERTIFICATION STATEMENT**

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

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

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

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than \$90,420.00? YES NO
3.	Does anyone in your organization receive more than \$90,420.00 of the bidding entity's or parent entity's distributive income? (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.) YES NO
4.	Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than \$90,420.00? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per bid</u> even if a specific individual would require a yes answer to more than one question.)
bidding e authorize	answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or the 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 sed to execute contracts for your organization. <b>Photocopied or stamped signatures are not acceptable</b> . The person signing can be, but have to be, the person for which the form is being completed. The bidder is responsible for the accuracy of any information provided.
	swer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> on page 2 of Form A must be signed and dated by that is authorized to execute contracts for your company.
bidding e	Identifying Other Contracts & Procurement Related Information  Disclosure Form B must be completed for each bid submitted by the must be signed by an individual who is authorized to execute contracts for the bidding entity. Note: Signing the NOT ABLE STATEMENT on Form A does not allow the bidder to ignore Form B. Form B must be completed, signed and dated or the bidder considered nonresponsive and the bid will not be accepted.
ongoing	er shall identify, by checking Yes or No on Form B, whether it has any pending contracts (including leases), bids, proposals, or other procurement relationship with any other (non-IDOT) State of Illinois agency. If "No" is checked, the bidder only needs to complete the box on the bottom of Form B. If "Yes" is checked, the bidder must do one of the following:
agency p attached and are r	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 pending contracts, leases, bids, proposals, and other ongoing procurement relationships. These items may be listed on Form B or on an sheet(s). Do not include IDOT contracts. Contracts with cities, counties, villages, etc. are not considered State of Illinois agency contracts not to be included. Contracts with other State of Illinois agencies such as the Department of Natural Resources or the Capital Development ust be included. Bidders who submit Affidavits of Availability are suggested to use Option II.
"See Affi	If the bidder is required and has submitted an Affidavit of Availability in order to obtain authorization to bid, the bidder may write or type davit of Availability" which indicates that the Affidavit of Availability is incorporated by reference and includes all non-IDOT State of Illinois ending contracts, leases, bids, proposals, and other ongoing procurement relationships. For any contracts that are not covered by the of Availability, the bidder must identify them on Form B or on an attached sheet(s). These might be such things as leases.
Bidders	Submitting More Than One Bid
	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. Indicate in the space provided below the bid item that contains the original disclosure forms and the bid items which incorporate the forms note.
	te bid submitted for letting item contains the Form A disclosures or Certification Statement and the Form B sclosures. The following letting items incorporate the said forms by reference:

## 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 the LCS 500). Vendors desiring to enter into a potential conflict of interest information as solublicly available contract file. This Form a contracts. A publicly traded company matche requirements set forth in Form A. See 1990	a contract with the State of Illinois specified in this Disclosure Form. A must be completed for bids in e y submit a 10K disclosure (or ee Disclosure Form Instructions.	must disclose the financial information and This information shall become part of the excess of \$10,000, and for all open-ended quivalent if applicable) in satisfaction of
DISCLO	OSURE OF FINANCIAL INFORM	IATION
	nare in excess of 5%, or an interest . (Make copies of this form as ned e requirements)	interest in the BIDDER (or its parent) in which has a value of more than \$90,420.00 cessary and attach a separate Disclosure
NAME:		
ADDRESS		
Type of ownership/distributable incom	ne share:	
stock sole proprietorship % or \$ value of ownership/distributable in		other: (explain on separate sheet):
2. Disclosure of Potential Conflicts of In potential conflict of interest relationships ap describe.		
(a) State employment, currently or in t	he previous 3 years, including cont	ractual employment of services. YesNo
If your answer is yes, please answ	er each of the following questions.	
<ol> <li>Are you currently an office Highway Authority?</li> </ol>	r or employee of either the Capitol	Development Board or the Illinois Toll YesNo
currently appointed to or e exceeds \$90,420.00, (60°	ed to or employed by any agency mployed by any agency of the State of the Governor's salary as of 7/employed and your annual salary.	e of Illinois, and your annual salary

3.	If you are currently appointed to or employed by any ager salary exceeds \$90,420.00, (60% of the Governor's salar (i) more than 7 1/2% of the total distributable income corporation, or (ii) an amount in excess of the salary of the	ry as of 7/1/01) are you entitled to receive of your firm, partnership, association or
4.	If you are currently appointed to or employed by any ager salary exceeds \$90,420.00, (60% of the Governor's salar or minor children entitled to receive (i) more than 15% in a of your firm, partnership, association or corporation, or (ii salary of the Governor?	ry as of 7/1/01) are you and your spouse aggregate of the total distributable income
` '	employment of spouse, father, mother, son, or daughter, inc previous 2 years.	cluding contractual employment for services
	answer is yes, please answer each of the following questio	YesNo ns.
1.	Is your spouse or any minor children currently an officer or Board or the Illinois Toll Highway Authority?	employee of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to of Illinois? If your spouse or minor children is/are currently agency of the State of Illinois, and his/her annual salary of Governor's salary as of 7/1/01) provide the name of the spof the State agency for which he/she is employed and his/h	y appointed to or employed by any exceeds \$90,420.00, (60% of the pouse and/or minor children, the name
3.	If your spouse or any minor children is/are currently appoir State of Illinois, and his/her annual salary exceeds \$90,42 as of 7/1/01) are you entitled to receive (i) more than 71/29 firm, partnership, association or corporation, or (ii) an a Governor?	0.00, (60% of the salary of the Governor % of the total distributable income of your
4.	If your spouse or any minor children are currently appointed State of Illinois, and his/her annual salary exceeds \$90,420 7/1/01) are you and your spouse or any minor children entiaggregate of the total distributable income from your firm, p (ii) an amount in excess of 2 times the salary of the Govern	.00, (60% of the Governor's salary as of itled to receive (i) more than 15% in the eartnership, association or corporation, or or?
		Yes No
unit of l	e status; the holding of elective office of the State of Illinois, local government authorized by the Constitution of the State currently or in the previous 3 years.	
` '	nship to anyone holding elective office currently or in the production daughter.	evious 2 years; spouse, father, mother, YesNo
Americ of the S	tive office; the holding of any appointive government office of a, or any unit of local government authorized by the Constitute of Illinois, which office entitles the holder to compensate charge of that office currently or in the previous 3 years.	ution of the State of Illinois or the statues
` '	nship to anyone holding appointive office currently or in the laughter.	previous 2 years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any reg	istered lobbyist of the State government. YesNo

(h) Relationship to a son, or daughter.	nyone who is or was a registered lobbyist in the previous 2 years; s Yes _	spouse, father, mother, No
committee registe	red with the Secretary of State or any county clerk of the State of I registered with either the Secretary of State or the Federal Board of Yes _	llinois, or any political
last 2 years by any county clerk of the	nyone; spouse, father, mother, son, or daughter; who was a compey registered election or re-election committee registered with the See State of Illinois, or any political action committee registered with real Board of Elections.  Yes _	ecretary of State or any
	APPLICABLE STATEMENT	
This Disclosure Fo	rm A is submitted on behalf of the INDIVIDUAL named on prev	ious page.
Completed by:		
	Name of Authorized Representative (type or print)	
Completed by:		
•	Title of Authorized Representative (type or print)	
Completed by:		
•	Signature of Individual or Authorized Representative	Date
	NOT APPLICABLE STATEMENT	
	that no individuals associated with this organization meet the tion of this Form A.	criteria that would
This Disclosure Fo	rm A is submitted on behalf of the CONTRACTOR listed on the	e previous page.
	Name of Authorized Representative (type or print)	
	Title of Authorized Representative (type or print)	
	Signature of Authorized Representative	Date

## ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Procurement Related Information Disclosure

		Disclosure	
Contractor Name			
Legal Address			
City, State, Zip		_	
Telephone Number	Email Address	Fax Number (if available)	
,		, , ,	
	tion contained in this Form is required by the		
·	information shall become part of the publicly		
be completed for bids in $\epsilon$	excess of \$10,000, and for all open-ended co	intracts.	
DISCLOS	SURE OF OTHER CONTRACTS AND PRO	CUREMENT RELATED INFORMATION	
has any pending contra- any other State of Illinoi	ontracts & Procurement Related Informaticts (including leases), bids, proposals, or othes agency:  Yes No bidder only needs to complete the signature	er ongoing procurement relationship with	
	<ul> <li>Identify each such relationship by showing sor project number (attach additional pages a</li> </ul>		
	THE FOLLOWING STATEMENT	MUST BE SIGNED	
	Name of Authorized Representativ	e (type or print)	
	Title of Authorized Representative	(type or print)	
	Signature of Authorized Repr	esentative Date	_

#### **SPECIAL NOTICE TO CONTRACTORS**

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

#### **CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION**

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



Contract No. 91355
VERMILION County
Section 05-00154-00-BR
Project M-5016(33)
Routes FAU 7060 / FAS 507 (Webster Street)
District 5 Construction Funds

PART I. IDENTIFIC	ATION																	
Dept. Human Rights	s #						_ Du	ration o	of Proj	ect: _								
Name of Bidder:																_		
PART II. WORKFO A. The undersigned which this contract wor projection including a p	bidder hark is to be	as analyz perform for mino	ed mir ed, an rity an	d for the d fema TAI	ne locati ale empl BLE A	ons fro	m which tilization	ch the b on in all	idder re	cruits	employe	es, and h	ereb	y subm e alloca	its the follo ted to this TABLE	owin cont	g workfo tract:	rce
		TOTA	AL Wo	rkforce	Project	tion for	Contra	act						(	CURRENT			ES
				MIN	ORITY E	EMPLO	YEES			TRA	AINEES				TO BE		-	
JOB CATEGORIES	EMPLO	TAL OYEES	AL			HISPANIC		*OTHER MINOR.		APPREN- TICES		HE JOB INEES		TOTAL EMPLOYEES		MINORITY EMPLOYEE		OYEES
OFFICIALS (MANAGERS)	M	F	M	F	M	F	M	F	M	F	M	F		M	F		M	F
SUPERVISORS																		
FOREMEN																		
CLERICAL EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED LABORERS,																		
UNSKILLED																		
TOTAL													]					
<del>-</del>		BLE C		. ( 0					<b>-</b>		F	OR DEP	AR	ГМЕПТ	USE ON	<b>ILY</b>		$\neg$
EMPLOYEES		aining Pro TAL	ojectio	n for C	ontract		*0	THER										
IN	_	OYEES	BL	ACK	HISP	ANIC	_	NOR.										
TRAINING	M	F	M	F	M	F	M	F	1									
APPRENTICES	-					Ė	T	1	1									

ON THE JOB TRAINEES

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

Note: See instructions on the next page

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

Contract No. 91355
VERMILION County
Section 05-00154-00-BR
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Routes FAU 7060 / FAS 507 (Webster Street)
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#### PART II. WORKFORCE PROJECTION - continued

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

#### **ADDITIONAL FEDERAL REQUIREMENTS**

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

CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:

YES \_\_\_\_\_ NO \_\_\_\_

B.

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.

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?

Contract No. 91355
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#### PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
(IF A CO-PARTNERSHIP)		
(,		
		Name and Address of All Members of the Firm:
	Corporate Name	
	Ву	
(IF A CORPORATION)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Attest	
(IF A JOINT VENTURE, USE THIS SECTION		Signature
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
,		
	Cornerate Name	
(IF A JOINT VENTURE)	Ву	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	nlagge attach an addit	ional signature shoot



#### Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

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

#### PROPOSAL ENVELOPE



### **PROPOSALS**

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

Item No.	Item No.	Item No.

#### Submitted By:

Name:	
Address:	
Phone No.	

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

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

#### **NOTICE**

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

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

#### **NOTICE**

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

Contract No. 91355
VERMILION County
Section 05-00154-00-BR
Project M-5016(33)
Routes FAU 7060 / FAS 507 (Webster Street)
District 5 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., March 9, 2007. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 91355
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Project consists of realigning the existing roadway with a raised profile and removal of an existing concrete culvert and replacing it with a single-span precast, prestressed concrete deck beam bridge (27" depth) supported on steel H piles and all other work to complete the project on FAS Route 507/FAU Route 7060 (Webster Street) at the drainage structure over Butler Branch at the north edge of Catlin.

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

By Order of the Illinois Department of Transportation

Timothy W. Martin, Secretary

BD 351 (Rev. 01/2003)

# INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted January 1, 2007

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

#### SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

#### RECURRING SPECIAL PROVISIONS

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

CHECK		<u>E NO.</u>
1 X	Additional State Requirements For Federal-Aid Construction Contracts	
	(Eff. 2-1-69) (Rev. 1-1-07)	1
2 X	Subletting of Contracts (Federal-Aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	3
3 X	EEO (Eff. 7-21-78) (Rev. 11-18-80)	4
4	Specific Equal Employment Opportunity Responsibilities	
	Non Federal-Aid Contracts (Eff. 3-20-69) (Rev. 1-1-94)	14
5	Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 1-1-07)	
6	Reserved	24
7 X	National Pollutant Discharge Elimination System Permit (Eff. 7-1-94) (Rev. 1-1-03)	25
	Haul Road Stream Crossings, Other Temporary Stream Crossings, and	
	In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98)	26
9	Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-07)	27
	Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-07)	
11	Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-07)	33
12	Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 1-1-07)	35
13	Hot-Mix Asphalt Surface Removal (Cold Milling) (Eff. 11-1-87) (Rev. 1-1-07)	
14	Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-07)	41
15	PCC Partial Depth Hot-Mix Asphalt Patching (Eff. 1-1-98) (Rev. 1-1-07)	42
16	Patching with Hot-Mix Asphalt Overlay Removal (Eff. 10-1-95) (Rev. 1-1-07)	44
17	Polymer Concrete (Eff. 8-1-95) (Rev. 3-1-05)	
18	PVC Pipeliner (Eff. 4-1-04) (Rev. 1-1-07)	
19	Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-07)	48
20	Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-97)	40
	Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-07)	53
21	Temporary Modular Glare Screen System (Eff. 1-1-00) (Rev. 1-1-07)	55 55
22 23	Temporary Portable Bridge Traffic Signals (Eff. 8-1-03) (Rev. 1-1-07)	57
	Work Zone Public Information Signs (Eff. 9-1-02) (Rev. 1-1-07)	
24	VVOIK ZONE PUDNIC INIOINIARION SIGNIS (EII. 9-1-02) (Nev. 1-1-07)	60
25	Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	61
26	English Substitution of Metric Bolts (Eff. 7-1-96)	60
27		
28	Calcium Chloride Accelerator for Portland Cement Concrete (Eff. 1-1-01)	03
29	Quality Control of Concrete Mixtures at the Plant-Single A (Eff. 8-1-00) (Rev. 1-1-04)	70
30	Quality Control of Concrete Mixtures at the Plant-Double A (Eff. 8-1-00) (Rev. 1-1-04)	70
31	Quality Control/Quality Assurance of Concrete Mixtures (Eff. 4-1-92) (Rev. 1-1-07)	78
LRS 1	Reserved	91
LRS 2	Furnished Excavation (Eff. 1-1-99) (Rev. 1-1-07)	
LRS 3	Work Zone Traffic Control (Eff. 1-1-99) (Rev. 1-1-07)	
LRS 4	☐ Flaggers in Work Zones (Eff. 1-1-99) (Rev 1-1-07)	94
LRS 5	Contract Claims (Eff. 1-1-02) (Rev. 1-1-07)	95
LRS 6	Bidding Requirements and Conditions for Contract Proposals (Eff. 1-1-02)	96
LRS 7	Bidding Requirements and Conditions for Material Proposals (Eff. 1-1-02) (Rev. 1-1-03)	102
LRS 8	Failure to Complete the Work on Time (Eff. 1-1-99)	108
LRS 9	☐ Bituminous Surface Treatments (Eff. 1-1-99)	
LRS 10	Reflective Sheeting Type C (Eff. 1-1-99) (Rev. 1-1-02)	
LRS 11	Employment Practices (Eff. 1-1-99)	111
LRS 12	Wages of Employees on Public Works (Eff. 1-1-99) (Rev. 1-1-06)	
LRS 13	Selection of Labor (Eff. 1-1-99)	
LRS 14	Paving Brick and Concrete Paver Pavements and Sidewalks (Eff. 1-1-04) (Rev. 1-1-07)	115
LRS 15	Partial Payments (Eff. 1-1-07)	118
	• • •	



#### **Special Provisions**

#### **Webster Street Improvement Project**

FAS 507 over unnamed tributary to Butler Branch of Vermilion River Village of Catlin Vermilion County, IL Sec. 05-00154-00-BR

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# INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

	LR#	Title (Effective Date) (Revision Date).	Page #
LR SD 12	<u> </u>	Title (Effective Date) (Revision Date).  "Slab Movement Detection Device" (Eff. 11-1-84) (Rev. 1-1-07)	
LR SD 12		"Required Cold Milled Surface Texture" (Eff. 11-1-87) (Rev. 1-1-07)	
LR SD 631		"Traffic Barrier Terminal Type 5A" (Eff. 1-1-07). Developed to keep the Traffic Barrier Terminal Type 5A as an	
LIV OD OO!		option for local agencies.	
LR 102		"Protests on Local Lettings" (Eff. 1-1-07). Developed to allow local agencies to adopt the department's	
LN 102		interested party protest procedures outlined in Title 44 of the IL Administrative Code.	
LD 405	v	"Cooperation with Utilities" (Eff 1/1/99) (Rev 1/1/07). Formerly issued as LRS 1 and was reissued as an LR	94-96
LR 105	Х	Contract Special Provision based on industry concerns discussed at the Joint Coop.	
LD 407.4	V	"Nationwide Permit No. 14" (Eff. 2-1-04) (Rev. 3-1-05). Developed to outline the necessary requirements to	97-103
LR 107-1	Х		07 100
. = 407.0		comply with No. 14 permits	
LR 107-2		"Kalifoad Protective Liability Insurance for Local Lettings" (Ell. 5-1-05) (Nev 1-1-00). Developed to require	
		insurance policies to be submitted to the letting agency rather than the department.	
LR 107-3		"Disadvantaged Business Enterprise Participation" (Eff. 1-1-07). Developed to require DBE utilization plans to	
		be submitted to the local agency.	
LR 108		"Combination Bids (Eff. 1-1-94) (Rev. 3-1-05). Developed to allow the revision of working days and calendar	
		days. Revised to incorporate applicable portions of deleted Sections 102 & 103.	
LR 109		"Contract Claims" (Eff. 1-1-02) (Rev. 5-1-02). Developed to assist local agencies in handling contract claims	
LR 212		"Shaping Roadway" (Eff. 8-1-69) (Rev. 1-1-02)	
LR 355-1		"Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix" (Eff. 10-1-73) (Rev. 1-1-07)	
LR 355-2		"Asphalt Stabilized Base Course, Plant Mix" (Eff. 2-20-63) (Rev. 1-1-07)	
LR 400		"Bituminous Treated Earth Surface (Eff. 1-1-07). Developed since Section 401 was eliminated from the 2007	
		Standard Specifications.	
LR 402		"Salt Stabilized Surface Course" (Eff. 2-20-63) (Rev. 1-1-07)	
LR 403-2		Bituminous Hot Mix Sand Seal Coat" (Eff. 8-1-69) (Rev. 1-1-07)	
LR 420		"PCC Pavement (Special)" (Eff. 5-12-64) (Rev. 1-1-07). Developed to allow local agencies to construct quality	
		PCC pavements for low volume roads.	
LR 442		"Bituminous Patching Mixtures for Maintenance Use" (Eff 1-1-04). Developed to reference approved	
		bituminous patching mixtures.	
LR 451		"Crack Filling Bituminous Pavement with Fiber-Asphalt" (Eff. 10-1-91) (Rev. 1-1-07)	
LR 503-1		"Furnishing Class SI Concrete" (Eff. 10-1-73) (Rev. 1-1-02)	
LR 503-2		"Furnishing Class SI Concrete (Short Load)" (Eff. 1-1-89) (Rev. 1-1-02). Developed to allow a load charge	
		to be added when short loads are expected during the contract	
LR 542		"Pipe Culverts, Type (Furnished)" (Eff. 9-1-64) (Rev. 1-1-07)	
LR 663		"Calcium Chloride Applied" (Eff. 6-1-58) (Rev. 1-1-07)	
LR 702	Х	"Construction and Maintenance Signs" (Eff 1-1-04) (Rev 1-1-07). Developed to require florescent orange	104
LIVIOZ	^	sheeting and a minimum sign size of 48" X 48" on construction and maintenance signs.	
LR 1004		"Coarse Aggregate for Bituminous Surface Treatment" (Eff. 1-1-02) (Rev 1-1-07). Developed to provide a	
LK 1004		coarser mix when aggregate producers have adjusted the CA-16 gradation according to the Aggregate	
		Gradation Control System (AGCS) to a finer mix for Hot-Mix Asphalt.	
1 D 4040			
LR 1013		"Rock Salt (Sodium Chloride)" (Eff. 8-1-69) (Rev. 1-1-02)	
LR 1032-1		"Penetrating Emulsions" (Eff. 1-1-07). Developed to combine Penetrating Emulsified Asphalt and Penetrating	
I D 4000 0		Emulsified Prime into a single special provision.	
LR 1032-2		"Multigrade Cold Mix Asphalt" (Eff. 1-1-07). Developed to provide the material specification for Multigrade cold	
		mix asphalt	
LR 1102		"Road Mix or Traveling Plan Mix Equipment" (Eff. 1-1-07). Developed to replace road mix and traveling plant	
		mix bituminous equipment that was eliminated from the Standard Specifications	•

# BDE SPECIAL PROVISIONS For the January 19 and March 9, 2007 Lettings

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

	<u>Pg#</u>	Special Provision Title	<u>Effective</u>	<u>Revised</u>
* 80099		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
80108		Asbestos Bearing Pad Removal	Nov. 1, 2003	
* 72541		Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt	June 1, 1989	Jan. 2, 2007
		Surface Removal		
		(NOTE: This special provision was previously named "Asbestos	ag esa, placae a sist	
		Waterproofing Membrane and Asbestos Bituminous Concrete Surface	grigitästä kati 200.	
		Removal"))		
* 50261		Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
* 50481	ruzw.	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
* 50491		Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	Jan. 1, 2007
* 50531		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	Jan. 1, 2007
<ul> <li>30 (40) (20) (20) (31) (32) (32) (32)</li> </ul>	105 X		Jan. 1, 2007	
1 (1) 2 (4) 10 (5) 53 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	108 X		Sept. 1, 2000	Jan. 1, 2007
* 80167			Jan. 1, 2007	
1 1 542 1 1 2 2 4 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	116 X		Jan. 1, 2007	a or single colors at the
* 80169		High Tension Cable Median Barrier	Jan. 1, 2007	
The state of the s	118 X	<del>and the west of the first of t</del>	Jan. 1, 2005	Jan. 1, 2007
		(NOTE: This special provision was previously named "Bituminous		
		Equipment, Spreading and Finishing Machine".)		German en S
* 80136		Hot-Mix Asphalt Mixture IL-4.75	Nov. 1, 2004	Jan. 1, 2007
		(NOTE: This special provision was previously named "Superpave		
		Bituminous Concrete Mixture IL-4.75".)		
* 80109		Impact Attenuators	Nov. 1, 2003	Jan. 1, 2007
* 80110		Impact Attenuators, Temporary	Nov. 1, 2003	Jan. 1, 2007
* 80045	3 614 3 100	Material Transfer Device	June 15, 1999	Jan. 1, 2007
* 80165	sila e di <del>radi</del>	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2007
80082		Multilane Pavement Patching	Nov. 1, 2002	THAMBUMEARMR
* 80129	4 (4 0 0	Notched Wedge Longitudinal Joint	July 1, 2004	Jan. 1, 2007
* 80069			Nov. 1, 2001	Jan. 1, 2007
Later Charles . Printer Constitution with the Constitution of the	119 X		June 1, 2000	Jan. 1, 2006
80148	119 -	Planting Woody Plants	Jan. 1, 2006	Jan. 1, 2000
AND RESIDENCE OF THE CONTRACT MEDICAL PROPERTY OF THE PROPERTY		Plastic Blockouts for Guardrail	Nov. 1, 2004	Jan. 1, 2007
* 80134 * 80110		CONTRACTOR OF THE CONTRACTOR OF THE PROPERTY O	April 1, 2004	Jan. 1, 2007
00110		Polyurea Pavement Marking	Jan 1, 2007	Jan. 1, 2007
* 80170		Portland Cement Concrete Plants	COLUMN TO THE PROPERTY OF THE REST OF THE PROPERTY OF THE PARTY OF THE	
* 80171			Jan. 1, 2007	
80015	-	Public Convenience and Safety	Jan. 1, 2000	lon 1 2006
34261	ļ <del></del>	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	9 A2 1 1 1 K	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	1
<ul> <li>3 m., 140 c. 11 sept. 1.1. Same BBBBBB 100 100 100</li> </ul>	121 <u>&gt;</u>		Jan. 1, 2007	Jan. 2, 2007
* 80160		Reflective Crack Control Treatment	April 1, 2006	Jan. 1, 2007
<ul> <li>Per Yuken - Lemin Brokenberger 198</li> </ul>	126 📝		Nov. 1, 2005	Jan. 1, 2007
* 80164		Removal and Disposal of Regulated Substances	Aug. 1, 2006	Jan. 1, 2007
* 80131	128   2		July 1, 2004	Jan. 1, 2007
		(NOTE: This special provision was previously named *Seeding and		
		Sodding".)		
* 80152		Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	Jan. 1, 2007
* 80132		Self-Consolidating Concrete for Precast Products	July 1, 2004	Jan. 1, 2007

<u>File Name Pg#</u>	Special Provision Title	<u>Effective</u>	<u>Revised</u>
* 4 80127 130 X		April 2   2004   F.	
* 80153 134 X	Steel Plate Beam Guardrail.	Nov. 1, 2005 P. 1.	Jan 1, 2007
80143 135 X	Subcontractor Mobilization Payments	April 2, 2005	at v. 174 (Depositional Somethia America V.) (Depositionis (Sect.
*##80075########	Surface Testing of Pavements.	April 1;12002   11	
1 80087 136 X	Temporary Erosion Controls 1995	Nov 1 2002	Jan 1 2007
#: 480161	Traffic Signal Grounding Co. 1	April 1, 2006	Jan 11 2007
20338	Training Special Provisions	Oct. 15, 1975	
* 80154	Turf Reinforcement Mat	Nov. 1, 2005	
*.   80162   1   <u>  1   1   1   1   1   1   1   1 </u>	Unimterruptable Power Supply (UPS) 4 2:	April 1, 2006	
÷ : 80149	Variable Spaced Tining ( )	ин :: "Pr "Aug Id , 2005 Чту	
# 80163	Water Blaster with Vacuum Recovery	April 1, 2006.	Jan 1 2007
80071 137 <u>X</u>	Working Days	Jan. 1, 2002	

The following special provisions have been deleted from use:

80139 Portland Cement This special provision is now covered in a BMPR Policy Memorandum "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

80120 Precast, Prestressed Concrete Members This special provision is now in BMPR's "Manual for Fabrication of Precast Prestressed Concrete Products".

80145 Suspension of Slipformed Parapets This special provision is no longer required.

The following special provisions are either in the 2007 Standard Specifications or the 2007 Recurring Special Provisions:

File Name 80156	Special Provision Title Aggregate Shipping Tickets	New Location Articles 1003.01(f),	Effective Jan. 1, 2006	Revised
00100	Aggregate Shipping Tickets	1004.01(f) & 1005.01(d)	Jan. 1, 2000	
80128	Authority of Railroad Engineer	Article 105.02	July 1, 2004	
80065	Bituminous Base Course/Widening Superpave	Sections 355, 356, 1030 & 1102	April 1, 2002	Aug. 1, 2005
80050	Bituminous Concrete Surface Course	Article 406.13(b)	April 1, 2001	April 1, 2003
80066	Bridge Deck Construction	Sections 503, 1004, 1020 &1103	April 1, 2002	April 1, 2004
80118	Butt Joints	Article 406.08	April 1, 2004	April 1, 2005
80031	Calcium Chloride Accelerator for Portland Cement Concrete Patching	Recurring # 28	Jan. 1, 2001	
80077	Chair Supports	Article 421.04(a)	Nov. 1, 2002	Nov. 2, 2002
80051	Coarse Aggregate for Trench Backfill, Backfill and Bedding	Sections 208, 542, 550, 1003 & 1004	April 1, 2001	Nov. 1, 2003
80094	Concrete Admixtures	Article 1020.05(b) & Section 1021	Jan. 1, 2003	July 1, 2004
80112	Concrete Barrier	Section 637	Jan. 1, 2004	April 2, 2004
80102	Corrugated Metal Pipe Culverts	Articles 542.04(d), 1006.01(a)(4) & 1006.03(d)	Aug. 1, 2003	July 1, 2004
80114	Curing and Protection of Concrete Construction	Sections 503, 1020 & 1022	Jan. 1, 2004	Nov. 1, 2005
80146	Detectable Warnings	Section 424	Aug. 1, 2005	
80144	Elastomeric Bearings	Section 1083	April 1, 2005	
31578	Epoxy Coating on Reinforcement	Sections 420, 483 & 606	April 1, 1997	Jan. 1, 2003
80041	Epoxy Pavement Marking	Article 1095.04	Jan. 1, 2001	Aug. 1, 2003
80055	Erosion and Sediment Control Deficiency Deduction	Article 105.03(a)	Aug. 1, 2001	Nov. 1, 2001
80103	Expansion Joints	Article 420.05(d)	Aug. 1, 2003	

Ella Nama	Chariel Dravinian Title	New Location	Effective	Revised
File Name	Special Provision Title	Article 701.13	April 1, 2003	Jan. 1, 2006
80101	Flagger Vests		Nov. 1, 2002	Jan. 1, 2000
80079	Freeze-Thaw Rating	Article 1004.02(f)	Aug. 1, 2002	Nov. 1, 2004
80072	Furnished Excavation	Section 204		NOV. 1, 2004
80054	Hand Vibrator	Article 1103.17(a)	Nov. 1, 2003	
80147	Illuminated Sign	Sections 801, 891 & 1084	Aug. 1, 2005	
80104	Inlet Filters	Section 280 &	Aug. 1, 2003	
	I Real Constant	Article 1081.15(h)	Nov. 4, 0000	A.u. 4 0000
80080	Insertion Lining of Pipe Culverts	Section 543 &	Nov. 1, 2002	Aug. 1, 2003
		Article 1040.04	N= 4 0005	A
80150	Light Emitting Diode (LED) Pedestrian Signal Head	Sections 801, 881, & 1078	Nov. 1, 2005	April 1, 2006
80067	Light Emitting Diode (LED) Signal Head	Sections 801, 880 & 1078	April 1, 2002	Nov. 1, 2005
80081	Lime Gradation Requirements	Article 1012.03	Nov. 1, 2002	4
80133	Lime Stabilized Soil Mixture	Section 310	Nov. 1, 2004	April 1, 2006
80158	Manholes	Article 1042.10	April 1, 2006	
80137	Minimum Lane Width with Lane Closure	Article 701.06	Jan. 1, 2005	
80138	Mulching Seeded Areas	Section 251 &	Jan. 1, 2005	
		Article 1081.06(a)(4)		
80116	Partial Payments	Article 109.07	Sept. 1, 2003	
80013	Pavement and Shoulder Resurfacing	Recurring # 14	Feb. 1, 2000	July 1, 2004
53600	Pavement Thickness Determination for Payment	Articles 407.03, 407.10,	April 1, 1999	Ján. 1, 2004
		420.03, 420.15 & 421.04		
80155	Payrolls and Payroll Records	Recurring #1 & #5	Aug. 10, 2005	
80130	Personal Protective Equipment	Article 701.12	July 1, 2004	
80073	Polymer Modified Emulsified Asphalt	Article 1032.06	Nov. 1, 2002	
80124	Portable Changeable Message Signs	Articles 701.15(j),	Nov. 1, 1993	April 2, 2004
		701.20(h) & 1106.02(j)		
80083	Portland Cement Concrete	Articles 1103.01 & 1103.02	Nov. 1, 2002	
80036	Portland Cement Concrete Patching	Sections 442, 701, 1013 &	Jan. 1, 2001	Jan. 1, 2004
		1020		
419	Precast Concrete Products	Sections 540, 1020 & 1042	July 1, 1999	Nov. 1, 2004
80084	Preformed Recycled Rubber Joint Filler	Articles 503.02, 637.02 &	Nov. 1, 2002	
		1051.10	4 114 0004	A 11.4 000F
80121	PVC Pipeliner	Recurring # 18	April 1, 2004	April 1, 2005
80159	Railroad Flaggers	Article 107.12	April 1, 2006	
80122	Railroad, Full-Actuated Controller and Cabinet	Articles 857.04,	April 1, 2004	
		1073.01(c)(2) &		
		1074.03(a)(5)e.	4 0000	
80105	Raised Reflective Pavement Markers (Bridge)	Articles 781.03(a), 781.05	Aug. 1, 2003	
		& 1096.01(b)	1 . 4 .0000	A! 4 0000
80011	RAP for Use in Bituminous Concrete Mixtures	Sections 1030 & 1031	Jan. 1, 2000	
80032	Remove and Re-Erect Steel Plate Beam Guardrail	Section 633	Jan. 1, 2001	Jan. 1, 2005
	and Traffic Barrier Terminals	a .: a=a	N 4 0000	
80085	Sealing Abandoned Water Wells	Section 672	Nov. 1, 2002	
80096	Shoulder Rumble Strips	Section 642	Jan. 1, 2003	
80140	Shoulder Stabilization at Guardrail	Article 630.06	Jan. 1, 2005	A 11 4 0000
80135	Soil Modification	Section 302	•	April 1, 2006
80070	Stabilized Subbase and Bituminous Shoulders	Sections 312, 482, 1030 &	April 1, 2002	Aug. 1, 2005
	Superpave	1102	Nov. 4, 0000	
80086	Subgrade Preparation	Section 301	Nov. 1, 2002	April 1 2004
80010	Superpave Bituminous Concrete Mixtures	Sections 406, 407 & 1030	Jan. 1, 2000	
80039	Superpave Bituminous Concrete Mixtures (Low	Sections 406, 407 & 1030	Jan. 1, 2001	April 1, 2004
90000	ESAL) Tomporory Concrete Barrier	Section 704	Oct. 1, 2002	Nov. 1, 2003
80092	Temporary Concrete Barrier Temporary Module Glare Screen System	Recurring # 22	Jan. 1, 2000	1404. 1, 2000
80008	remporary injudic Glare Screen System	Recuiring # 22	Jan. 1, 2000	

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File Name	Special Provision Title	New Location	<u>Effective</u>	<u>Revised</u>
80106	Temporary Portable Bridge Traffic Signals	Recurring # 23	Aug. 1, 2003	
80098	Traffic Barrier Terminals	Section 631	Jan. 1, 2003	
57291	Traffic Control Deficiency Deduction	Article 105.03(b)	April 1, 1992	Jan. 1, 2005
80107	Transient Voltage Surge Suppression	Article 1074.03(a)(4)	Aug. 1, 2003	
80123	Truck Bed Release Agent	Article 1030.08	April 1, 2004	
80048	Weight Control Deficiency Deduction	Article 109.01	April 1, 2001	Aug. 1, 2002
80090	Work Zone Public Information Signs	Recurring # 24	Sept. 1, 2002	Jan. 1, 2005
80125	Work Zone Speed Limit Signs	Article 701.14(b)	April 2, 2004	Jan. 1, 2006
80126	Work Zone Traffic Control	Articles 701.19 & 701.20	April 2, 2004	Nov. 1, 2005
80097	Work Zone Traffic Control Devices	Section 701 &	Jan. 1, 2003	Nov. 1, 2004
		Article 1106.02	-	·

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



## **Special Provisions**

The following Special Provisions supplement the "Standard Specification for Road and Bridge Construction," Adopted January 1, 2007, the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the Supplemental Specifications and recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of the proposed improvement designated as Section 05-00154-00-BR, Vermilion County, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

## **DESCRIPTION OF WORK**

This section consists of realigning the existing roadway with a raised profile and removal of an existing concrete culvert and replacing it with a single-span precast prestressed concrete deck beam bridge-supported on steel H-piles. All related utility work, earthwork, related roadwork, and incidental work required to complete the section.

## COMPLIANCE WITH SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 13444)

This bridge replacement or rehabilitation included with this project is authorized under a Nationwide Permit, provided all terms and conditions of the Nationwide Permit and any special conditions outlined in the Corps of Engineers' verification letter are met. A copy of the permit should be included within these special provisions. If they are not, a copy of these can be requested from the Department.

The Contractor will not be allowed to complete the structure replacement or rehabilitation using any in-stream access fill, cofferdams, or causeways unless shown on the plans or unless the proper permits are acquired by the Contractor for these activities. The existing permit may be amended to include these activities once the contractor determines the plan for completion of the work and it is submitted to the Department for submission to the Corps of Engineers. The Department will not be held responsible for any delays incurred due to acquisition of additional permits or amending the existing permit. Determination of allowable methods for completion of the work under the current permit can be obtained from the Corps of Engineers.

## REMOVAL OF EXISTING STRUCTURE

The existing concrete bridge box culvert shall be removed prior to driving piles or re-grading the stream banks. This shall include removal and disposal of the concrete box, headwalls, footings, wing walls, and earth that remains in the way of the proposed bridge opening, and other debris, and shall be disposed in accordance with Article 501. Stream banks at the location of the removed structure shall be graded similar to the natural stream banks.

## **CONCRETE CUT-OFF WALL**

Description: This work shall consist of excavating for and constructing the concrete cut-off walls.

<u>Installation</u>: The embankment for the abutment shall be placed and compacted to the bottom of the abutment. After the abutment piles are driven, a 3-foot deep by 10-inch wide trench shall be excavated between the piles and the full length of the abutment cap. A concrete cut-off wall shall be poured in the trench with the top of the cut-off wall directly below the bottom of the abutment cap.

Materials: The concrete strength shall be greater than or equal to 3000 psi at 28 days.

Method of Measurement: The concrete cut-off wall will be measured for payment and computed in cubic yards. The dimensions used will be those shown on the plans or ordered in writing by the engineer. Increased quantities resulting from the contractor's operations will not be measured for payment.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per CUBIC YARD for **CONCRETE CUT-OFF WALL**.

## **GROUTED RIPRAP**

<u>Description</u>: Foundation preparation and placing shall be done in accordance with Articles 281.03 and 281.04 of the Standard Specifications. The riprap shall be a minimum of 18 inches thick and placed on filter fabric. A bedding layer will not be required. A cement grout shall be placed in such a manner as to form a stable mat between the individual stone riprap and pieces to a height of within one (1) inch of the top of the riprap. This grout shall consist of a mixture of Portland Cement, 5/8 inch (maximum size) pea gravel and water so proportioned and mixed to provide a readily workable slurry. The cement content of grout shall not be less than five (5) bags per cubic yard and the hardened grout shall have a minimum compressive strength of 2,000 Pounds per Square Inch at 28 days. The estimated quantity of grout is 1 cubic yard grout per 12 square yards of riprap surface.

<u>Materials</u>: The gradation or size of the stone shall conform to Gradation 3 for the regarded side slopes, as defined in Article 281.04 of the Standard Specifications.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per SQUARE YARD for **GROUTED RIPRAP**, said price shall include all materials including excavation, grout and labor necessary to complete the work. Filter fabric will not be paid for separately, but shall be included in the contract unit price per square yard for GROUTED RIPRAP as noted above.

## SEGMENTAL CONCRETE BLOCK WALL

<u>Description.</u> This work shall consist of furnishing the design computations, shop plans, materials, equipment and labor to construct a Segmental Concrete Block Retaining Wall.

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

<u>Submittals</u>. The wall supplier shall submit design computations and shop plans to the Engineer. The shop plans shall be sealed by an Illinois Licensed 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.
  - (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 block line shown on the contract plans. This view shall also show the steps and proposed top of foundation elevations as well as the finished grade line at the wall face specified on the contract plans. These foundation elevations shall be located at or below the theoretical top of leveling line shown on the contract plans. The location, size, and length of any soil reinforcing connected to the blocks shall be indicated.
  - (3) Typical cross section(s) showing the limits of the select granular backfill, soil reinforcement if used in the design. The right-of-way limits shall be indicated as well as the proposed excavation, cut slopes, and the elevation relationship between existing ground conditions and proposed grades.
  - (4) All general notes required for constructing the wall.
  - (b) All details for the foundations, including the steps, shall be shown.
  - (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.

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- (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 initial submittal shall include 8 sets of prints of the detail shop plans. 3 sets of plans will be returned to the Contractor with any corrections indicated. 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) Precast 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 1010.03.
- 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.
- Water shall be according to Article 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 shall consist of Coarse Aggregate Gradation CA-11

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. All 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 Class SI concrete according to Article 1020.04.
- (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 -20 and 140° F. The following standards shall be used in determining and demonstrating the soil reinforcement capacities:

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

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

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

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

structures, utilities, structure foundation elements, or other items shall be accounted for in the internal stability design of the wall.

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

The 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 no more than 10 inches loose measurement or the proposed block height.

The select granular backfill shall be compacted. Compaction shall be achieved using a minimum of 3 passes of a 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.

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

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

## **AGGREGATE BASE COURSE, TYPE A, 8"**

The aggregate base course shall be CA-6. The aggregate shall be placed the width specified on the plans.

## <u>AGGREGATE SURFACE COURSE, TYPE B</u>

The aggregate surface course shall be CA-6. The aggregate shall be placed the width and thickness specified on the plans.

## **EXISTING SIGNS**

The Engineer shall inventory all existing signs and their condition within the limits of the project. All existing signs will be the property of the Village of Catlin when the project is completed. Any signs that are damaged by the contractor will be replaced at his own expense.

## **EXISTING FRAMES AND GRATES**

All salvageable frames and grates which are not incorporated in the work shall become the property of the Contractor. The Contractor's bid price should reflect the salvage value of the items.

## STUMP REMOVAL ONLY

<u>Description</u>: This work shall consist of removing the existing tree stump to a minimum of 12" below the finished grade elevation.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per UNIT for **STUMP REMOVAL ONLY**, which price shall include the cost of all work involved including disposing of the materials.

## **WOVEN WIRE FENCE REMOVAL**

<u>Description</u>: This work shall consist of removing the existing woven wire fence and posts at locations shown on the plans as directed by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per FOOT for **WOVEN WIRE FENCE REMOVAL**, which price shall include the cost of all work involved including disposing of the materials.

## **REMOVE EXISTING CULVERTS**

<u>Description</u>: This work consists of removing and disposing existing culverts at locations shown in plans.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price EACH for **REMOVE EXISTING CULVERTS**, which price shall include the cost of all work involved including disposing of the materials.

#### **RETAINING WALL REMOVAL**

<u>Description</u>: This work consists of removing and stacking the existing flagstones at a location chosen by the property owner.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price SQUARE FOOT for **RETAINING WALL REMOVAL**, which price shall include all labor and equipment required to complete the work.

## REMOVE AND REPLACE EXISTING BLOCK WALL

<u>Description</u>: This work consists of removing, safely storing and rebuilding a retaining wall using the existing Allen Blocks as shown in the plans.

Basis of Payment: This work will be paid for at the contract unit price SQUARE FOOT for **REMOVE AND REPLACE EXISTNG BLOCK WALL**, which price shall include all labor, materials and equipment required to complete the work.

## REMOVING AND RESETTING STREET SIGNS

<u>Description</u>: This work consists of removing, storing and resetting street name signs at locations designated by the Engineer. Signs or posts damaged by the Contractor shall be replaced by him at his own expense.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price EACH for **REMOVING AND RESETTING STREET SIGNS**, which price shall be payment in full for the work complete in place, including new concrete bases where necessary.

## MAILBOX REMOVAL AND RELOCATION

<u>Description</u>: United States Postal Service mail service shall not be interrupted by construction. The contractor shall coordinate mail delivery with the USPS to ensure continuous mail service throughout construction.

Mailboxes shall be removed and relocated to a temporary location, approved by the USPS throughout construction. Notice shall be given to the USPS, property owner, and engineer of mailbox relocation 2 days prior to activity so that mail service will not be disrupted. At completion of the project, mailboxes shall be installed in permanent location as shown on plans.

<u>Basis of Payment:</u> This work shall be included in the contract unit EACH for **MAILBOX REMOVAL AND RELOCATION**, and no additional compensation shall be allowed.

## SANITARY SEWER PIPE

<u>Description</u>: The description of work, material, and methods of construction under this part of the Specifications shall be in accordance with the Specifications herein and the provisions of the "Standard Specifications for Water and Sewer Main Construction", latest edition, by the Illinois Society of Professional Engineers, the Consulting Engineers Council of Illinois, the Illinois Chapter of the American Public Works Association, the Illinois Municipal League, and the Associated General Contractors of Illinois.

Specification references made herein for manufactured materials such as pipe and fittings refer to designations for American Water Works Association (AWWA), or to American National Standard

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Institute (ANSI), or to the American Society for Testing and Materials (ASTM), as they are effective on the date of call for bids.

Materials: 4" Diameter Force Main SDR 21

Material Specifications: PVC SDR-PR PIPE (Sanitary Forcemains)

- A. SDR-PR PVC pipe shall be manufactured from PVC 1120 and shall conform to ASTM D-2241. Nominal size shall be as indicated on the Drawings and shall be SDR-21 and shall be rated for not less than 150 psi pressure while handling potable water having a temperature of 73.4°F. Pipe shall be NSF rated for intended use and all such pipe delivered to the site shall be stamped as such.
- B. Joints in PVC SDR-PR pipe shall be of the bell and spigot type with elastomeric seals and shall conform to the requirements of ASTM D-3139. Gaskets shall be factory installed and chemically bonded to the bell end of the pipe. Gasket material shall be in accordance with ASTM F477. The bell shall be integral with the pipe and of equal or greater pressure rating.

## General Installation Requirements:

- A. Installation of all piping work shall be complete in every respect insuring a system which will operate satisfactorily and quietly. All work shall be done by skilled workmen, and work performed by unskilled help will not be acceptable. All cutting, fitting, repairing and finishing of masonry, concrete, metal and carpentry work that may be required for the contemplated work under this Specification must be done by craftsmen skilled in their respective trades and at the expense of the Contractor. Unless otherwise indicated, all material and equipment shall be installed in conformance with the manufacturer's recommendations.
- B. Proper and suitable tools and appliances for the safe and convenient handling and installation of the pipe and fitting shall be used. Great care shall be taken to prevent damage to any interior coating on pipes and fittings. All pieces shall be carefully examined for defects, and no piece shall be installed which is known to be defective.
- C. If any defective piece should be discovered after having been installed, it shall be removed and replaced with a sound one in a satisfactory manner by the Contractor at his own expense. Pipe and fitting shall be thoroughly cleaned before they are installed, and shall be kept clean until they are accepted in the complete work.
- D. All lengths of pipe shall be dimensioned accurately to measurements established at the site, and shall be worked into place without springing or forcing.
- E. The Contractor shall cut all pipe and drill all holes that may be necessary. Cut sections of pipe shall be reamed or filed to remove all burrs. The pipe interior and joints shall be thoroughly cleaned before being installed and kept clean during construction.

- F. All changes in direction shall be made with fittings or approved joint deflection. Bending of pipe is prohibited.
- G. Any transition from one pipe size to another shall be made with a reducing fitting. Reducing bushings are prohibited except where specifically indicated on the Drawings or approved by the Engineer.
- H. Make adequate provision for expansion and contraction of piping.
- I. Pipe embedment and backfilling shall closely follow the installation and jointing of pipe in the trench, to prevent floating of the pipe by water which may enter the trench, and to prevent longitudinal movement caused by thermal expansion or contraction of the pipe. Not more than 50 feet of pipe shall be exposed at any time ahead of the backfilling in any section of trench.
- J. This project will involve excavation in shale thru the creek bed.

## Construction Requirements:

CONCRETE CRADLES, ENCASEMENT AND REACTION BLOCKS

- A. Concrete cradles, encasement and reaction blocks shall be as indicated on the Drawings, or as directed by the Engineer.
- B. Reaction or thrust blocks shall be constructed at all tees, plugs, caps, and at bends deflecting 22-1/2 degrees or more. Thrust blocks shall be installed on any slopes exceeding 10 degrees from horizontal; using one block at least 3 cubic feet in volume for each successive three lengths of pipe on such slope.
- C. Blocks shall be poured between undisturbed soil and fittings. Concrete shall be so placed that pipe joints and fitting joints will be accessible for repair. The dimensions of concrete thrust blocks shall be as indicated on the Drawings. THE USE OF MASONRY BLOCKS FOR THRUST BLOCKING IS PROHIBITED.

#### **GRADE**

Force main shall be a laid at a minimum depth of four feet (4').

#### SEPARATION OF SEWERS AND POTABLE WATER LINES

- A. Horizontal Separation
  - 1. Water mains shall be located at least ten feet horizontally from any existing or proposed drain, storm sewer, sanitary sewer, combined sewer or sewer service connection.
  - 2. Water mains may be located closer than ten feet to a sewer line when:
    - a) local conditions prevent a lateral separation of ten feet; and

- b) the water main invert is at least 18 inches above the crown of the sewer; and
- c) the water main is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
- 3. When it is impossible to meet (1) or (2) above, both the water main and drain or sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, prestressed concrete pipe, or PVC pipe equivalent to water main standards of construction. The drain or sewer shall be pressure tested to the maximum expected surcharge head before backfilling.

#### B. Vertical Separation

- 1. A water main shall be separated from a sewer so that its invert is a minimum of 18 inches above the crown of the drain or sewer whenever water mains cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main located within ten feet horizontally of any sewer or drain crossed. A length of water main pipe shall be centered over the sewer to be crossed with joints equidistant from the sewer or drain.
- 2. Both the water main and sewer shall be constructed of slip-on or mechanical joint cast or ductile iron pipe, prestressed concrete pipe, or PVC pipe equivalent to water main standards of construction when:
  - a) it is impossible to obtain the proper vertical separation as described in (1) above; or
  - b) the water main passes under a sewer or drain.
- 3. A vertical separation of 18 inches between the invert of the sewer or drain and the crown of the water main shall be maintained where a water main crosses under a sewer. Support the sewer or drain lines to prevent settling and breaking the water main, as shown on the Plans or as approved by the ENGINEER.
- 4. Construction shall extend on each side of the crossing until the perpendicular distance from the water main to the sewer or drain line is at least ten feet.

#### **PLUGS**

- A. Installed piping systems shall be temporarily plugged at the end of each day's work, or other interruption to progress on a given line. Plugging shall be adequate to prevent entry of small animals or persons into the pipe or the entrance or insertion of deleterious materials.
- B. Standard plugs shall be inserted into all dead-end pipes, tees, or crosses; spigot ends shall be capped; flanged and mechanical joint ends shall have blind flanges of metal.
- C. Plugs installed for pressure testing shall be blind flanges fully secured and blocked to withstand the test pressure.

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

#### O-RING TYPE PUSH-ON JOINTS

- A. Before making joint, clean the pipe end and the bell thoroughly. Insert the O-ring gasket, making certain it is properly oriented. Lubricate the spigot well with an approved lubricant; do not lubricate the bell or O-ring. Insert the spigot end of the pipe carefully into the bell until the reference mark on the spigot is flush with the bell.
- B. Field cut pipe shall be beveled, have all burrs removed, and shall have a reference mark applied the correct distance from the end.

Method of Measurement: Sanitary sewer force main shall be measured in place along the horizontal centerline. No deduction in length shall be made for fittings. It shall be assumed for measurement purposes that each sewer entering a manhole extends to the inside face of the wall of the manhole. Where sewers are connected to special structures, the length of sewer for measurement purposes shall extend to the inside face of the wall of the special structure.

<u>Basis of Payment</u>: Payment for all materials, labor and equipment involved in installing sanitary sewer force main shall be per contract unit price per FOOT of **SANITARY SEWER PIPE** for the sizes shown on the plans, and no additional compensation will be allowed.

## **PUMP STATION GENERAL WORK**

#### Installation Requirements:

#### WET WELL

The existing wet well shall remain in place. This work shall involve adjustments needed in order to build up the embankment and build the new bridge and roadway. This work shall be done in accordance with the plan detail for "Sanitary Pump Station and Valve Vault Adjustments."

The work involves all labor, equipment, materials, shop drawing submittals, disposals, etc, that is needed to:

- 1. Rewire pumps which will require sending pumps back to manufacturer one at a time;
- 2. Extend the barrel of the existing wet well, remove and dispose the existing lid and replace with a new precast concrete lid and door,
- 3. Remove and replace 3/2" schedule 80 PVC tubing and supports for wiring;
- 4. Remove and replace chains on pumps with proper length of chain for new wet well height;
- 5. Remove and replace, with proper length, 2" aluminum guide rails for pumps, no spicing will be allowed;
- 6. Remove floats and replace with new floats;
- 7. Remove existing vent pipe and construct a new vent pipe as shown in the detail.

#### TEMPORARY PUMPING AND DOWNTIME FOR PUMPS

The pumps shall be in operation at all times with a maximum allowed downtime of 8 hours when absolutely needed. The existing valve vault is equipped with a 3-inch Tee for temporary pumping as needed. Coordinate temporary pumping with the Village of Catlin, Tim McFadden, (217) 304-5852. The Village will provide this service.

#### EXISTING PUMPS

The existing pumps were manufactured by F.E. Myers Company of Ashland, Ohio. They are model 4VX30M4-21, 3 hp, 1750 rpm, 75 gallon per minute pumps.

#### VALVE VAULT

The existing valve vault shall remain in place. This work shall involve adjustments needed in order to build up the embankment and build the new bridge and roadway. This work shall be done in accordance with the plan detail for "Sanitary Pump Station and Valve Vault Adjustments." The work involves all labor, materials and equipment that is needed to extend the 5' diameter barrel and reset the existing lid.

#### JOINTS AND SEALS

Joints for the barrel sections and lids of the wet well and valve vault shall have a flexible butyl rubber joint gasket conforming to ASTM C-443. The concrete tongue and groove on each barrel section shall be cast to accept the gasket. Lubricant used for installing the gasket shall be supplied by the gasket manufacturer. In addition to the gasket, a one inch butyl joint sealant rope shall be placed on the flat portion of the tongue and groove connection of all joints for added protection against groundwater entrance into the structure.

#### TRENCH BACKFILL

Granular backfill complying with IDOT Spec Article 208 shall be used to build up the embankment between the wet well and valve vault extensions where earthwork equipment can not be used. Fill shall be placed in no greater than 8-inch lifts and tamped for compaction. Cost included in FURNISHED EXCAVATION. The top 1' of fill shall consist of topsoil quality soil as shown on the detail. Cost is included in TOPSOIL EXCAVATION AND PLACEMENT.

#### ELECTRICAL

This work involves laying new PVC conduit from wet well to relocated control panel, new wiring and galvanized steel (G.S.) conduit shown in detail, and removing and disposing of existing rack, meter and service pole. See electrical specifications at end of Special Provisions section for more detailed electrical requirements.

#### REPLACE GUIDE RAILS

#### A. Slide Rail System

- A rail system shall be provided for easy removal of the pump and motor assembly for inspection and service. The system shall not require a man to enter the wet well or tank to remove the pump and motor assembly.
- 2. Two rails of two inch stainless steel pipe shall be provided for each pump. The guide rails shall be positioned as supported by the pump mounting base. The guide rails shall be aligned vertically and supported at the top by attachment to the access hatch frame.
- One intermediate guide rail support is required for each fifteen feet of guide rail length for stainless steel pipe. A pultruded fiberglass rail system may be provided in lieu of stainless steel guide rails.
- 4. The pumps shall be equipped with sliding brackets or rail guides. To insure easy removal of the pumps, the rail guides attached to each pump shall not encircle the rails.
- 5. A stainless steel lifting chain of adequate length for the wet well or tank depth shall be provided for each pump. Each pump shall be equipped with a permanent, stainless steel, stationary lifting handle.

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6. The rails and the rail guides shall function to allow the complete weight of the pumping unit to be lifted on dead center without binding and stressing the pump housing. The rail system shall function to automatically align the pumping unit to the discharge connection by a simple downward movement of the pump. No twisting or angle approach will be considered acceptable.

## B. Hoist Assembly

A hoist assembly shall be constructed on the wet well as shown and described in the Drawings.

#### HATCH ON WET WELL LID

The pump supplier is to provide a recessed aluminum two-door access hatch frame and door assembly to be installed in the concrete wet well top. This door assembly shall provide access for removal of the pumps and shall support the guide rails. The doors shall be provided with lifting handles, safety latches to hold the doors in the open position, and hasps suitable for a padlock. The doors shall have a non-skid finish. The doors shall be channel frame with spring assist, and shall be manufactured as listed in the Drawings. Provide a safety net fall protection device for the wet well access hatch. The hatch shall be provided with a stainless steel slam lock with removable key and non-corrosive handle.

#### **FLOATS**

Liquid Level Sensors

#### A. General

The supplier of the submersible recessed-impeller sewage pumps shall also furnish, and the Contractor shall install, the liquid level sensors as shown in the Drawings.

#### B. Continuous Level Measurement

A continuous level measurement device shall be mounted in the wet well. The level control shall be a Consolidated Electric 12 VDC powered unit, model no. 157GSCE. The transducer shall be mounted on a stainless steel cable out of the flow path, and shall be removable from outside the wet well.

#### C. Float Switches

- 1. Each liquid level sensor shall be of the direct acting, intrinsically safe, floating type, consisting of a double throw level switch sealed with a smooth chemical resistant polypropylene casing firmly bonded electrical cable of sufficient length to reach the Control Panel or Junction Box without splices. A weight shall be attached to each float switch cord, above the float, to hold the switch in place in the wet well. The weight shall be placed in a location to prevent sharp bends in the float cord when the float operates under water. Float switches shall be Anchor Scientific "Rotofloat", a Flygt ENH-10; or approved equal.
- 2. The upper float switch shall serve as a backup high water alarm. If the liquid level reaches the point where the upper float is engaged, an alarm signal shall be sent to the SCADA system indicating a High Water Alarm.

- 3. The lower float shall serve as a backup low water pump shut off. It shall be set just below the Level Transducer Pump Off elevation. If the lower float is disengaged because the level transducer failed to signal for the pump(s) to shut off and the wet well level is continuing to drop, the pump(s) shall be stopped. Normal operation will be continued after the lower float is re-engaged.
- D. Hanging of Cables: Use existing brackets for hanging cables.

#### **CHAINS**

When the manufacturer is re-wiring the pumps, each pump shall also be fitted with a suitable length of stainless steel lifting chain sized per the pump manufacturer's requirements.

#### **VENT**

The wet well top shall be provided with a four inch vent having a downward pointing inlet and bird screen over the inlet opening. See detail for suggested vent location.

## Suggested Staging:

- 1. Contact power company about new service pole and meter and requirements for power drop. (Anticipate temporary power feed from existing line.)
- 2. Send pump no. 1 to manufacturer for rewiring.
- 3. Install new service pole, meter and overhead feed. Build new rack for pump station control panel, junction box, fuse box, and generator receptacle.
- 4. Put pump no. 1 back into existing wet well with coiled excess wire. Hook up to controls in existing location.
- 5. Send pump no. 2 to manufacturer for rewiring.
- 6. Install electrical conduit from existing wet well to new rack and on new rack as shown in detail.
- 7. Put pump no. 2 back into existing wet well.
- 8. All electrical adjustment must be made with maximum eight (8) hour downtime for the pump station: relocate existing control panel, junction box, generator receptacle, and fuse box to new rack. Re-connect all wiring and put pumps into operation. (Anticipate temporary pumping.)
- 9. Make vertical adjustments to pump station wet well and valve vault.
- 10. Construct embankment.

<u>Basis of Payment</u>: All of this work shall be paid at the contract LUMP SUM price for **PUMP STATION GENERAL WORK** and no additional compensation will be allowed.

## **WATER MAIN SPECIFICATIONS**

<u>Description</u>, <u>Materials & Construction Methods</u>: The description of work, material, and methods of construction under this part of the Specifications shall be in accordance with the Specifications herein and the provisions of the "Standard Specifications for Water and Sewer Main Construction", latest edition, by the Illinois Society of Professional Engineers, the Consulting Engineers Council of Illinois, the Illinois Chapter of the American Public Works Association, the Illinois Municipal League, and the Associated General Contractors of Illinois, and hereinafter referred to as the "Standard Specifications".

#### UTILITY PIPING AND FITTINGS

Specification references made herein for manufactured materials such as pipe and fittings refer to designations for American Water Works Association (AWWA), or to American National Standard Institute (ANSI), or to the American Society for Testing and Materials (ASTM), as they are effective on the date of call for bids.

<u>Submittals</u>: Shop drawings, product data, and details for pipe materials, fittings and gaskets must be submitted for approval.

<u>Product Delivery Storage & Handling</u>: Exercise care in transporting and handling pipe and fittings in order to avoid damage to materials or coatings. Lifting shall be by hoist or on skids when hand lifting is not feasible. Dropping shall not be permitted. Store pipe as recommended by the manufacturer. Damaged pipe and fittings shall be replaced.

<u>Materials</u>: Contractor shall use the following allowable materials for the type of work under which they are listed:

Finished Water Mains

Certa-Lok C900/RJ Pipe

(Open Cut)

Water Service Line

Type K Copper Pipe

#### Material Specifications:

## JOINTS, BOLTS, AND GASKETS

- Except as noted on the Drawings, joints for pipe shall be push-on joints conforming to ANSI A21.11 (AWWA C111). Except as noted on the drawings, joints for fittings shall be mechanical joints conforming to ANSI A21.11 (AWWA C111). Bolts and nuts shall conform to ASTM A307, Grade B.
- 2. Gaskets shall meet AWWA C111-90. Provide U.S. Pipe Co. "Field Lok" or equal gripper gaskets for joint restraint where called for on the Drawings.

**FITTINGS** 

Fittings for ductile iron pipe shall be either compact fittings conforming to ANSI A53.88 (AWWA C153) or standard length fittings conforming to ANSI A21.10 (AWWA C11). Joints shall be as specified above.

#### **LUBRICANTS**

Lubricants shall meet AWWA C111. Lubricants other than that furnished with the pipe shall not be used.

#### INTERIOR AND EXTERIOR LININGS

- Interior lining for ductile iron pipe and fittings shall be a standard thickness ANSI A21.4 cement mortar lining and bituminous seal coat.
- 2. Exterior coatings for ductile iron pipe and fittings shall be bituminous coating in accordance with ANSI 21.51 and ANSI 21.10.

#### COPPER SERVICE LINE

Copper service line shall comply with ASTM B88 and shall be TYPE K.

## CERTA-LOK C900/RJ (OPEN CUT)

- PVC pipe shall be manufactured from class 12454-A or class 12454-B compounds and shall conform to AWWA C900-89. Pipe shall be NSF approved for potable water usage. Each pipe section shall be marked with the name of the manufacturer, nominal size, NSF usage classifications and the manufacturer's date code.
- 2. PVC Pipe shall be Certain-Teed Certa-Lok restrained joint pipe. (No Substitutions).
- 3. Restrained joints shall be provided.
- 4. Lubricants other than that furnished with the pipe shall not be used.
- 5. Use Certa-Lo9k C900/RJ restrained joint mechanical adapters to transition from Ductile Iron Pipe to Certa-Lok Pipe.

#### Installation Requirements:

A. Installation of all piping work shall be complete in every respect insuring a system which will operate satisfactorily and quietly. All pipe installation work shall be done by skilled workmen, and work performed by unskilled help will not be acceptable. All cutting, fittings, repairing and finishing of masonry, concrete, metal and carpentry work that may be required for the contemplated work under this Specification must be done by craftsmen skilled in their respective trades and at the expense of the Contractor. Unless otherwise indicated, all material and equipment shall be installed in conformance with the manufacturer's recommendations.

- B. Proper and suitable tools and appliances for the safe and convenient handling and installation of the pipe and fitting shall be used. Great care shall be taken to prevent damage to any interior coating on pipes and fittings. All pieces shall be carefully examined for defects, and no piece shall be installed which is known to be defective.
- C. If any defective piece should be discovered after having been installed, it shall be removed and replaced with a sound one in a satisfactory manner by the Contractor at his own expense. Pipe and fitting shall be thoroughly cleaned before they are installed, and shall be kept clean until they are accepted in the complete work.
- D. All lengths of pipe shall be dimensioned accurately to measurements established at the site, and shall be worked into place without springing or forcing.
- E. The Contractor shall cut all pipe and drill all holes that may be necessary. Cut sections of pipe shall be reamed or filed to remove all burrs. The pipe interior and joints shall be thoroughly cleaned before being installed and kept clean during construction.
- F. All changes in direction shall be made with fittings or by joint deflection within the tolerances recommended by the pipe manufacturer. Bending of pipe is prohibited.
- G. Any transition from one pipe size to another shall be made with a reducing fitting. Reducing bushings are prohibited
- H. Make adequate provision for expansion and contraction of piping.
- I. Pipe embedment and backfilling shall closely follow the installation and jointing of pipe in the trench, to prevent floating of the pipe by water which may enter the trench, and to prevent longitudinal movement caused by thermal expansion or contraction of the pipe. Not more than 50 feet of pipe shall be exposed at any time ahead of the backfilling in any section of trench.
- J. This project will involve excavation in shale through the creek bed.

## CONCRETE CRADLES, ENCASEMENT AND REACTION BLOCKS

- A. Concrete cradles, encasement and reaction blocks shall be as indicated on the Drawings. Concrete thrust blocks shall be provided on pressure piping at all changes in direction.
- B. Reaction or thrust blocks shall be constructed at all tees, plugs, caps, and at bends deflecting 11-1/4° or more. Thrust blocks shall be installed on any slopes exceeding 10 degrees from horizontal; using one block at least 3 cubic feet in volume for each successive three lengths of pipe on such slope.
- C. Blocks shall be poured between undisturbed soil and fittings. Prior to placing the poured-inplace concrete blocking, the Contractor shall apply polyethylene sheeting over the bolts on mechanical joint connections to protect the bolt threads. Concrete shall be so placed that pipe

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joints and fitting joints will be accessible for repair. The dimensions of concrete thrust blocks shall be as indicated on the Drawings. THE USE OF EITHER PRECAST MASONRY BLOCKS OR PRECAST CONCRETE BLOCKS FOR THRUST BLOCKING IS PROHIBITED.

## SEPARATION OF SEWERS AND POTABLE WATER LINES

## A. Horizontal Separation

- 1. Whenever possible, existing and proposed water and sewer lines shall be separated at least 10 feet horizontally.
- 2. Should local conditions prevail which would prevent a lateral separation of 10 feet, installation closer than 10 feet will only be allowed provided that separate trenches are used or the water line is located on an undisturbed earth bench located to one side of the sewer.

## B. Vertical Separation

Whenever sewer lines or storm drains and water mains or service lines cross or run parallel within 10 feet, they shall be vertically separated with the water line at least 18 inches above the top of the drain or sewer. This vertical separation shall be maintained for that portion of the sewer or drain line located 10 feet either side of the water line.

#### C. Conflicts

- Where it is impossible to obtain proper horizontal and vertical separation as stipulated above, both the water line and sewer shall be constructed of mechanical joint ductile iron pipe within 10 feet of the crossing, and both shall be pressure tested to assure watertightness before backfilling.
- 2. In making such crossings, it is preferable to center a minimum 20-foot length of sewer pipe under the water main to be crossed so that the joints will be equidistant from the water line and as remote there from as possible. Where a sewer line must cross over a water line, a vertical separation of 18 inches between the bottom of the sewer and the top of the water line shall be maintained, along with means to support sewer lines to prevent their settlement and potential breakage of the water line.

#### **PLUGS**

- A. Installed piping systems shall be temporarily plugged at the end of each day's work, or other interruption to progress on a given line. Plugging shall be adequate to prevent entry of small animals or persons into the pipe or the entrance or insertion of deleterious materials.
- B. Standard plugs shall be inserted into all dead-end pipes, tees, or crosses; spigot ends shall be capped; flanged and mechanical joint ends shall have blind flanges of metal.
- C. Plugs installed for pressure testing shall be blind flanges fully secured and blocked to withstand the test pressure.

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

#### **DUCTILE IRON PIPE**

A. Mechanical Joints

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

B. Push-On type Joints

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

#### O-RING TYPE PUSH-ON JOINTS

- A. Before making joint, clean the pipe end and the bell thoroughly. Insert the O-ring gasket, making certain it is properly oriented. Lubricate the spigot well with an approved lubricant; do not lubricate the bell or O-ring. Insert the spigot end of the pipe carefully into the bell until the reference mark on the spigot is flush with the bell.
- B. Field cut pipe shall be beveled, have all burrs removed and shall have a reference mark applied the correct distance from the end.

<u>Basis of Payment</u>: Payment for work performed under this section will be made at the contract unit price per FOOT for **WATERMAIN 6**", and no additional compensation will be allowed.

#### WATERMAIN: SITE VALVES, FITTINGS AND HYDRANTS

<u>Description</u>: Work under this Section includes utility and site valves, including pressure connections to existing mains, corp. stops, curb stops, joint couplings, 90 Degree service bends, hydrants and valve operators, stems and boxes.

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

Submittals: Contractor shall submit the following materials:

- 1. Submit product data in compliance for all valves, hydrants and valve operators showing general dimensions, construction details and full descriptive literature.
- 2. Submit operation and maintenance instruction bulletins for all valves, hydrants and valve operators.

## Materials: Contractor shall use the following materials:

- A. All valves shall be new, of standard manufacture, and of highest quality materials and workmanship. It is the intent of these Specifications that all valves of a particular type shall be the product of one manufacturer regularly engaged in the continuous production of that size and type of valve. Valves shall be suitable for working pressure as required in each application. Manufacturer's name, service, and pressure marking shall be cast into the body.
- B. Unless otherwise indicated or specified, all valves three inches and smaller shall be all brass or bronze; valves over three inches shall be iron body, fully bronze or bronze mounted. All valve dimensions shall conform to AWWA C500 were applicable.
- C. Where required for satisfactory operation of valves, provide valve operators, extension stems, stem guides, cast iron valve boxes, floor boxes, handwheels, operator stands, position indicators, and other valve appurtenances. Extension stems shall be complete with guide bearings wrench nut, and tee handle wrench. All machinery stuffing boxes shall be packed with material selected for the service intended. Maintain all packing until final acceptance by the Owner.
- D. Valves shall be installed in all pipe ahead of equipment not furnished with stops, and elsewhere as required for proper control and isolation of sections for systems for maintenance purposes.

#### Material Specifications:

## GATE VALVES, TAPPING VALVES AND TAPPING SLEEVES

- A. Gate valves larger than 3-inches shall be full opening, resilient seated wedge type valves with iron body, non-rising bronze stem and 4 mil epoxy coating on interior surfaces, and shall equal or exceed AWWA Standard C509, as manufactured by Mueller or equal. All valves shall open counterclockwise. Gate valves larger than 3-inches shall have mechanical joint ends.
- B. All gate valves 3 inches and smaller shall be 125 lb. bronze rising stem, double wedge disc, union or screwed bonnet type. Valves shall be of a design to permit repacking under pressure.
- C. Tapping sleeves shall be Mueller model H615 or H616 or equal. Tapping sleeves shall have either stainless tell, ductile iron, r cast iron bodies. Cast iron sleeves shall have mechanical joint ends. Tapping valves shall conform to the requirements of AWWA C500 and shall be resilient seat models having flanged x mechanical joint ends. Tapping valve inlet flange shall meet ANSI B16.1 Class 125. Tapping valves shall be Mueller model H687 or equal.

#### BUTTERFLY VALVES

A. Butterfly valves shall be of the tight-closing type with seats of a material specified herein and which are securely fastened to the valve body. No metal-to-metal seating surfaces permitted. Valves shall be bubble-tight as rated pressures with flow in either direction, and shall be satisfactory for applications involving throttling service and/or frequent operation and for

applications involving valve operating after long periods of inactivity. Valve discs shall rotate 90° from the full open position to the tight shut position. Valve shall meet the full requirements of AWWA Standard C 504 for Class 150 B.

- B. Butterfly valve bodies shall have mechanical joint ends. Flange drilling shall be in accordance with ANSI B16.1 Standard for cast iron flanges. Body construction shall be in strict accordance with AWWA Standard C 504.
- C. Shafts of all valve shall be turned, ground and polished. Valve shafts shall be constructed of Type 416, 316, or 304 stainless steel. Shaft diameters must meet minimum requirements established by AWWA Standard C504-80.
- D. Valve seats must be resilient Buna N or synthetic rubber. Valves shall have seats that are simultaneously molded in vulcanized and bonded to the body. Seat bond must withstand 75 pounds pull under test procedure ASTM D-429, Method B.
- E. Packing shall be self-adjusting Chevron type.
- F. All buried butterfly valve unless otherwise noted, shall be furnished with manual operators of the self-locking type designed to hold the valve in any intermediate position without creeping or fluttering. Operators shall open counter clockwise and be equipped with mechanical stoplimiting devices to prevent overtravel. All site butterfly valves shall be gear operated and have extension stems and valve boxes with covers.
- G. Site butterfly valves shall be manufactured by Mueller.

## JOINT COUPLINGS

Joint couplings shall be fabricated of brass and shall be of the size indicated on the Drawings, having inlet and outlet connections as required for the installation.

## CORPORATION STOPS, SERVICE LINE FITTINGS, AND CURB STOPS

Corporation stops, service line fittings, and curb stops shall be fabricated of brass and shall be of the size indicated on the Drawings, having inlet and outlet connections as required for the installation. Curb stops shall be of the roundway type.

#### **CURB BOXES**

Service boxes shall be of the best quality iron, of the spiral type, with the base of ample size to completely house the corp stop. The configuration of the box shall conform to the standards of the Village and shall be capable of extension from a minimum of four feet, six inches in length, to a maximum of six feet, six inches.

## VALVE EXTENSION STEMS

- A. Extension stems shall be provided for all valves in buried locations and in other locations where indicated on the Drawings.
- B. Extension stems shall be fabricated from solid steel shafting not smaller in diameter than the stem of the valve or from galvanized steel pipe having an internal diameter not smaller than the diameter of the valve stem. Stem couplings shall be both threaded and keyed to the coupled stems and shall be of standard design and construction. Pipe couplings will not be acceptable.
- C. Stems for buried valves shall extend to within 6 inches of the surface of the ground. Each extension stem shall be connected to the valve operator with a suitable universal joint type coupling. All connections shall be pinned. Each extension stem shall be provided with spacers which will center the stem in a valve box having an inside diameter of approximately 5 inches, and shall be equipped with a standard AWWA wrench nut as described in AWWA C500, except where handwheels are indicated.

#### **VALVE BOXES**

- A. All buried valves shall be provided with adjustable valve boxes approximately 5 inches in diameter with a minimum thickness of 3/16 inch and constructed so that the removable cover will not be thrown out by travel over it. Valve boxes shall be of sound, close grained cast iron, free from flaws and defects, built strong and rugged enough to withstand the shock of street traffic.
- B. Valve boxes shall be of sufficient length to operate all valves buried in the ground. Valve boxes shall consist of base, center section, and top section with cover.
- C. Valve boxes located in unpaved areas shall be Slip Type design to permit movement of the top section without transmitting forces onto the valve body.
- D. Valve boxes cast into concrete surfacing shall have brass covers which can be secured.
- E. Valve box covers shall be chained to valve boxes with an 18-inch long galvanized chain. Valve covers for water service shall be named "Water", Mueller brand or equal.

#### FIRE HYDRANTS

- A. Fire hydrants shall be dry-barrel type with break-away flange or ring. Fire hydrants shall be designed for 150 pounds per square inch working pressure conforming to AWWA C-502. All working parts shall be bronze.
- B. Hydrant Specifications:
  - 1. Main valve opening being at least 5 1/4 inches in diameter.
  - 2. Outlets shall have National Standard Thread fire-hose coupling threads.

- 3. The operating nut shall be the National Standard, 1 ½" pentagon measured from point to opposite flat.
- 4. Hydrants shall open counterclockwise.
- 5. Fire hydrants shall each have one (1) 4-1/2 inch pumper connection and two (2) 2-1/2 inch hose connections.
- 6. All hydrant leads shall be a minimum 6-inch diameter.
- 7. The hydrant shoe shall be mechanical joint.
- 8. All fire hydrants shall be red finish painted at the factory.
- C. Acceptable hydrant model and manufacturers:

  Mueller Modern Centurion model catalog #A-442 or equal.
- D. All fire hydrants shall be equipped with a 6" auxiliary valve located between the main and the hydrant as shown on the Drawings.

#### Installation Requirements:

#### **GENERAL**

Make connections between valves and piping as specified in Utility Piping & Fittings.

#### **BURIED VALVES**

- A. Buried valves 6-inch diameter and larger shall be set on a foundation of solid concrete not less than 8 inches thick nor less than one cubic foot in volume. Foundations shall be set on firmly compacted ground.
- B. The height of the valve and its supporting foundation shall conform to the height of the connecting pipe. Valves shall be set in a vertical position unless otherwise indicate don the Drawings.

## **EXPOSED VALVES**

Exposed valves shall be installed in a vertical position wherever possible. Unless otherwise indicated or directed by the Owner, valve stems shall never be below a horizontal position.

#### VALVE OPERATION

Open and close each valve observing full operation prior to installing successive lengths of pipe.

#### FIRE HYDRANT

A. Fire hydrants shall be installed at the locations as shown on the Drawings. Fire hydrants shall be installed plumb and shall be set so that the lowest hose connection is (as required by State of Illinois Public Act 85-343) not less than fourteen (14) inches and not more than twenty-six (26) inches above the surrounding finished grade. The Contractor shall be responsible for communicating to the hydrant supplier the proper "depth of bury" dimension needed to meet this requirement. Hydrants shall be placed such that no above-ground fixed object is within 48 inches of the hydrant, as measured horizontally. A minimum of 1/4 cubic yard of coarse stone,

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broken concrete, or like material shall be placed at and around the base of the hydrant to insure proper drainage of the hydrant after use. The blocking of the hydrant shall consist of a wedge of P.C. Concrete of not less than 1/4 cubic yard extending from the hydrant base to counteract the pressure of water exerted thereon. Care shall be taken to insure that the hydrant weep holes are not covered by concrete. The hydrant shall be set on a concrete block to insure a firm bearing for the hydrant base. The hydrant valve and tee shall be interconnected by steel rods if required by special provision.

B. Fire hydrants by size and type required shall be measured for payment as an installed unit complete with accessories, thrust blocking and auxiliary gate valve and box.

#### **VALVE BOXES**

- A. Boxes shall be adjusted so that the cover may be set flush with paving; in areas without paving, set the cover as directed by the Owner. Boxes shall be set to allow equal movement above and below finish grade.
- B. The base of the box shall be centered over the valve, and then the top of the base section shall be approximately on line with the nut on top of the valve stem. The entire assembly shall be plumb. The base of the box in place shall rest two or more inches above the flanged joint of the valve cover. The valve box shall be located such that there is ample space all around the valve, preventing the box from touching the valve in any way and permitting free access to the operating nut with a valve wrench.

<u>Basis of Payment</u>: The cost of materials, equipment and labor to install these items will be paid for with the following contract pay items:

TAPPING SLEEVE AND VALVE, 6" per EACH CORPORATION STOPS 1" per EACH FIRE HYDRANT AND VALVE (SPECIAL) per EACH CURB STOPS 1" per EACH

## **WATER METERS**

Water meters will be installed by the Village of Catlin. Please contact Tim McFadden (217) 304-5852 to coordinate.

## WATER METER REMOVAL

There are 3 water meters to be removed. This work shall be incidental to other water items.

## WATER MAIN: UTILITY TRENCHING, BEDDING AND BACKFILLING

<u>Description</u>: Work under this section includes trenching for piping; excavation for valves, vaults and appurtenances; bedding, cover and backfilling; and pavement removal and replacement.

<u>Materials</u>: It is intended that previously excavated materials conforming to the following requirements be utilized wherever possible.

## Material Specifications:

#### TRENCH OR EXCAVATION BOTTOM STABILIZATION MATERIAL

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

## SAND

Sand shall be IDOT approved FA-1.

#### PIT RUN GRAVEL

Pit run gravel shall be organic free and shall pass a 3/4-inch sieve.

#### GRANULAR MATERIAL

Granular material shall be IDOT approved CA-6 or CA-10.

## LIMESTONE SCREENING

Screening shall be limestone aggregate complying with the following gradation:

U.S. Size	Standard	Sieve	Percent Weight	Passing	by
¾-inc	h		100		
½-inc	h		94-100		
3/8-in	ch		75-95		
No. 4			20-50		
No. 1	6		0-6		

#### Construction Requirements:

- A. It is the intent of this project to install water main *BEFORE* beginning any embankment, bridge or roadway work.
- B. Provide suitable temporary drainage channels for any water that may flow along or across the work.
- C. Provide barriers, warning lights and other protective devices at all excavations.
- D. Sidewalks, roads, streets, and pavements shall not be blocked or obstructed by excavated materials and adequate temporary provisions must be made for satisfactory temporary passage

of Owner's operating personnel, pedestrians, and vehicles. Minimize inconvenience to public travel or to tenants occupying adjoining property.

- E. Where necessary to place excavated material adjacent to the buildings, erect barriers to keep earth at least 4 feet from such buildings. Earth deposited on lawns shall be promptly and carefully removed to preserve the turf. All trees, shrubs, etc., shall be protected.
- F. In unimproved areas, croplands, lawns, and landscaped areas the top 12 inches of topsoil shall be stripped and stored separate from other excavated materials. Topsoil shall be free of roots, stones larger than 2 inches, and other undesirable materials. Topsoil shall be reused to complete backfill operation in these areas.
- G. If underground utilities and/or structures not shown on the Drawings are encountered, notify the Engineer and do not proceed until instructions are obtained. Notify the Engineer if springs or running water are encountered.

#### PIPELINE TRENCHING

- A. Excavation of trenches shall not advance more than 50 feet ahead of completed pipe installation.
- B. Excavation in close proximity to existing utilities shall be performed in a manner to prevent damage. Contact representatives of public utilities for assistance in locating buried lines.
- C. All excavations shall be made by open cut unless otherwise indicated on the Drawings. Sides of trenches shall be kept as nearly vertical as possible from the trench bottom to a level of one foot above the top of the pipe. Trench bottoms shall be excavated true to line and shall be not less than 18 inches wider or more than 24 inches wider than the outside diameter of the pipe so a clear space of 9 to 12 inches is provided on each side of the pipe. Minimum trench width for small diameter pipe shall be 24 inches. If more than one pipe is to be installed in a trench, the pipes shall be spaced a minimum of one foot apart for pipes 4 inches and larger, with a side clearance of 9 to 12 inches between the pipe and trench wall. Grade of the trench bottom shall be consistent with the method of bedding specified.

#### MINOR STRUCTURAL EXCAVATION

- A. Minor structures are defined as manholes, junction boxes, valve vaults, cleanouts, etc. Do not excavate for any structure until that structure is scheduled for construction. Excavate only to the depth and dimensions necessary for the construction.
- B. The bottom of all excavations shall be undisturbed earth unless otherwise indicated, and shall be observed by the Engineer for conformance with these Specifications before any subsequent work is started.

- C. Excavations carried below depths indicated on the Drawings beyond the limits shown on the plans or without the previous observance by the Engineer shall be filled with lean (2500 psi) concrete or well-compacted granular fill to the correct level at the expense of the Contractor.
- D. Maintain excavations in good order. If the bearing capacity of the foundation soils is reduced because the excavation is allowed to remain open prior to commencing work, the weathered soil shall be removed and replaced with lean (2500 psi) concrete or well-compacted granular fill at the expense of the Contractor.

#### SHEETING AND BRACING

- A. Open-cut trenches and minor structural excavations shall be sheeted and braced or otherwise protected as required by any governing Federal or State laws and municipal ordinances, and as may be necessary to protect life, property, or the work. In any event, the minimum protection shall conform to the recommendations in O.S.H.A. Safety and Health Standards for Construction. A sand box or trench shield may be used in lieu of sheeting as permitted by O.S.H.A. When close-sheeting is used, it shall be so driven as to prevent adjacent soil from entering the trench either below or through such sheeting.
- B. Where sheeting and bracing are used, the trench width shall be increased accordingly. The granting of permission by the Engineer, however, shall not relieve the Contractor in any degree from his full responsibility under the contract. Sheeting and bracing which have been left in place shall be cut off at the elevation ordered by the Owner via the Engineer. Bracing, except that ordered left in place, may be removed when the backfilling has reached the respective levels of such bracing. Sheeting, except that ordered left in place, may be removed after the backfilling has been completed or has been brought to such an elevation as to permit its safe removal.

#### STABILIZATION

The placement of minor structures and/or the laying of pipe shall be permitted only in dry trenches having a stable bottom. If portions of the bottom of trenches or minor structural excavations consists of material unstable to such a degree that it cannot adequately support the pipe or structure, the bottom shall be over-excavated and stabilized with coarse granular stabilization material specified in this section.

## BEDDING AND COVER FOR PIPING

#### A. General

Bedding is defined as the shaped and tamped material which supports piping. Cover is defined
as the compacted material which protects and covers piping, and which extends from the top of
bedding material to a point one foot above the top of the pipe. Backfill, as specified hereafter, is
defined as the material extending above the top of pipe cover to topsoil, paving subgrade, or
foundation level.

2. All buried piping shall be continuously bedded and covered. The following are minimum requirements for pipe bedding and cover, unless otherwise indicated on the Drawings.

## B. Pipe Bedding

- 1. Pipe bedding shall consist of over excavation of the trench bottom and refilling to proper grade with a minimum of 4 inches of tamped sand or IDOT approved CA-6. **Previously excavated materials are prohibited for use as pipe bedding.**
- 2. Following placement of pipe and inspection of joints, tamped bedding material shall be continued upward for the full width of the trench to one foot above the top of the pipe (combined bedding and cover).
- C. Bedding in Cinders and Special Soils

  Where cinder fill, garbage dumps, slag piles, or harmful corrosive conditions exist in the soil or
  backfill, protect the pipe by placing limestone screenings from a point 10 inches below the pipe to
  12 inches above the pipe for the full width of the trench, adequately tamped to provide support for
  the pipe.

#### D. Pipe Cover

- 1. After completion of bedding and preliminary observation of the piping installation the pipe shall be covered to a point one foot above the top of the pipe for the full trench width. For pipe less than 12 inches diameter, cover has been previously provided under bedding. For pipes 12 inches diameter or greater, cover material may be finely pulverized noncohesive (non-clay), nonorganic, previously excavated soil, free from lumps, rocks, and debris, except where granular backfill is hereafter specified above the cover.
- 2. All cover materials shall be carefully deposited to avoid damage to the pipe and shall be compacted in accordance with IDOT Specifications.

## TRENCH BACKFILLING

1. After bedding and cover have been placed to a level one foot above the top of the pipe, backfilling procedures shall be in accordance with the following schedule:

Surface Feature	<u>Method</u>	
1. Unimproved areas	1	
2. Croplands, lawns, landscaped areas	2 or 3	
3. Unpaved parkway strips, drives	2 or 3	
4. Aggregate surfaced roads and parking areas	4	
5. Non-rigid bituminous paving including "oil and chip"	4	
and bituminous treatment	•	
Rigid surfacing including bituminous concrete and	4	
Portland cement concrete paving	<b>-</b>	
7. Influence area below existing rigid surfacing,	5	
foundations, utilities, etc.	0	

<sup>&</sup>quot;Influence area" shall be considered the area within lines sloped downward at 45 degrees from the outer edges of paving, foundations, and utility lines.

#### 2. Method 1

From the top of the pipe cover to the surface of the ground, backfill consisting of previously excavated soil free of frozen material and large rocks may be deposited by dragline, bulldozer, or other suitable equipment. Depositing in layers or tamping will not be required. Sufficient surplus excavated material shall be neatly rounded over the trench to compensate for settlement.

#### 3. Method 2

1. Backfill shall be previously excavated soil free of frozen material and large rocks and shall be deposited in accordance with Method 1, except backfill shall be compacted by water jetting. Jetting procedures shall be demonstrated by the Contractor and observed by the Engineer before beginning operations. Jetting shall follow backfilling operations as soon as practicable but not later than 30 days after backfill placement. Paving, if any, shall not be placed until surface subsidence has occurred, a minimum 30 days after jetting.

## 2. Jetting Procedure

- a) The trench compaction shall be started at the point of lowest elevation of the trench and work up along the trench. Jetting and water-soaking shall not begin until the trench has been backfilled to within six (6) inches of the finished surface.
- b) The holes through which water is injected into the backfill shall be centered over the trench backfill and at longitudinal intervals of not more than six (6) feet. Additional holes shall be provided if deemed necessary by the Engineer to secure adequate settlement.

All holes shall be jetted and shall be carried to a point one (1) foot above the top of the pipe. Drilling the holes by means of augers or other mechanical means shall not be permitted. Care shall be taken in jetting so as to prevent direct contact with, or other disturbance of the pipe.

c) Water required for jetting and water soaking shall be provided by the Contractor. The water shall be injected at a pressure and rate just sufficient to sink the holes at a moderate rate. After a hole has been jetted to the required depth, the water shall continue to be injected until it begins to overflow the surface. The Contractor shall, at his own expense, bore test holes at such locations as the Engineer may designate in order to determine the effectiveness of the water soaking. A soil auger observed by the Engineer shall be used for boring test holes. As soon as the jetting and water soaking has been completed, all holes shall be filled with soil and compacted. Surface depressions resulting from backfill subsidence caused by jetting and water soaking shall be filled and recompacted by tamping or rolling to the satisfaction of the Engineer.

#### 4. Method 3

Backfill shall be IDOT approved CA-6. Backfill may be deposited by bulldozer, dragline, or direct dumping, exercising care to prevent displacement of the pipe. Depositing in layers and compacting will not be required.

#### 5. Method 4

Backfill shall be IDOT-approved CA-6 granular material. The CA-6 backfill shall be carefully deposited in uniform 6 inch lifts and compacted to 95% of maximum dry density as determined by the Standard Proctor Test ASTM D698. Each lift shall be wetted adequately and compacted with vibratory jumping-jack compactors, in accordance with Article 02250. Plate tampers are not permitted

#### 6. Method 5

Backfilling shall consist of using Method 4 in the area of influence under the foundation or utility, and above that level to the surface using the backfill method required by the surface features. The area of influence shall be considered the area under a line sloped downward at 45 degrees from the near edge of foundation or utility.

## MINOR STRUCTURAL BACKFILL

## General Instructions:

- 1. Do not backfill until new concrete has properly cured, coatings have been reviewed for contract compliance, and any required tests have been accepted.
- 2. Exercise care during backfilling operations to avoid any puncture, break or other damage to waterproofing systems, if any. Backfill adjacent to waterproofing in the presence of the Engineer.

3. Where backfilling is required on both sides of structures, backfill and compact simultaneously on opposite sides in even layers. Other backfilling sequences shall be as specifically noted.

#### Materials:

- A. Backfill in lawns and landscaped areas shall be previously excavated materials free from cinders, construction debris, vegetation or other extraneous material and suitable for the intended purpose.
- B. Backfill in influence areas beneath piping, foundations, and paving shall e granular material complying with GRANULAR MATERIAL specified within.
- C. "Influence area" shall be considered the area within lines sloped downward at 45 degrees from the outer edges of paving, foundations, and utility lines.
- D. Compaction
- E. Backfill in 6 inch lifts and compact to 95% of maximum dry density as determined by the Standard Proctor Test ASTM D698.

## REMOVAL OF WATER

- A. At all times during the excavation period and until its completion and acceptance, ample means and equipment shall be provided with which to remove promptly and dispose of properly, all water entering any excavation or other parts of the work. The excavation shall be kept dry.
- B. Water pumped or drained from the work hereunder shall be disposed of in a suitable manner without damage to adjacent property or to other work under construction. Any and all damage caused by dewatering the work shall be promptly repaired by the Contractor at his expense. Dewatering schemes shall be submitted to the Engineer for review.

#### TESTING AND CLEANUP

- A. Provide for testing and cleanup as soon as practicable, so these operations do not lag far behind pipe installation. Perform preliminary cleanup and grading operations immediately after backfilling.
- B. As sections of piping are completed, conduct tests in accordance with Testing, Adjusting and Balancing Systems.
- C. All surplus excavated material shall be disposed of by the Contractor.

<u>Basis of Payment</u>: If edge of trench is within 2 feet of a paving surface, the trench will be backfilled and paid per contract unit price per CUBIC YARD of **TRENCH BACKFILL**. All other backfilling and work done to fulfill the requirement of this section shall be included in the contract unit price per FOOT of **WATERMAN 6**" and no additional compensation will be allowed.

## WATER MAIN: DISINFECTION

<u>Description</u>: Contractor shall disinfect all newly installed raw water mains including interior process piping carrying raw water, finished water mains, and process equipment.

All disinfection work shall be acceptable to the State Health Authority. If any requirements of this section are in conflict with requirements of the authority for disinfection, those of the authority shall govern. Methods of disinfection for all water mains and piping systems shall conform to AWWA C651. Disinfection for refurbished wells shall be completed in accordance with AWWA C654. Disinfection for treatment plat equipment shall be completed in accordance with AWWA C653.

Qualifications: All work performed for and in connection with disinfection shall be under the direction of and experienced supervisor. All equipment used in disinfection work shall be in proper working condition, and shall be adequate for the specified work.

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

#### Materials:

## CHLORINE SOURCE

- A. Chlorine gas-water solution or direct chlorine feed is preferred for disinfection. Use of high-test calcium hypochlorite or the tablet method of disinfection must be reviewed by the Engineer for conformance with IEPA regulations and AWWA procedures. Tablet form calcium hypochlorite may be used only for water lines up to 12 inches in diameter and less than 2,500 feet in length.
- B. The Contractor shall be liable for all damages arising from direct contact of granular calcium hypochlorite with solvent welding materials used to join PVC pipe, if any.

#### Implementation:

#### DISINFECTION OF WATER PIPING SYSTEMS

#### A. General

Water mains shall be disinfected and bacteriologically tested at every isolation valve. Water mains must be successfully flushed and successfully bacteriologically tested under the provisions of this section, prior to being considered for payment of the installation work.

## B. Preparation of Liquid Chlorine

A chlorine gas-water solution shall be applied by means of a solution-feed chlorinating device, or, if approved by the Owner via the Engineer, the dry gas may be fed directly through proper devices for regulating the rate of flow and providing effective diffusion of the gas into the water

within the unit being treated. Chlorinating devices for feeding solutions of the chlorine gas shall provide means to prevent the backflow of water into the chlorine cylinder.

## C. Preparation of Calcium Hypochlorite

Granular calcium hypochlorite shall be prepared as a water mixture before introduction into the unit. The dry powder shall first be made into a paste and then thinned to approximately a 1% chlorine solution. To prepare a 1% chlorine solution, add one pound of calcium hypochlorite (65% to 70% available Cl2) to 7-1/2 gallons of water.

## D. Preliminary Procedures

After pressure and leakage tests have been completed, all units shall be thoroughly flushed to remove all foreign material. Entrapped air shall be released at high points of the water main and the unit shall be completely filled with water to allow the disinfecting agent to come in contact with all interior surfaces. In the event that complete venting cannot be accomplished through available outlets, furnish and install necessary corporation cocks and vent piping, with no additional compensation.

## E. Application of Disinfectant

- Chlorinating agent shall be applied at the supply end of the unit being disinfected. For pipes, disinfectant shall be applied through a corporation cock installed in the top of the pipe. Tablets shall be placed in accordance with AWWA C651.
- 2. Water shall be introduced at a controlled rate in order to regulate the chlorine dosage. The rate of chlorine mixture flow shall be proportioned to the rate of water entering the unit so the chlorine dose applied shall produce at least 25 mg/l chlorine residual after a period of 24 hours. The method of determining the rate of flow of water into the unit being disinfected shall be reviewed by the Engineer and approved by the Owner.
- 3. Valves shall be manipulated to keep the strong chlorine solution and/or contaminated water from flowing into units that are on-line or have been previously chlorinated and/or flushed.

#### F. Quality

The chlorinated water shall be retained in the unit long enough to destroy all nonspore-forming bacteria. The minimum retention period shall be 24 hours with a chlorine residual at the end of this period of not less than 25 mg/l (ppm).

#### G. Disinfecting Valves

All valves and appurtenances shall be operated while the line or unit is being disinfected to insure that all surfaces of the valves are disinfected.

## H. Swabbing

Disinfection for pipe, fittings, or valves that must be placed in service immediately shall be accomplished by thoroughly flushing and swabbing with a strong (5 percent) solution of calcium

hypochlorite immediately prior to assembly. Approval must be secured from the Owner via the Engineer before this method of disinfection will be accepted.

- I. Final Flushing, Sampling and Testing
  - 1. Following chlorination, the unit shall be flushed until the replacement water in the system is proven to be comparable in quality to the water which will enter that unit or system. This acceptable condition of water delivered by each unit or system shall continue for at least two days, as demonstrated by laboratory examination of samples. Laboratory tests shall show a chlorine residual after final flushing of less than one mg/l (ppm).
  - 2. The Contractor shall pay for and retain an IEPA-approved laboratory to perform at least one (1) set of bacteriological tests per sampling site, as approved by IEPA on water samples taken by the Contractor in the presence of the Owner's representative, at each sampling site along the newly-installed water mains involved with this Contract. At testing sites where more than one (1) set of bacteriological tests are required for any reason, the Contractor shall bear the costs of additional flushing of the mains as well as the costs associated with the second and subsequent bacteriological tests, per site.
  - 3. The Contractor shall furnish and install all sampling taps required for obtaining samples for bacteriological tests. The Owner will take and handle all water samples required for bacteriological testing in accordance with IEPA and USEPA regulations.
- J. Repetition of Flushing and Testing If the initial treatment results in an unsatisfactory bacterial test, disinfection shall be repeated by the Contractor at no additional cost until satisfactory results are obtained.

<u>Basis of Payment</u>: The cost of this work shall be included in the contract unit price per FOOT of **WATERMAIN 6**" and no additional compensation will be allowed.

## WATER MAIN: TESTING, ADJUSTING AND BALANCING SYSTEMS

<u>Description</u>: Work under this section includes water main testing.

## Materials:

- A. Provide all necessary equipment and instrumentation required for proper completion of testing. Source and quality of water shall be approved by the Owner. Contractor is advised that the pressure and leakage testing require the use of test pumps or similar apparatus to perform said tests. Contractor shall obtain said equipment in a timely manner so as to complete the testing specified herein.
- B. The Owner will furnish all water for testing piping and water mains. The Contractor shall furnish all equipment including hoses, fittings, trucks, gauges, test pumps, etc. to transport the water for testing into the piping being testing.

## Implementation:

## PIPING SYSTEM TESTING

#### A. General

- 1. All test procedures shall be in accordance with the requirements of the applicable articles of "Standard Specifications for Water and Sewer Main Construction in Illinois", latest edition. Test procedures and methods of disposal of water shall be approved by the Owner. All tests shall be made in the presence of the Owner or the Engineer. Preliminary tests made by the Contractor without being observed by the Owner or the Engineer will not be accepted. Notify the Owner or the Engineer at least twenty-four hours before any work is to be inspected or tested.
- 2. All defects in piping systems shall be repaired and/or replaced and retested until acceptable. Repairs shall be made to the standard of quality specified for the entire system.
- 3. Water mains shall be flushed and tested at every isolation valve. Water mains must be successfully flushed and tested under the provisions of this section, prior to being considered for payment of the installation work. Any defect which may develop in a section previously tested and accepted shall be promptly corrected and retested. Pressure tests shall be made between valves to demonstrate ability of said valves to sustain pressure.
- 4. All piping shall be tested in accordance with the test methods listed below, in addition to any test required by local and state codes or building authorities.

#### B. Flushing

Prior to testing, flush all piping system with water to remove construction debris.

## C. Pressure Piping Testing

- 1. All piping subject to 5 psi pressure or more shall pass the following hydrostatic pressure test and leakage test.
- 2. Tests for any exposed piping shall be made before covering and insulations is placed.
- 3. The pressure and leakage test for buried piping shall be made after all jointing operations are completed and any concrete reaction blocks, and restraints have cured at least 28 days and the concrete strength is at least 4000 psi as determined by compressive strength tests. Lines tested before backfill is in place shall be retested after compacted backfill is placed.
- 4. Sections of piping between valves and other short sections of line may be isolated for testing. If shorter sections are tested, test plugs or bulkheads required at the ends of the test section shall be furnished and installed by the Contractor, together with all anchors, braces, and other devices required to withstand the hydrostatic pressure without imposing

any thrust on the pipe line. The Contractor shall be solely responsible for any damage which may result from the failure of test plugs or supports.

## D. Hydrostatic Tests for Pressure Piping, including water mains

- 1. Piping shall be slowly filled with water and all air expelled. Care shall be taken that all air valves are installed and open in the section being filled, and that the rate of filling does not exceed the venting capacity of the air valves.
- 2. After the section of line to be tested has been filled with water, the specified test pressure shall be applied and maintained for a minimum period of 10 minutes and for such additional period necessary for the Owner or the Engineer to complete the inspection of the line under test. Do not exceed pipe manufacturer's suggested time duration at the test pressure. If defects are noted, repairs shall be made and the test repeated until all parts of the line withstand the test pressure.
- 3. Hydrostatic test pressure shall be as follows:
  - a) All pressure pipe which is part of a pumping system shall be tested at 1.5 times the normal distribution pressure or 125 psi, whichever is greater. The hydrostatic test shall have a 2 hour minimum duration, and for such additional time necessary for the Engineer to complete observation of the section of line under test. The piping being tested shall be considered in compliance with the hydrostatic testing requirements if the test pressure is continuously maintained at 98% of the specified test pressure for the entire duration of the hydrostatic test.
  - b) All pressure pipe in which the flow is driven by differential free water surfaces shall be tested at twice the maximum static head as determined from the hydraulic profile drawings.

## E. Leakage Test for Pressure Piping

- 1. After the specified hydrostatic test has been completed, the line shall be subjected to a leakage test under a hydrostatic pressure in the range of 50% to 100% of the pressure required for the hydrostatic test. The selected pressure shall be maintained within a maximum variation of 5 percent during the entire leakage test. The duration of each leakage test shall be 2 hours minimum, and for such additional time necessary for the Engineer to complete observation of the section of line under test. Leakage measurements shall not be started until a constant test pressure has been established. The line leakage shall be measured by means of a water meter installed on the supply side of the pressure pump.
- 2. No leakage is allowed in exposed piping, buried piping with flanged, threaded, or welded joints or buried raw or non-potable piping in conflict with potable water lines.

3. Tested section of buried piping with slip-type or mechanical joints will not be accepted if it has a leakage rate in excess of that rate determined by the formula:

L = NDp in which; 7400

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

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

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

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

- 4. Where the leakage rate exceeds the permissible maximum, the Contractor shall locate and repair leaking joints to the extent required to reduce the total leakage to within the prescribed amount.
- 5. All apparent leaks discovered within one (1) year from the date of final acceptance of the work by the Owner shall be located and repaired by the Contractor, regardless of the total line leakage rate.

Basis of Payment: The cost of this work shall be included in the contract unit price per FOOT of **WATERMAIN 6"** and no additional compensation will be allowed.

## BASIC ELECTRICAL MATERIALS AND METHODS

<u>Materials:</u> Provide all new materials, without blemish or defect, in accord with standards specified and U.L. listed or labeled.

Basic materials include:

- 1. Raceways
- 2. Fittings
- 3. Sealing
- 4. Wire and cables
- 5. Boxes
- 6. Wiring Devices
- 7. Circuit and Motor Disconnects
- 8. Supporting Devices
- 9. Fuses
- 10. Identification

Quality Assurance: Regulatory Requirements: ANSI C1/NFPA to comply with: National Electrical Code (NEC).

<u>References</u>: Specified references, or cited portions thereof, current at date of bidding documents unless otherwise specified, govern the work. In conflict between referenced standards and contract documents, notify Owner and Engineer immediately. Confirm notification in writing. Do not proceed with the work until Owner issues written instructions via the Engineer.

- A. American National Standards Institute (ANSI):
  - 1. C80.1 Specification for Rigid Steel Conduit, Zinc-Coated.
  - 2. C80.3 Specification for Electrical Metallic Tubing, Zinc-Coated.
  - 3. C80.4 Specification for Fittings for Rigid Metal Conduit and Electrical Metallic Tubing.
- B. American National Standards Institute/National Fire Protection Association (ANSI/NFPA): ANSI C1/NFPA 70 National Electrical Code (NEC).
- C. National Electrical Manufacturers Association (NEMA):
  - 1. FB-1 Conduit and Cable Assemblies
  - 2. KS-1 Switches
  - 3. WC-5 Thermoplastic Insulated Wire and Cable
  - 4. 250 Enclosures for Electrical Equipment
- D. Manufacturer's Catalogs: Specified manufacturer's catalogs are incorporated by reference to same force and effect as if repeated herein.

CODE	MANUFACTURER'S NAME & LOCATION
1. ALL	Allied Tube & Conduit Corp., Harvey, IL.
2. AMP	AMP Products Co., Schaumburg, IL.
3. ANA	Anaconda Metal Hose, American Brass Div., Hinsdale, IL.
4. APP	Appleton Electric Co., Chicago, IL.
5. B-LB-Line	Systems, Inc., Highland, IL.
6. EFL	Electri-Flex Co., Roselle, IL.
7. ETP	ETP, Oakbrook, IL.
8. FUR	Furnas Electric Co., Batavia, IL.
9. IDEAL	Ideal Industries, Inc., Sycamore, IL.
10. IMAT	Intermatic, Inc., Spring Grove, IL.
11. ITT-H	ITT Holub Industries, Sycamore, IL.
12. KAI	Kaiser Aluminum & Chemical Corp., Electrical
13. MIN	Minerallac Electric Co., Elk Grove, IL
14. PYLE	Pyle-National Co., Chicago, IL.
15. WOOD	Daniel Woodhead, Inc. /Brad Harrison Co., Northbrook, IL.
16. ALCAN	Alcan Aluminum Corp., Alcan Cable Div., Atlanta, GA.
17. AMF	AMF Paragon Electric Co., Two Rivers, WI.
18. AND	Anderson Electrical Connectors, Leeds, AL.
19. BELL	Square D Co./Bell Electrical Products,
20. BRY	Bryant Circuit Devices, Bridgeport, CT.
21. BUCH	Buchanan Div., Elastimold Div., Amerace Corp., Hackettstown, NJ.
22. BURN	Burndy Corp., Norwalk, CT.
23. BUSS	Bussman Div., McGraw-Edison Co., St. Louis, MO.
24. CAB	Cablec Corp., Independence, MO.
25. CARL	Carlton Electrical Sciences, Inc., Cleveland, OH.
26. C-TEED	Certain-Teed Corp., Pipe & Plastics Group
27. CHALL	Challenger Electric Equipment Corp., Malvern, PA.
28. C-F	Challenger Circle F, Inc. Trenton, NJ.
29. COLL	Collyer Insulated Wire Div., Gulf-Western Manufacturing Co., Lincoln, RI.
30. C-H	Crouse-Hinds Co., Syracuse, NY.
31. DOW	Dow Corning Corp., Midland, Ml.
32. EAT	Eaton Corp., Custom Distribution & Controls Div., Milwaukee, Wl.
33. EFC	EFCOR Family of Companies, East Farmingdale, NY.
34. ERI	Erico Products, Inc., Cleveland, OH.
35. FED	Federal Pacific Electric Co./Reliance Electric Co.,
36. GE	General Electric Co., Schenectady, NY.
37. GKT	GK Technologies, Inc., General Cable Co., Cornish Products Div.,
	Greenwich, CT.
38. GOULD	Gould, Inc., Circuit Protection Div., Newburyport, MA.
39. GSC	General Signal Cor./O-Z/Gedney Co., Terryville, CT.
40. HUBB	Harvey Hubbell, Inc., Wiring Device Div.,
41. HOFF	Hoffman Engineering Co., Div. of Federal Cartridge Corp., Anoka, MN.

42. HUSKY	Husky Storage Systems, Inc., Cleveland, OH.
43. IMH	International Metal Hose, Bellevue, OH.
44. ITT-B	ITT Blackburn, St. Louis, MO.
45. ITT-W	ITT Weaver, St. Louis, MO.
46. KILL	Killark Electric Mfg. Co., St. Louis, MO.
47. KIN	Midland Ross Corp., Electric Products Div.,
48. KRA	Krayloy Products, Inc., San Dimos, CA.
49. LEV	Leviton Mfg. Co., Little Neck, NY.
50. LTV	LTV Steel Co., Cleveland, OH.
51. M-R	Midland-Ross, Pittsburgh, PA.
52. MEP	Midwest Electric Products, Inc., Mankato, MN.
53. NEL	Nelson Electric, Tulsa, OK.
54. OKO	Okonite Co., Ramsey, NJ.
55. P&S	Pass & Seymour, Syracuse, NY.
 56. PIR	Pirelli Cable Corp., Union, NJ.
57. PSD	Power Strut Div, Van Huffel Tube Corp, Warren, OH.
58. RACO	Raco, Inc., South Bend, IN.
59. SCP	Steelduct Conduit Products Div., Sawhill Tubular Div., Cyclops Corp.,
	Houston, TX.
60. SOU	Southwire Co., Carrollton, GA.
61. SQD	Square D Co., Distribution Equipment Div.,
62. T&B	Thomas & Betts Corp., Raritan, NY.
63. 3M	Three M Co., St. Paul, MN.
64. TORK	Tork, Inc., Mt. Vernon, NY.
65. TRI	Triangle Industries, Inc., New Brunswick, NJ.
66. UBS	Unistruct Building Systems, Wayne, Ml.
67. VTC	Versa-Tech Corp., Garland, TX.
68. WALK	Walker Div., Butler Mfg. Co., Parkersburg, WV.
69. WEST	Westinghouse / Cutler-Hammer Electric Corp., Pittsburgh, PA.
70. WHEAT	Wheatland Tube Co., Collingswood, NJ.
71. WIM	Wiremold Co., West Hartford, CT.

Submittals: Submit Product Data: Wire and Conduit

<u>Delivery, Storage, & Handling</u>: Materials shall be suitably packed by manufacturer to prevent damage during shipment. Damaged materials will not be acceptable for use. Store materials on site in clean, cry storage area; when outside, elevated above grade and enclosed with durable watertight wrapping. Handle all materials carefully to prevent damage. Minor scratches, marks or blemishes to finish shall be repaired to satisfaction of the Owner and Engineer.

## Individual Materials:

#### **RACEWAYS**

Conduit: Galvanized Steel Rigid Metal (G.R.S.)

Acceptable Manufacturers (by CODE): ALL, ANA, EFL, ETP, CARL, C-TEED, IMH, KRA, LTV, SCP, TRI, WHEAT

#### **FITTINGS**

Rigid subject to ANSI C80.4

May include: Locknuts; steel or malleable iron bushings; insulating or insulated throat type couplings; threaded or gland compression malleable iron type. Set screw or indenter type not acceptable.

Acceptable Manufacturers (by CODE): APP, C-H, EFC, GSC, KILL, M-R, RACO, T&B

#### WIRE AND CABLE

Building Wire: Copper, 98% conductivity, 600 v. insulation, THWN or XHHW complying with UL-83, ICEA S-61-402 or S-66-524. Wire thru #10 solid; #8 and larger, stranded.

Branch Circuit Wiring: Conductors sized in accord with N.E.C. 75° C Ampacity tables but not less than No. 12 AWG. Increase size when furthest outlet is greater than 75 ft. from panelboard.

Wiring for systems other than power: Comply with system manufacturer's standards. No. 14 AWG unless otherwise specified.

Color code conductors to designate neutral and phase.

	120 / 240V
Phase A	Black
Phase B	Red
Neutral	White
Ground	Green

Where conductors of different systems are installed in same raceway, box, or other type enclosure, comply with NEC 210-5. Use different colors for other systems. Color coding or phase conductors may be accomplished with colored tape approved by the Owner for sizes larger than No. 8 AWG. Identify control wire at each end and in all junction boxes with designated wire number corresponding to control schematics.

Acceptable Manufacturers (by CODE): ANA, CAB, COLL, GE, GKT, OKO, PIR, TRI

#### JOINTS & SPLICES

Wire No. 8 or smaller: Compression or crimp type with insulating wrap cover, or insulated twist-on spring connector. Acceptable products by code of manufacturer and product name are listed below.

<u>CODE</u>	<u>PRODUCT</u>
1. IDEAL	Wing Nut.
2. ITT-H	Free Spring.
3. BUCH	B Cap.
4. 3M	Scotchlok
5. T&B	Piggy.

Wire <u>No. 6 or larger</u>: Mechanical compression or bolted type connector covered with insulating tape or heat shrinkable insulation equal to conductor insulation.

Acceptable Manufacturers (by CODE): AMP, AND, BURN, GE, GSC, IDEAL, ITT-B, ITT-W, 3M, T&B

#### BOXES

Pull boxes and Junction Boxes: NEC - 370 and U.L. 50.

Outlet Boxes: Exterior boxes or exposed interior in wet / damp locations shall be cast aluminum, deep type, corrosion proof fasteners, watertight, gasketed, with threaded hubs.

Conduit Bodies: Galvanized cast metal of type, shape and size to fit location. Constructed with threaded conduit ends, removable cover, corrosion resistant screws.

Acceptable Manufacturers (by CODE): APP, PYLE, C-H, GE, GSC, HOFF, KILL, M-R, RACO, SQD, T&B

## CIRCUIT AND MOTOR DISCONNECTS

Safety Switches shall:

- 1. Be heavy duty enclosed safety switch, surface mounted, fusible, rated at 600 v., UL listed.
- 2. Act as quick-make, quick-break mechanisms, by position of blades visible with cover open.
- 3. Have operating handle integral part of enclosure base with position easily identified, handle lockable in "off" position with padlocks.
- 4. Meet NEMA Enclosed Safety Switch Standards KS-1 for H.D. type.
- 5. Have current carrying parts of high conductivity copper with silver-tungsten type contact surfaces.
- 6. Contain positive pressure reinforced fuse clips for fused type.
- 7. Meet the standards of NEMA 3R for outdoor enclosures.

Acceptable Manufacturers (by CODE): GE, SQD, WEST

<u>Installation</u>: Execute work in a manner not to interfere with Owner's operation. Coordinate work so there is no interference between installation or of progress of any trade. Install all equipment with ample space allowed for removal, repair, or changes to equipment. Provide ready accessibility to removable parts of equipment and to all wiring without moving equipment installed or already in place.

At project completion, clean all equipment to the original finish. Remove all shipping labels. Paint conduit and other electrical equipment where specified. Provide touch-up painting of all equipment marred in any way during shipment or installation.

<u>Basis of Payment</u>: The cost of all work performed under this section shall be considered included to the contract LUMP SUM price for **PUMP STATION GENERAL WORK** and no additional compensation will be allowed.

## CONDUIT

Materials: Conduit Schedule - Minimum Conduit Size: 3/4 inch unless otherwise specified.

<u>Installation</u>: Use rigid steel for all conduit usage on this project, expect where flexible conduit is indicated on the Drawings.

### **CONDUIT RUNS**

Size all conduit as indicated on Drawings; where not shown, in accord with NEC. Make all conduit systems mechanically and electrically continuous from source of current to all outlets, and ground in accord with the NEC.

Ream conduit after threads are cut. Cut ends square and butt solidly into couplings.

Prevent the accumulation of water, foreign matter or concrete in the conduits during execution of work. Temporarily plug conduit, blowout and swab before wires are pulled.

Fasten conduits to all boxes and cabinets with two locknuts, in accord with NEC, where insulated bushings are used and where bushings cannot be brought into firm contact with the metal enclosures; otherwise, use at least a single locknut and bushing.

Seal each underground joint and make watertight.

Make changes in direction of runs with symmetrical bends or cast-metal fittings. Make field-made bends and offsets with conduit bending machine to avoid changing the internal diameter of the conduit and not damage its protective coating either inside or outside. Individual bends shall not exceed 90° and not more than 270° total bends will be allowed in any one conduit run. Where more bends are necessary and conduit runs exceed 150 lin. ft., install a suitable pull box or junction box.

Perform all work in manholes, valve vaults, and hazardous locations as defined by NEC in strict accord with NEC for Class I, Division I, Group D hazardous locations. Provide conduit and cable seals in accord with NEC, Article 500.

#### WIRE AND CABLE

Make conductors continuous from outlet to outlet. Do not make splices except in outlet or junction boxes. Make all feeder cables continuous from origin to panel or equipment terminations without running splices in intermediate pull or boxes, unless specifically indicated on the Drawings or approved in writing by the Owner via the Engineer.

Do not exceed conduit fill established by the National Electrical Code for number of conductors installed in a raceway.

Do not pull any cable or wire in a raceway until conduit system is complete and internal raceway has been cleaned. Strain on cables shall not exceed manufacturer's recommendations during pulling. Use pulling lubricant, compatible with insulation and covering, that will not cause deterioration of insulation or jacket covers of cables or conductors. Use pulling lubricant recommended by wire manufacturer.

Provide wires and cables entering equipment or panels with enough slack to eliminate stretched, angular connection. Neatly arrange wiring, bundle and fan out to termination panels. Make minimum bending radius for conductors in accord with National Electrical Code.

Upon completion of cable and wire installation, but before termination to equipment, test each wire for grounds and short circuits. Replace or correct defective wiring.

## **BOXES**

Protect all outlet boxes from entry of foreign materials.

Independently support all boxes. No parts of the weight or stress thereof shall be borne by conduits terminating therein.

Install suitable pull boxes in convenient intermediate locations in all conduit runs in excess of 150 lineal feet and runs requiring more than three 90° bends.

Plug all unused openings. Use threaded plugs for cast boxes and snap in metal plugs for sheet metal boxes.

## DISCONNECTS AND STARTERS

Supply motor or load from individual branch circuit in separate branch conduit except where otherwise shown.

Verify proper direction of rotation of all motors.

Verify proper direction of rotation of all motors.

## RACEWAY SUPPORTS AND HANGERS

Support rigid conduits within 3 ft. of every outlet box, junction box, pull box, cabinet or termination.

<u>Basis of Payment</u>: The cost of all work performed under this section shall be considered included to the contract LUMP SUM price for **PUMP STATION GENERAL WORK** and no additional compensation will be allowed.

## **ELECTRICAL IDENTIFICATION**

Policy: The contractor provide identification of:

Manuals and automatic operable equipment installed by Contractor:

- 1. Safety Switches.
- 2. Conduit system including boxes.
- 3. Wiring system.

## Work shall comply with

- 1. ANSI A 13.1., Identification of Piping Systems.
- 2. National Electric Code. (NEC)
- 3. Local Rules and Regulations.

References: Specified references, or cited portions thereof, current at date of bidding documents unless otherwise specified, govern the work. In conflict between referenced standards and contract documents, notify the Owner or the Engineer immediately. Confirm notification in writing. Do not proceed with the work until Owner, via the Engineer, issues written instructions.

- A. American National Standards Institute (ANSI): ANSI A13.1-Identification of Piping Systems.
- B. National Fire Protection Association (NFPA): NFPA 70-National Electrical Code (NEC).
- C. Underwriters Laboratories, Inc. (UL): All products UL listed and labeled.
- D. Manufacturers' Catalogs: Specification manufacturers' catalogs are incorporated by reference to same force and effect as if repeated herein in full.

## Materials:

## **EQUIPMENT IDENTIFICATION PLATES**

Provide plates for all equipment consisting of machine engraved laminated plastic. Plate field shall be white with black core.

- A. Size of plate shall be commensurate with lettering thereon.
- B. Lettering for major items of equipment, such as a "Main Disconnect Switch" shall be  $\frac{1}{2}$ " in height.

Acceptable Manufacturers: Quentin D. Schwab, Seton Name Plate Co., or equal.

Installation: Affix equipment identification plates to equipment with stainless steel self tapping screws.

<u>Basis of Payment</u>: The cost of all work performed under this section shall be considered incidental to the contract LUMP SUM price for **PUMP STATION GENERAL WORK** and no additional compensation will be allowed.

## **ELECTRICAL SERVICE**

**Description**: Electical Service shall:

- A. Include secondary service characteristics shall be 120 / 240 Volts, 1 Phase, 3 Wire, service entrance shall be aerial
- B. Customer metering per ELECTRIC UTILITY COMPANY Requirements.
- C. Grounding work shall be in accordance with these Specifications.
- D. Secondary distributions shall be 120 / 240 Volts, 1 Phase, 3 Wire.

Contractor shall provide all labor equipment, materials, tools and services required to perform all operations in conjunction with the installation of the following:

- A. 120 / 240 Volt, 1 Phase, 3 wire service entrance and metering installation.
- B. Secondary grounding.
- C. 120 / 240 Volt 1 Phase, 3 wire distribution system.
- D. All supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound, secure and complete installation, although such work is not specifically indicated.

## Quality Assurance:

Regulatory Requirements: Comply with ANSI C1, National Electrical Code, 2002.

Reference Publications:

American National Standards Institute, ANSI.

National Electrical Manufacturers Association, NEMA.

Manufacturers' Catalogs: Catalogs of specified manufacturers current at date of contract documents are incorporated by reference to same force and effect as if repeated herein. In conflicts between

catalogs and project manual, project manual governs.

Provide all new materials, without blemish or defect, in accordance with standards specified and U.L. listed or labeled.

<u>References</u>: Provide materials, perform work and install materials in strict accordance with the latest requirements of the following:

- A. Underwriters Laboratories, Inc. (U/L or UL).
- B. National Electrical Code (NEC) of National Fire Protection Association (NFPA).
- C. Other applicable codes and standards of NFPA.
- D. Factory Mutual System (FM).
- E. American National Standards Institute (ANSI).
- F. Occupational Health and Safety Act (OSHA).
- G. Federal, state and local codes, laws, ordinances; and rules and regulations of authorities having jurisdiction.

In case of conflict or disagreement between codes, laws, ordinances, rules and regulations or within documents themselves, the more stringent condition shall govern.

Use electrical materials approved by Underwriters' Laboratories, Inc. (U/L) and bearing UL Label.

All new fabricated assemblies, manufactured items or electrically operated equipment shall have UL approval or UL reexamination listing in every case where such approval has been established for the particular type of materials or devices in question.

Submittals: Submittals will not be required for this section.

#### Materials:

#### ELECTRICAL SERVICE EQUIPMENT

Electrical service materials shall be as shown and specified on the drawings.

<u>Installation</u>: Furnish and install the systems in accordance with the Drawings and Specifications, all applicable codes and the manufacturers' recommendations.

Installation of equipment and devices that pertain to other work in the Contract shall be closely coordinated with other contractors.

Provide complete service and metering installation in strict accordance with ELECTRIC UTILITY COMPANY.

<u>Basis of Payment</u>: The cost of all work performed under this section shall be considered incidental to the contract LUMP SUM price for **PUMP STATION GENERAL WORK** and no additional compensation will be allowed.

## SECONDARY GROUNDING

## Description:

- A. Ground separately derived electrical service neutral to grounding rod.
- B. Ground raceways and electrical equipment.
- C. Bond together system neutrals, service entrance enclosures, exposed non-current carrying metal parts of electrical equipment, metal raceway systems, grounding conductor in raceways and cables and receptacle ground connectors.
- D. Contractor shall provide the power system grounding for electrical service and metering.

Quality Assurance: Regulatory Requirements shall comply with National Electric Code.

<u>References</u>: Specified references, or cited portions thereof, current at date of bidding documents unless otherwise specified, govern the work. If conflict between referenced standards and contract documents, notify Engineer immediately. Confirm notification in writing. Do not proceed with the work until the Owner issues written instructions via the Engineer.

- 1. National Fire Protection Association (NFPA): NFPA 70 National Electrical Code (NEC).
- 2. Underwriters Laboratories, Inc. (UL): All products UL listed and labeled.

Submittals: Test data when specified in Part 3.

#### Materials:

Ground rods: steel, copper-encased 5/8-inch O.D., minimum length 10 ft.

Connections: exothermic weld equal to Cadweld.

## Installation:

Supplemental grounding electrode: Use driven ground rod where shown on drawings.

Bond all grounding systems together.

<u>Quality Assurance</u>: In the Field, measure ground resistance from system neutral connection at service entrance to convenient ground reference point using suitable ground testing equipment. Resistance shall not exceed 10 ohms. When resistance exceeds 10 ohms drive and bond another ground rod, one rod length away.

<u>Basis of Payment</u>: The cost of all work performed under this section shall be considered incidental to the contract LUMP SUM price for **PUMP STATION GENERAL WORK** and no additional compensation will be allowed.

## **ELECTRICAL TESTING**

### General:

As part of Bid: Contractor Provide:

- 1. Testing of electrical components and systems:
  - a. Insulation resistance test.
  - b. Grounding electrode test.
  - c. Continuity test.
  - d. Voltage test.
  - e. Phase relationship verification.
- 2. Correction of defective components or systems.
- 3. Retest of corrected components, systems.

Materials: Furnish all equipment, manpower and casual labor to perform specified testing.

## Installation:

#### PREPARATION

Ensure that electrical work is complete and ready for testing. Disconnect all devices or equipment that might be damaged by application of test voltage of reversed phase sequence or other test procedures.

## **TESTING**

Conduct tests and adjust equipment to verify compliance with specified performance.

### INSULATION RESISTANCE TESTS

Resistance measured; line-to-ground.

Perform testing on the following items:

Items Tested	Voltage of Test	Min. Acceptance Resistance of Megohms
1. No 2 and larger cables	1000V	50
(600V)		
2. Motors	500 V	5

#### GROUNDING ELECTRODE TEST

Measure and record ground resistance from system neutral connection at service entrance to convenient ground reference point using suitable ground testing equipment. Maximum acceptable resistance: 10 ohms. When resistance exceeds 10 ohms drive and bond another ground rod, two ground rod lengths away and repeat test.

#### **CONTINUITY TESTS**

Test branch circuits and control circuits to determine continuity of wiring and connection.

BLR 11310 (Rev 8/06)

## **VOLTAGE TESTS**

Make and record tests and recorded at the following listed points. Conduct tests under normal load conditions: Service entrance at main disconnect switch; Terminals of all motors.

## PHASE RELATIONSHIP

Examine connections to equipment for proper phase relationships. Verify proper motor rotation.

## **CORRECTION OF DEFECTS**

When tests disclose any unsatisfactory workmanship or equipment furnished under this contract, correct defects and retest. Repeat tests until satisfactory results are obtained.

When any wiring or equipment is damaged by tests, repair or replace such wiring or equipment. Test repaired items to ensure satisfactory operation.

<u>Basis of Payment</u>: The cost of all work performed under this work shall be considered incidental to the contract LUMP SUM price for **PUMP STATION GENERAL WORK** and no additional compensation will be allowed.

## TRAFFIC

The road shall be closed to traffic during the construction. Local residents shall be allowed access in accordance with Article 107.09 of the Standard Specifications. The contractor shall be responsible for erecting and maintaining all necessary traffic control devices in accordance with Article 107.14 of the Standard Specifications. As clarification of Article 107.14: Traffic control consisting of flagmen, barricades, signs and lights conforming to the Standards, Specifications, and Uniform Manual on Traffic Control Devices shall be furnished in the event the closed portion of the roadway is open to local traffic. The road closure signing shall be in accordance with Standard BLR 21-6. The contractor shall be responsible for notifying fire districts, police departments, and all other agencies having jurisdiction in that area of the time of closing and re-opening of the road.

## TRAFFIC CONTROL PLAN

Traffic Control shall be in accordance with applicable articles of the Standard Specifications for Road and Bridge Construction, the applicable guidelines contained in the Illinois Manual of Uniform Traffic Control Devices for Streets and Highways, these special provisions, and any special details and Highway Standards contained herein and in the plans. At the preconstruction meeting, the Contractor shall furnish the name of the individual in his direct employ who is to be responsible for the installation and maintenance of the traffic control for this project. If the actual installation and maintenance are to be accomplished by the Subcontractor, consent shall be requested of the Engineer at the time of the preconstruction meeting in accordance with Article 108.01 of the Standard Specifications for Road and Bridge Construction. This shall not relieve the Contractor of the foregoing requirement for a responsible individual in his direct employ. The Department will provide the Contractor the name of its representative who will be responsible for the administration of the Traffic Control Plan.

Special attention is called to Sect 701 and Articles 107.09 and 107.14 of the Standard Specifications for Road and Bridge Construction and the following (1) Highway Standards, (2) Supplemental Specifications, Recurring Special Provisions, and (3) other Special Provisions relating to traffic control.

## TRAFFIC CONTROL AND PROTECTION INCIDENTAL TO THE CONTRACT

Traffic Control protection required under the following standards will be considered incidental to the contract and will not be measured for payment:

Standard BLR 21-6

Standard 701001-01

Standard 701006-02

Standard 701501-03

Standard 702001-06

## RECURRING SPECIAL PROVISIONS

The Recurring Special Provisions indicated by an "X" on the "Index for Supplemental Specifications and Recurring Special Provisions" are applicable to this contract and are included by reference.

## SALVAGEABLE MATERIALS

All materials designated by the Engineer as salvageable shall be the property of the Vermilion County Highway Department and shall be transported to the Vermilion County Highway Department, 2732 Batestown Road in Oakwood by the Contractor, in a manner to prevent damage and to allow future use by the Department. Transport shall include all trucking, loading, unloading, and dunnage for permanent storage. The cost of this Work shall be incidental to the cost of REMOVAL OF EXISTING STRUCTURES.

## **STATUS OF UTILITIES**

All utility locations indicated on the plans are for reference only. For exact locations, call for utility locations (J.U.L.I.E. 1-800-892-0123).

The following utilities are located within project limits. For relocations, the utility companies have provided the estimated dates.

Name, Contact, Address

& Phone Number

Utility

Туре

Location

Relocation

Needed

Estimated
Date Relocation

Completed

Ameren IP

Electric

Possibly

Mr. John Hudson 253 1441 510 South Washington Street

Tuscola, Illinois 61953

Ameren CILCO

Gas

Buried

Yes

Mr. Bill Fleming 253 3375

155 W. Central

Tuscola, Illinois 61953

A. T. & T.

Telephone

Possibly

Ms. Joan Gray 443 7830 816 East Voorhees Street Danville, Illinois 61832

**Charter Communications** 

ons Cable

Possibly

Frank Lemezes 267-3196 1209 North State Street Westville, Illinois 61883

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Recurring Special Provision LRS1, LRS6, 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 a part of the progress schedule submitted by the Contractor. If any utility adjustments or relocation have not been completed by the above dates specified and when required by the Contractor's operations after these dates, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's critical path schedule is affected.

# ILLINOIS DEPARTMENT OF NATURAL RESOURCES OFFICE OF WATER RESOURCES 524 SOUTH SECOND STREET SPRINGFIELD, ILLINOIS 62701-1787

STATEWIDE PERMIT NO. 12

AUTHORIZING SPECIFIED BRIDGE AND CULVERT REPLACEMENT STRUCTURES AND BRIDGE WIDENINGS

#### PURPOSE

The purpose of this Statewide Permit is to authorize the replacement of existing bridges and culverts and the widening of existing bridges where the following conditions apply: 1) the existing structure has not been the cause of demonstrable flood damage, 2) the new structure will provide the same or greater effective waterway opening, and 3) there will be no appreciable reduction in existing over-the-road flow area. It is no longer necessary to submit applications to, or obtain Resources, Office of Water Resources (IDNR/OWR), for activities meeting the terms and conditions of this permit. If a project would not meet all of the terms and conditions of this permit, a permit application must be submitted to IDNR/OWR for review.

## APPLICABILITY

This permit applies to bridge and culvert replacement structures and the widening of existing bridges on all Illinois rivers, lakes and streams under the Department's jurisdiction except public waters (see attached list) and those in Lake, McHenry, Cook, DuPage, Kane and Will Counties for which regulatory floodways have been designated pursuant to 17 Illinois Administrative Code 3708. This permit does not apply to any project which conflicts with a federal, state or local project or improvement or with any other rules of the Department.

# COORDINATION WITH OTHER AGENCIES

This permit does not supersede nor relieve any permittee's responsibility to obtain other federal, state or local permits. The local (county or municipal) regulatory official and the U.S. Army Corps of Engineers' regulatory functions office should be contacted to obtain any additional required permits.

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## SPECIAL CONDITIONS

In order for a project to be authorized by this permit, the following special conditions shall be met.

- 1. A registered professional engineer shall determine and document that the existing structure has not been the cause of demonstrable flood damage. Such documentation shall include, at a minimum, confirmation that:
  - a) no buildings or structures have been impacted by the backwater induced by the existing structure; and
  - b) there is no record of complaints of flood damages associated with the existing structure.
- A registered professional engineer shall determine that the new structure will provide the same or greater effective waterway opening as the existing structure. For bridge widening projects, the existing piers and the proposed pier extensions must be in line with the direction of the approaching flow upstream of the bridge.
- The project shall not include any appreciable raising of the approach roads. (This condition does not apply if all points on the approaches exist at an elevation equal to or higher than the 100-year frequency flood headwater elevation as determined by a Federal Emergency Management Agency flood insurance study or a study completed or approved by IDNR/OWR.)
- 4. The project shall not involve the straightening, enlargement or relocation of the existing channel of the river or stream except as permitted by the Department's Statewide Permit No. 9 (Minor Shoreline, Channel and Streambank Protection Activities) or Statewide Permit No. 11 (Minor Maintenance Dredging Activities).
- 5. The permittee shall maintain records of projects authorized by this permit necessary to document compliance with the above conditions.

# GENERAL CONDITIONS OF THE STATEWIDE PERMIT

- This permit is granted in accordance with the Rivers, Lakes and Streams Act, 615 ILCS 5 (1996 State Bar Edition).
- This permit does not convey title to any permittee or recognize title of any permittee to any submerged or other lands, and furthermore, does not convey, lease or provide any right or rights of occupancy or use of the public or private property on which the project or any part thereof will be located, or otherwise grant to any permittee any right or interest in or to the property, whether the property is owned or possessed by the State of Illinois or by any private or public party or parties.
- 3. This permit does not release any permittee from liability for damage to persons or property resulting from any activity covered by this permit and does not authorize any injury to private property or invasion of private rights.
- This permit does not relieve any permittee of the responsibility to obtain other federal, state or local authorizations required for the construction of the permitted activity; and if any permittee is required by law to obtain approval from any federal or other state agency to do the work, authorization granted by this permit is not effective until the federal and state approvals are obtained.
- 5. The permittee shall, at the permittee's own expense, remove all temporary piling, cofferdams, false work, and material incidental to the construction of the project, from the floodway in which the work is done. If the permittee fails to remove such structures or materials, the Department may have removal made at the expense of the permittee. If the activity is on a public body of water and if future need for public navigation or public interests, by the state or federal government, necessitates changes in any part of the structure or structures, such changes shall be made by and at the expense of the permittee or permittee's successors as required by the Department of Natural Resources or other properly constituted agency, within sixty (60) days from receipt of written notice of the necessity from the Department or other agency, unless a longer period of time is specifically authorized.

- 6. In issuing this permit, the Department of Natural Resources does not approve the adequacy of the design or structural strength of any structure or improvement authorized by this permit.
- 7. This Statewide Permit shall remain in effect until such time as it is modified, suspended, or revoked by the Department of Natural Resources.

This Statewide Permit was issued on July 30, 1990 and last modified or corrected June 15, 1998.

APPROVED:

Brent Manning, Director Department of Natural Resources

EXAMINED AND RECOMMENDED:

Martin J. Stralow, Manager Division of Water Resource Management

APPROVAL RECOMMENDED:

Donald R. Vonnahme, Director Office of Water Resources

# Public Bodies of Water

The following public bodies of water were navigable in their natural condition or were improved for mavigation and opened to public use. The entire length and surface area in Illinois, including all backwater lakes and sloughs open to the main channel or body of water at normal flows or stages, are open to the public unless limited to a head of navigation as stated. Head of navigation descriptions use the U.S. rectangular survey system and these abbreviations: T = township, R = range, PM = principal meridian, Sec. = section, 1/4 = quarter section, N = north, E = east, S = south, W = west, USGS = U.S. Geological Survey.

- Lake Michigan;
- Chicago River: Main Branch;
- 3) Chicago River: North Branch to North Shore Channel;
- 4) Chicago River: South Branch;
- 5) Chicago River: South Fork of South Branch;
- 6) Chicago River: East and West Arms of South Fork of South Branch;
- 7) Chicago River: West Fork of South Branch to Chicago Sanitary and Ship Canal;
- 8) Calumet River;
- 9) Lake Calumet and entrance channel to Calumet River;
- 10) Grand Calumet River;
- 11) Little Calumet River;
- 12) Wolf Lake (Cook County);
- 13) Mississippi River (including all backwater lakes such as Frentress Lake in Jo Daviess County, Boston Bay in Mercer County and Quincy Bay in Adams County);

- 14) Sinsiniwa River to North Line of Sec. 9, T28N, R1W, 4th PM in Jo Daviess County, which is located approximately two-thirds mile downstream from the U.S. Highway 20 bridge. This area is shown on the Galena, Ill.-Iowa, 7.5 minute USGS quadrangle map;
- 15) Galena River to East Line of Sec. 6, T28N, R1E, 4th PM in Jo Daviess County, which is located approximately one-half mile upstream from the County Highway 67 bridge. This area is shown on the Galena, Ill.-Iowa, 7.5 minute USGS quadrangle map;
- 16) Apple River to North Line of Sec. 35, T26N, R2E, 4th PM in Jo Daviess County;
- Plum River to North Line, T24N, R3E, 4th PM in Carroll County, which is located approximately one and one-half miles upstream from the U.S. Highway 52 bridge. This area is shown on the Savanna, Ill., 15 minute USGS quadrangle map;
- 18) Rock River;
- 19) Pecatonica River;
- 20) Sugar River (Winnebago County);
- 21) Stillman Creek to South Line, T25N, R11E, 4th PM in Ogle County, which is located approximately one-third mile downstream from the Illinois Highway 72 bridge. This area is shown on the Stillman Valley, 7.5 minute USGS quadrangle map;
- Henderson Creek (new channel) to East Line, SW 1/4, Sec. 6, T10N, R5W, 4th PM in Henderson County. The river has been relocated and the old channel abandoned;
- 23) The Sny in Adams, Pike and Calhoun Counties. The area has been drained with levees and ditches and it is uncertain that any descendent body of water exists;
- 24) Bay Creek to West Line, Sec. 29, T8S, R3W, 4th PM in Calhoun County. The head of navigation is the limit of meanders on the official plat of survey; but it is uncertain that any descendent body of water exists;

- 25) Illinois River (including all backwater lakes such as Peoria Lake in Peoria, Tazewell and Woodford Counties; Matanzas Bay in Mason County; and Meredosia Lake in Cass and Morgan Counties);
- Des Plaines River to Hoffman Dam in Cook County, which is located one-half mile downstream from the junction with Salt Creek. This area is shown on the Berwyn, 7.5 minute USGS quadrangle map;
- 27) Kankakee River;
- Troquois River to South Line, SW 1/4, Sec. 30, T27N, R12W, 2nd PM in Iroquois County, which is located approximately one mile downstream from the junction with Sugar Creek. This area is shown on the Gilman, 15 minute USGS quadrangle;
- 29) Fox River (Illinois River Basin);
- 30) Griswold Lake (McHenry County);
- 31) Fox Chain-O-Lakes (Lake and McHenry Counties):
  Bluff Lake, Lake Catherine, Channel Lake, Fox
  Lake, Grass Lake, Lake Marie, Nippersink Lake,
  Dunns Lake, Pistakee Lake, Lake Jerilyn, Lac
  Louette, Redhead Lake;
- 32) Vermilion River (Illinois River Basin) to approximately one-half mile above the mouth near Oglesby in LaSalle County;
- 33) Spring Lake (Tazewell County);
- Spoon River to North Line, Sec. 24, T6N, R1E, 4th PM in Fulton County, which is located approximately one-half mile upstream from the Illinois Highway 95 bridge. This area is shown on the Smithfield, 7.5 minute USGS quadrangle map:
- Sangamon River to South Line, NE 1/4, Sec. 1, T15N, R4W, 3rd PM in Sangamon County, which is located approximately one mile south of the Mechanicsburg Road bridge. This area is shown on the Mechanicsburg, 7.5 minute USGS quadrangle map;

- Sangamon River: South Fork to South Line, Sec. 33, T16N, R4W, 3rd PM in Sangamon County, which is located approximately two miles upstream from the mouth. This area is shown on the Springfield-East, 7.5 minute USGS quadrangle map;
- Macoupin Creek to East Line, Sec. 25, T9N, R13W, 3rd PM in Green and Jersey Counties, which is located approximately one mile downstream from the junction with Boyer Creek. This area is shown on the Boyer Creek, 7.5 minute USGS quadrangle map;
- Otter Creek to East Line of Sec. 3, T7N, R13W, 3rd PM in Jersey County, which is located approximately two miles east of the Illinois Highway 100 bridge. This area is shown on the Nutwood, 7.5 minute USGS quadrangle map;
- 39) Kaskaskia River to East Line, SW 1/4, Sec. 31, T8N, R2E, 3rd PM, which is located nine miles south and two miles west of Herrick. This area is shown on the Vera, 7.5 minute USGS quadrangle map;
- 40) Big Muddy River to East line T8S, R2W, 3rd PM in Jackson County, which is located approximately one mile northwest of the Southern Illinois Airport. This area is shown on the Murphysboro, 7.5 minute USGS quadrangle map;
- 41) Ohio River;
- 42) Wabash River;
- Vermilion River (Wabash River Basin) to West Line, T19N, R11W, 2nd PM in Vermilion County, which is located approximately one mile upstream from the junction with the North Fork. This area is shown on the Danville, SW, 7.5 minute USGS quadrangle map;
- 44) Little Wabash River to the Illinois Highway 1 bridge in Carmi in White County;
- 45) Saline River to junction of North Fork and South Fork;

- Saline River: North Fork to North Line, Sec. 5, T8S, R8E, 3rd PM in Gallatin County, which is located approximately three miles south of the junction of Illinois Highway 141 and U.S. Highway 45. This area is shown on the Ridgway, 7.5 minute USGS quadrangle map;
- Saline River: South Fork to West Line, T9S, R8E, 3rd PM in Gallatin County, which is located at the Gallatin-Saline County line. This area is shown on the Equality, 7.5 minute USGS quadrangle map;
- 48) Horseshoe Lake (Alexander County).

The following public bodies of water are primarily artificial navigable waters that were opened to public use.

- 1) Illinois and Michigan Canal;
- 2) Illinois and Mississippi (Hennepin) Canal and Canal Feeder;
- 3) North Shore Channel (Cook County);
- 4) North Branch Canal of North Branch Chicago River (Cook County);
- 5) Relocated South Branch Chicago River (Cook County);
- 6) Chicago Sanitary and Ship Canal;
- 7) Calumet Sag Channel;
- 8) Marseilles Canal (LaSalle County);
- 9) Chain of Rocks Canal (Madison County);
- Relocated Kaskaskia River.

The following public bodies of water are navigable waters that were dedicated to public use. This list is incomplete. It is believed there are numerous channels and slips in subdivisions on the margins of public bodies of water which have been dedicated by plat. Additional channels and slips have been dedicated by common law.

1) Petite Lake, Spring Lake and connecting channels between Bluff Lake and Fox Lake in Lake County.



## DEPARTMENT OF THE ARMY

U.S. ARMY ENGINEER DISTRICT, LOUISVILLE
CORPS OF ENGINEERS
NEWBURGH REGULATORY OFFICE
P.O. Box 489
NEWBURGH, INDIANA 47629-0489
FAX: (812) 858-2678
http://www.irl.usace.army.mil

May 21, 2006

Operations Division Regulatory Branch (South) ID No. 200600669-kam

Vermillion County Highway Department 2732 Batestown Road Oakwood, Illinois 61858-6149

Dear Gentlemen:

This is in response to your request for authorization to remove a single cell box culvert and replace it with a single span concrete structure on spill thru abutments. The proposed bridge would be 96.5 feet long and 30 feet wide. The channel banks would be sloped to 2:1 and protected with approximately 94.7 cubic yards of rip rap. The proposed project is located near Catlin, in Vermilion County, Illinois. The information supplied by you was reviewed to determine whether a Department of the Army (DA) permit will be required under the provisions of Section 404 of the Clean Water Act.

Your project is considered a discharge of fill for a road crossing. The project is authorized under the provisions of 33 CFR 330 Nationwide Permit (NWP) No. 14, Linear Transportation Crossings, as published in the Federal Register January 15, 2002. Under the provisions of this authorization you must comply with the enclosed:

- 1. Terms for Nationwide Permit No. 14
- 2. Nationwide Permit General Conditions
- 3. Water Quality Certification Conditions issued by the Illinois Environmental Protection Agency (ILEPA).

This verification is valid until the NWP is modified, reissued, or revoked. All of the existing NWPs are scheduled to be modified, reissued, or revoked prior to March 18, 2007. It is incumbent upon you to remain informed of changes to the NWPs. We will issue a public notice when the NWPs are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this Nationwide Permit. A copy of this letter is being sent to your agent and to the ILEPA.

If you have any questions, please contact me by writing to the above address, ATTN: CELRL-OP-FS, or by calling (812) 853-9713. Any correspondence on this matter should refer to our ID No. 200600669-kam.

Sincerely,

Michael Ricketts Project Manager Regulatory Branch ORIGINAL SIGNED

Enclosure

Copy Furnished:

ADDRESS FOR COORDINATING AGENCY

Mr. Bernard Killian
Director
Permits Section
Environmental Protection Agency
1020 North Grand Avenue East
P.O. Box 19276
Springfield, Illinois 62794-9676

ADDRESS FOR AUTHORIZED AGENT

Keith E. Brandau Frauenhoffer and Associates, P.C. 3002 Crossing Court Champaign, Illinois 61822-6135 Vermilion County Village of Catlin Sec. 05-00154-00-BR

## **COMMITTMENTS**

There are no known commitments regarding Vermilion County Sec. 05-00154-00-BR as of August 2006.



# **Storm Water Pollution Prevention Plan**

Route	FA	U 7060 / FS507	Marked	
Section	n 0	5-00154-00-BR	Project No.	M-5016(303)
County	, <u> </u>	/ermilion		
	<del></del>			
This p Enviro	ian ha	as been prepared to comply with the provisions tal Protection Agency for storm water discharges fro	of the NPDES om Construction	Permit Number ILR10, issued by the Illinois Site Activities.
accord submit gather am aw	lance tted. I ing the are th	er penalty of law that this document and all attact with a system designed to assure that qualified Based on my inquiry of the person or persons who information, the information submitted is, to the beat there are significant penalties for submitting false violations.	personnel prop manage the sy est of my knowle	stem, or those persons directly responsible for edge and belief, true, accurate and complete.
D	rbe	et bandrews	December	
		Signature		Date
COÜN	ITY E	NGINEER		
		Title -		
1.	Site E	Description		
	a.	The following is a description of the construction as necessary):		
		Construction of Webster Street in Catlin, Illinois, in single span bridge. Construction activities include	ncluding the rep e excavation an	lacement of an existing concrete culvert with a discussion of an existing concrete culvert with a
	b.	The following is a description of the intended sequentions of the construction site, such as grubbing 1. Grubbing of the Right-of-Way 2. Removal of the Existing Culvert 3. Excavation of portions of the roadway emban 4. Utility excavation and backfill. 5. Roadway Embankment construction.	յ, excavation ar	activities which will disturb soils for major od grading (use additional pages, as necessary):
	c.	The total area of the construction site is estimated	d to be 3.0	acres.

The total area of the site that it is estimated will be disturbed by excavation, grading or other activities is 3.0 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): The project requirements include the following:

- 1. Temporary Seeding
- 2. Mulch
- 3. Ditch Checks
- 4. Perimeter Erosion Barrier
- 5. Inlet and Pipe Protection

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

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

#### Structural Practices include:

- 1. Temporary Seeding: Installed for the purpose of abating erosion over the project duration.
- 2. Mulch: Installed to promote seed growth.
- 3. Ditch Checks: Installed to pond stormwater flow to abate erosion.
- 4. Perimeter Erosion Barrier: Installed to be the last line of defense for eroding soils.
- 5. Inlet and Pipe Protection: Installed to contain erosion at the conduit entrance.

#### 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.
- 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):

- 1. Temporary Seeding: Installed for overland flow attenuation.
- 2. Mulch: Installed to promote seed growth to attenuate flow.
- 3. Ditch Checks: Installed to pond pollutants.
- 4. Perimeter Erosion Barrier: Installed to arrest pollutant travel outside the project limits.
- 5. Inlet and Pipe Protection: Installed to trap pollutants at the conduit entrances.

#### 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:

- 1. Temporary Seeding: Installed for the purpose of abating erosion over the project duration.
- 2. Mulch: Installed to promote seed growth.
- Ditch Checks: Installed to pond stormwater flow to abate erosion.
- 4. Perimeter Erosion Barrier: Installed to be the last line of defense for eroding soils.
- 5. Inlet and Pipe Protection: Installed to contain erosion at the conduit entrance.

#### 3. Maintenance

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

The contract requires that the Contractor maintain the erosion control features in functional and unbreached condition. Further, the Contractor is required to replace breached erosion control features.

The Resident Engineer is empowered under the contract to augment the features in the contract by extending their limits and doubling their placement.

#### 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).

Non-Storm Discharges shall be arrested by the following means:

- 1. Temporary Seeding: Installed for the purpose of abating erosion over the project duration.
- 2. Mulch: Installed to promote seed growth.
- 3. Ditch Checks: Installed to pond stormwater flow to abate erosion.
- 4. Perimeter Erosion Barrier: Installed to be the last line of defense for eroding soils.
- 5. Inlet and Pipe Protection: Installed to contain erosion at the conduit entrance.



#### **Contractor Certification Statement**

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

Project l	nformation:			
Route	FAU 7060 / FS507		_ Marked	
Section	05-00154-00-BR		_ Project No.	M-5016(303)
County	Vermilion			
portific:	under penalty of law that Lunderstar	nd the terms of t	the general National I	Pollutant Discharge Elimination System
(NPDĚS	inder penalty of law that i understarty by permit (ILR 10) that authorizes the tified as part of this certification.	e storm water di	scharges associated	with industrial activity from the construction
	Signature	· · ·		Date
		· · · · · · · · · · · · · · · · · · ·	<del></del>	
	Title			
	Name of Firm			
			· · · · · ·	
·	Street Address	· · · · · · · · · · · · · · · · · · ·	<del></del>	
City		State		
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Ot-ti	LT EOP	Centerline		LT X-Slope	CL Grade Line (%)	RT X-Slope Percent	
Station	Elevation	Elevation	Elevation	Percent		2.00%	<b>V</b> -
99+38.810	651.93	652.17	651.93	2.00%	-1.91		25' Transition From AA Section to BB Section STA 99+38.81 TO 99+63.81
99+40.000	651.91	652.15 652.06	651.92	2.00%	-1.91	1.90%	Sec 34.1
99+45.000	651.82		651.87	2.00%	-1.91	1.50%	nsition Fr n to BB S 99+38.8° 99+63,81
99+50.000	651.72	651.96	651.83	2.00%	-1.91	0.70%	sitic to 194-6 9-6
99+55.000	651.63	651.87	651.79	2.00%	-1.91		ran tion 7A §
99+60.000	651.53	651.77 651.69	651.73	2.00%	-1.91	0.30%	25' T Sec ST
99+63.810	651.45		651.69	2.00%	-1.91		
99+65.000	651.43	651.67	651.68	2.00%	-1.91	-0.10%	QQ
99+70.000	651.34	651.58	651.64	2.00%	-1.91	-0.50%	월인
99+75.000	651.24	651.48	651.59	2.00%	-1.91	-0.90%	Section to 63.81 TO
99+80.000	651.15	651.39	651.55	2.00%	-1.91	-1.30%	88. ±2
99+85.000	651.05	651.29	651.49	2.00%	-1.91	-1.70%	BB 99+ 13.8
99+90.000	650.95	651.20	651.45	2.10%	-1.91	-2.10%	nsition from BB Section to ection STA 99+63.81 TO 100+13.81
99+95.000	650.80	651.10	651.40	2.50%	-1.91	-2.50%	1 S 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
100+00.000	650.66	651.01	651.36	2.90%	-1.91	-2.90%	sitic ctio
100+05.000	650.51	650.91	651.31	3.30%	-1.91	-3.30%	Transition Section
100+10.000	650.37	650.81	651.25	3.70%	-1.91	-3.70%	20 ∓
100+13.810	650.26	650.74	651.22	4.00%	-1.91	-4.00%	ro
100+15.000	650.24	650.72	651.20	4.00%	-1.91	-4.00%	
100+20.000	650.14	650.62	651.10	4.00%	-1.93	-4.00%	
100+25.000	650.05	650.53	651.01	4.00%	-1.96	-4.00%	_
100+30.000	649.95	650.43	650.91	4.00%	-1.99	-4.00%	8
100+35.000	649.85	650.33	650.81	4.00%	-2.02	-4.00%	
100+40.000	649.75	650.23	650.71	4.00%	-2.05	-4.00%	£ 5.
100+45.000	649.64	650.12	650.60	4.00%	-2.08	-4.00%	) XX
100+50.000	649.54	650.02	650.50	4.00%	-2.11	-4.00%	40
100+55.000	649.43	649.91	650.39	4.00%	-2.14	-4.00%	→ Ke
100+60.000	649.32	649.80	650.28	4.00%	-2.17	-4.00%	3.8
100+65.000	649.21	649.69	650.17	4.00%	-2.2	-4.00%	vated Curve 1 - SECTION 100+13.81 TO 100+95.35
100+70.000	649.10	649.58	650.06	4.00%	-2.23	-4.00%	7 <u>v</u> 2

	LT EOP	Centerline	RT EOP	LT X-Slope	CL Grade	RT X-Slope	
Station	Elevation	Elevation	Elevation	Percent	Line (%)	Percent	
100+75.000	648.99	649.47	649.95	4.00%	-2.26	-4.00%	Superele STA
100+80.000	648.88	649.36	649.84	4.00%	-2.29	-4.00%	edr S
100+85.000	648.76	649.24	649.72	4.00%	-2.32	-4.00%	<u> </u>
100+90.000	648.65	649.13	649.61	4.00%	-2.35	-4.00%	
100+95.000	648.53	649.01	649.49	4.00%	-2.38	-4.00%	
100+95.350	648.52	649.00	649.48	4.00%	-2.38	-4.00%	
101+00.000	648.44	648.89	649.34	3.75%	-2.41	-3.75%	
101+05.000	648,35	648.77	649.19	3.49%	-2.44	-3.49%	
101+10.000	648.26	648.65	649.04	3.22%	-2.47	-3.22%	出
101+15.000	648.17	648.52	648.87	2.95%	-2.50	-2.95%	Reverse Curve Transition from DD to STA 100+95.35 TO 101+70.35
101+20.000	648.08	648.40	648.72	2.69%	-2.53	-2.69%	rse Curve Transition from DD t STA 100+95.35 TO 101+70.35
101+25.000	647.98	648.27	648.56	2.42%	-2.56	-2.42%	fron 01+
101+30.000	647.88	648.14	648.40	2.15%	-2.59	-2.15%	on 0
101+35.000	647.78	648.01	648.24	1.89%	-2.62	-1.89%	nsiti 5 T
101+40.000	647.69	647.88	648.07	1.62%	-2.65	-1.62%	Trai 5.3
101+45.000	647.59	647.75	647.91	1.35%	-2.68	-1.35%	0+6
101+50.000	647.48	647.61	647.74	1.09%	-2.71	-1.09%	19 CE
101+55.000	647.37	647.47	647.57	0.82%	-2.72	-0.82%	rse STA
101+60.000	647.27	647.34	647.41	0.55%	-2.66	-0.55%	e s
101+65.000	647.18	647.21	647.24	0.29%	-2.59	-0.29%	쬬
101+70.000	647.08	647.08	647.08	0.02%	-2.53	-0.02%	
101+70.350	647.07	647.07	647.07	0.00%	-2.52	0.00%	
101+75.000	646.99	646.96	646.93	-0.25%	-2.46	0.25%	
101+80.000	646.90	646.84	646.78	-0.51%	-2.4	0.51%	<u>µ</u>
101+85.000	646.81	646.72	646.63	-0.78%	-2.33	0.78%	ئ <sup>ر</sup> خ
101+90.000	646.73	646.60	646.47	-1.05%	-2.27	1.05%	표 5.3
101+95.000	646.65	646.49	646.33	-1.31%	-2.2	1.31%	from EE to FF 02+45.35
102+00.000	646.57	646.38	646.19	-1.58%	-2.14	1.58%	
102+05.000	646.50	646.28	646.06	-1.85%	-2.07	1.85%	sitio T
102+10.000	646,42	646.17	645.92	-2.11%	-2.01	2.11%	ran 3.35
102+15.000	646.37	646.08	645.79	-2.38%	-1.94	2.38%	e † +70
102+20.000	646.30	645.98	645.66	-2.65%	-1.88	2.65%	ž <u>5</u>
102+25.000	646.24	645.89	645.54	-2.91%	-1.81	2.91%	Reverse Curve Transition STA 101+70.35 TO 1
102+30.000	646.18	645.80	645.42	-3.18%	-1.75	3.18%	vers ST
102+35.000	646.13	645.71	645.30	-3.45%	-1.68	3.45%	R.
102+40.000	646.08	645.63	645.19	-3.71%	-1.68	3.71%	
102+45.000	646.03	645.55	645.07	-3.98%	-1.62	3.98%	·
102+45.350	646.02	645.54	645.06	-4.00%	-1.62	4.00%	
102+50.000	645.96	645.48	645.00	-4.00%	-1.55	4.00%	
102+55.000	645.88	645.40	644.92	-4.00%	-1.55	4.00%	
102+60.000	645.80	645.32	644.84	-4.00%	-1.55	4.00%	

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	LT EOP	Centerline	RT EOP		LT X-Slope	CL Grade	RT X-Slope	
Station	Elevation	Elevation	Elevation		Percent	Line (%)	Percent	
102+65.000	645.71	645,23	644.75		-4.00%	-1.71	4.00%	7
102+70.000	645.61	645.13	644.65		-4.00%	-1.88	4.00%	ION 57
102+75.000	645.50	645.02	644.54		-4.00%	-2.04	4.00%	+32 +32
102+80.000	645.39	644.91	644.43		-4.00%	-2.21	4.00%	erelevated Curve 2 - SECTION STA 102+45,35 TO 103+32.57
102+85.000	645.27	644.79	644.31		-4.00%	-2.37	4.00%	0.2
102+90.000	645.13	644.65	644.17		-4.00%	-2.53	4.00%	Superelevated Curve 2 STA 102+45,35 TO
102+95.000	645.00	644.52	644.04		-4.00%	-2.7	4.00%	2. 2. 2. 3.
103+00.000	644.85	644.37	643.89		-4.00%	-2.86	4.00%	atec 02+
103+05.000	644.69	644.21	643.73	·	-4.00%	-3.02	4.00%	lev. A 1
103+10.000	644.53	644.05	643.57		-4.00%	-3.19	4.00%	ST.
103+15.000	644.36	643.88	643.40		-4.00%	-3.35	4.00%	Sup
103+20.000	644.18	643.70	643.22		-4.00%	-3.52	4.00%	
103+25.000	643.99	643.51	643.03		-4.00%	-3.68	4.00%	•
103+30.000	643.79	643.31	642.83		-4.00%	-3.84	4.00%	
103+32.570	643.69	643.21	642.73		-4.00%	-3.93	4.00%	
103+35.000	643.57	643.11	642.65		-3.81%	-4.01	3.81%	出
103+40.000	643.30	642.90	642.49		-3.41%	-4.17	3.41%	
103+45.000	643.04	642.68	642.31		-3.01%	-4.34	3.01%	Transition from HH Section to Section STA 103+82.57 TO 103+32.57
103+50.000	642.76	642.45	642.14		-2.61%	-4.5	2.61%	Sec 32.5
103+55.000	642.49	642.23	641.96		-2.21%	-4.5	2.21%	1H S 33+8 2.57
103+60.000	642.22	642.00	641.76		-1.81%	-4.5	2.00%	from HI STA 103 103+32.
103+65.000	641.94	641.78	641.54		-1.41%	-4.5	2.00%	n fron STA 103+
103+70.000	641.67	641.55	641.31		-1.01%	-4.5	2.00%	idior
103+75.000	641.40	641.33	641.09		-0.61%	-4.5	2.00%	ransition
103+80.000	641.12	641.10	640.86		-0.21%	-4.5	2.00%	Ę
103+82.570	640.98	640.98	640.74		0.00%	-4.5	2.00%	20
103+85.000	640.85	640.88	640.64		0.19%	-4.5	2.00%	두 우
103+90.000	640.58	640.65	640.41	<u> </u>	0.59%	-4.5	2.00%	# - 12 /-
103+95.000	640.31	640.43	640.19		0.99%	-4.5	2.00%	sitio for to 7
104+00.000	640.03	640.20	639.96		1.39%	-4.5	2.00%	Transition Section to Section \ 104+07.5
104+05.000	639.76	639.98	639.74		1.79%	-4.5	2.00%	25'T  30 S STA
104+07.570	639.62	639.86	639.62		2.00%	-4.5	2.00%	25. Ju
104+10.000	639.51	639.75	639.51		2.00%	-4.5	2.00%	
104+15.000	639.29	639.53	639.29		2.00%	-4.5	2.00%	
104+20.000	639.06	639.30	639.06		2.00%	-4.5	2.00%	
104+25.000	638.84	639.08	638.84		2.00%	-4,5	2.00%	
104+30.000	638.61	638.85	638.61		2.00%	-4.5	2.00%	
104+35.000	638.39	638.63	638.39		2.00%	-4.5	2.00%	
104+40.000	638.16	638.40	638.16		2.00%	-4.5	2.00%	
104+45.000	637.94	638.18	637.94		2.00%	-4.5	2.00%	
104+50.000	637.72	637.96	637.72		2.00%	-4.37	2.00%	

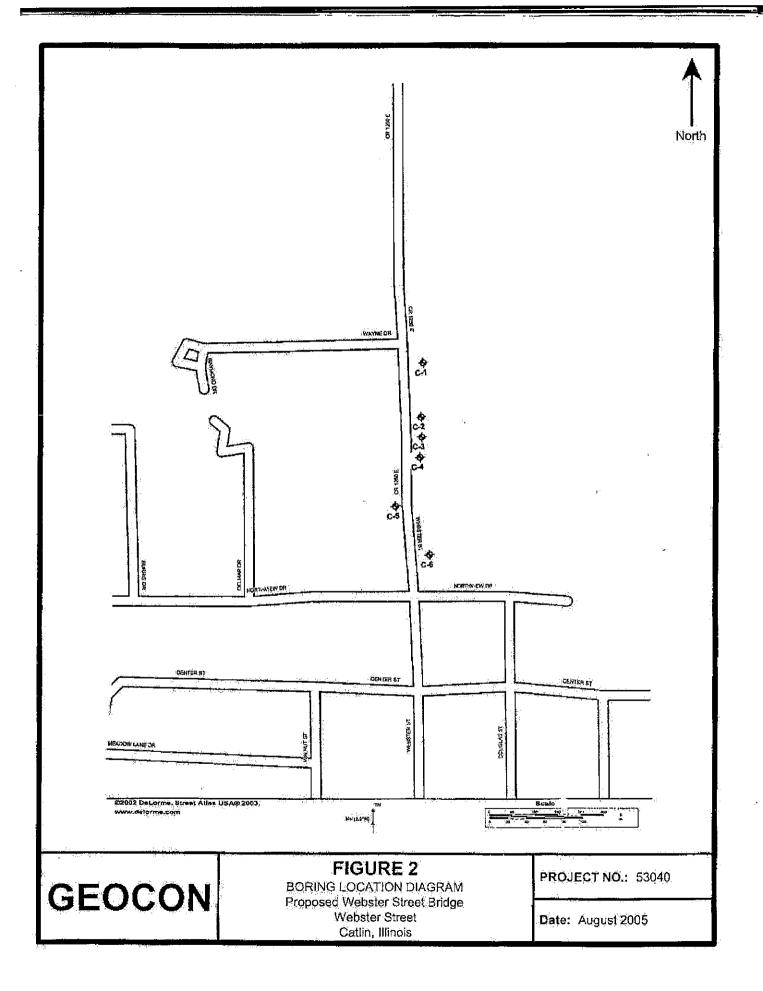
	LT EOP	Centerline	RT EOP		LT X-Slope	CL Grade	RT X-Slope	
Station	Elevation	Elevation	Elevation		Percent	Line (%)	Percent	
104+55.000	637.51	637.75	637.51		2.00%	-4.24	2.00%	
104+60.000	637.31	637.55	637.31		2.00%	-4.1	2.00%	
104+65.000	637.12	637.36	637.12		2.00%	-3.97	2.00%	
104+70.000	636.93	637.17	636.93		2.00%	-3.84	2.00%	
104+75.000	636.75	636.99	636.75		2.00%	-3.71	2.00%	
104+80.000	636.57	636.81	636.57		2.00%	-3.57	2.00%	
104+85.000	636.40	636.64	636.40		2.00%	-3.44	2.00%	
104+90.000	636.24	636.48	636.24		2.00%	-3.31	2.00%	
104+95.000	636.08	636.32	636.08		2.00%	-3.18	2.00%	
105+00.000	635.94	636.18	635.94		2.00%	-3.05	2.00%	
105+05.000	635.79	636.03	635.79		2.00%	-2.91	2.00%	
105+10.000	635,66	635.90	635.66		2.00%	-2.78	2.00%	,
105+15.000	635.53	635.77	635.53		2.00%	-2.65	2.00%	
105+20.000	635.41	635.65	635.41		2.00%	-2.52	2.00%	
105+25.000	635.29	635.53	635.29	_	2.00%	-2.39	2.00%	
105+30.000	635.18	635.42	635.18		2.00%	-2.25	2.00%	
105+35.000	635.08	635.32	635.08		2.00%	-2.12	2.00%	
105+40.000	634.98	635.22	634.98		2.00%	-1.99	2.00%	
105+45.000	634.89	635.13	634.89		2.00%	-1.86	2.00%	
105+50.000	634.81	635.05	634.81		2.00%	-1.72	2.00%	
105+55.000	634.73	634.97	634.73		2.00%	-1.59	2.00%	
105+60.000	634.66	634.90	634.66		2.00%	-1.46	2.00%	
105+65.000	634.60	634.84	634.60		2.00%	-1.33	2.00%	
105+70.000	634.54	634.78	634.54		2.00%	-1.2	2.00%	~
105+75.000	634.49	634.73	634.49		2.00%	-1.06	2.00%	
105+80.000	634.45	634.69	634.45		2.00%	-0.93	2.00%	
105+85.000	634.41	634.65	634.41		2.00%	-0.8	2.00%	
105+90.000	634.38	634.62	634.38		2.00%	-0.67	2.00%	
105+95.000	634.36	634.60	634.36		2.00%	-0.53	2.00%	
106+00.000	634.34	634.58	634.34		2.00%	-0.4	2.00%	
106+05.000	634.33	634.57	634.33		2.00%	-0.27	2.00%	
106+10.000	634.33	634.57	634.33		2.00%	-0.14	2.00%	
106+15.000	634.33	634.57	634.33		2.00%	-0.01	2.00%	
106+20.000	634.34	634.58	634.34		2.00%	0.13	2.00%	
106+25.000	634.36	634.60	634.36		2.00%	0.26	2.00%	
106+30.000	634.38	634.62	634.38	ļ <u>-</u>	2.00%	0.39	2.00%	
106+35.000	634.41	634.65	634.41		2.00%	0.52	2.00%	
106+40.000	634.45	634.69	634.45	<u> </u>	2.00%	0.65	2.00%	
106+45.000	634.49	634.73	634.49		2.00%	0.79	2.00%	
106+50.000	634.54	634.78	634.54	_	2.00%	0.92	2.00%	
106+55.000	634.59	634.83	634.59	1_	2.00%	1.05	2.00%	<u></u>

	LT EOP	Centerline	RT EOP		LT X-Slope	CL Grade	RT X-Slope	
Station	Elevation	Elevation	Elevation		Percent	Line (%)	Percent	
106+60.000	634.66	634.90	634.66		2.00%	1.18	2.00%	
106+65.000	634.73	634.97	634.73	•	2.00%	1.32	2.00%	
106+70.000	634.80	635.04	634.80		2.00%	1.45	2.00%	
106+75.000	634.88	635.12	634.88		2.00%	1.58	2.00%	
106+80.000	634.97	635.21	634.97		2.00%	1.71	2.00%	
106+85.000	635.07	635.31	635.07		2.00%	1.84	2.00%	***
106+90,000	635.17	635.41	635.17		2.00%	1.98	2.00%	
106+95.000	635.28	635.52	635.28		2.00%	2.11	2.00%	
107+00.000	635.40	635.64	635.40		2.00%	2.24	2.00%	
107+05.000	635.52	635.76	635.52		2.00%	2.37	2.00%	
107+10.000	635.65	635.89	635.65		2.00%	2.51	2.00%	
107+15.000	635.78	636.02	635.78	··	2.00%	2.64	2.00%	
107+20.000	635.92	636,16	635.92		2.00%	2.77	2.00%	
107+25.000	636.07	636.31	636.07		2.00%	2.9	2.00%	
107+30.000	636.23	636.47	636.23		2.00%	3.03	2.00%	
107+35.000	636.39	636.63	636.39		2.00%	3.17	2.00%	
107+40.000	636.56	636.80	636.56		2.00%	3.3	2.00%	
107+45.000	636.73	636.97	636.73		2.00%	3.43	2.00%	
107+50.000	636.90	637.14	636.90		2.00%	3.43	2.00%	
107+55.000	637.07	637.31	637.07		2.00%	3.43	2.00%	
107+60.000	637.24	637.48	637.24		2.00%	3.43	2.00%	
107+65.000	637.41	637.65	637.41		2.00%	3.43	2.00%	
107+70.000	637.59	637.83	637.59		2.00%	3.43	2.00%	
107+75.000	637.76	638.00	637.76		2.00%	3.43	2.00%	
107+80.000	637.93	638.17	637.93		2.00%	3.43	2.00%	
107+85.000	638.10	638.34	638.10		2.00%	3.43	2.00%	
107+90.000	638.27	638.51	638.27		2.00%	3.43	2.00%	
107+95.000	638.44	638.68	638.44		2.00%	3.43	2.00%	
108+00,000	638.61	638.85	638.61		2.00%	3.43	2.00%	
108+05.000	638.79	639.03	638.79		2.00%	3.43	2.00%	
108+10.000	638.96	639.20	638.96		2.00%	3.43	2.00%	~~
108+15,000	639.13	639.37	639.13		2.00%	3.43	2.00%	
108+20.000	639,30	639.54	639.30		2.00%	3.43	2.00%	
108+25.000	639.47	639.71	639.47		2.00%	3,43	2.00%	
108+30.000	639.64	639.88	639.64		2.00%	3,43	2.00%	
108+35,000	639,81	640.05	639.81		2.00%	3.43	2.00%	
108+40.000	639.99	640.23	639.99		2.00%	3.43	2.00%	
108+45.000	640.16	640.40	640.16		2.00%	3.43	2.00%	
108+50.000	640.33	640.57	640.33		2.00%	3.43	2.00%	
108+55,000	640.50	640.74	640.50		2.00%	3.43	2.00%	
108+60.000	640.67	640.91	640.67		2.00%	3.43	2.00%	

	LT EOP	Centerline	RT EOP		LT X-Slope	CL Grade	RT X-Slope	
Station	Elevation	Elevation	Elevation		Percent	Line (%)	Percent	
108+65.000	640.84	641.08	640.84		2.00%	3.43	2.00%	
108+70.000	641.02	641.26	641.02		2.00%	3.43	2.00%	
108+75.000	641.19	641.43	641.19		2.00%	3,43	2.00%	
108+80.000	641.36	641.60	641.36		2.00%	3.43	2.00%	
108+85.000	641.53	641.77	641.53		2.00%	3.43	2.00%	
108+90.000	641.70	641.94	641.70		2.00%	3.43	2.00%	
108+95.000	641.87	642.11	641.87		2.00%	3.43	2.00%	
109+00.000	642.04	642.28	642.04		2.00%	3.43	2.00%	
109+05.000	642.22	642.46	642.22		2.00%	3.43	2.00%	
109+10.000	642.39	642.63	642.39		2.00%	3.43	2.00%	
109+15.000	642.57	642.81	642.57		2.00%	3.55	2.00%	
109+20.000	642.76	643.00	642.76		2.00%	3.67	2.00%	
109+25.000	642.95	643.19	642.95		2.00%	3.78	2.00%	
109+30.000	643.15	643.39	643.15		2.00%	3.9	2.00%	
109+35.000	643.35	643.59	643.35		2.00%	4.02	2.00%	
109+40.000	643.56	643.80	643.56		2.00%	4.14	2.00%	
109+45.000	643.78	644.02	643.78		2.00%	4.26	2.00%	
109+50.000	644.00	644.24	644.00	_	2.00%	4.38	2.00%	
109+55.000	644.23	644.47	644.23		2.00%	4.49	2.00%	
109+60.000	644.46	644.70	644.46		2.00%	4.61	2.00%	
109+65.000	644.70	644.94	644.70		2.00%	4.73	2.00%	
109+70.000	644.94	645.18	644.94		2.00%	4.85	2.00%	
109+75.000	645.20	645.44	645.20		2.00%	4.97	2.00%	
109+80.000	645.45	645.69	645.45		2.00%	5.08	2.00%	
109+85.000	645.72	645.96	645.72		2.00%	5.2	2.00%	
109+90.000	645.99	646.23	645.99		2.00%	5.32	2.00%	
109+95.000	646.26	646.50	646.26		2.00%	5.44	2.00%	
110+00.000	646.53	646.77	646.53		2.00%	5.56	2.00%	
110+05.000	646.79	647.03	646.79		2.00%	5.31	2.00%	
110+10.000	647.04	647.28	647.04		2.00%	5.06	2.00%	
110+15.000	647.27	647.51	647.27		2.00%	4.82	2.00%	
110+20.000	647.49	647.73	647.49		2.00%	4.57	2.00%	
110+25.000	647.70	647.94	647.70	!	2.00%	4.32	2.00%	
110+30.000	647.90	648.14	647.90		2.00%	4.07	2.00%	
110+35.000	648.09	648.33	648.09		2.00%	3.83	2.00%	
110+40.000	648.26	648.50	648.26		2.00%	3,58	2.00%	
110+45.000	648.42	648.66	648.42		2.00%	3.33	2.00%	
110+50.000	648.57	648.81	648.57		2.00%	3.09	2.00%	
110+55.000	648.70	648.94	648.70		2.00%	2.84	2.00%	
110+60.000	648.83	649.07	648.83		2.00%	2.59	2.00%	
110+65.000	648.94	649.18	648.94		2.00%	2.35	2.00%	

	LT EOP	Centerline	RT EOP		LT X-Slope	CL Grade	RT X-Slope	
Station	Elevation	Elevation	Elevation		Percent	Line (%)	Percent	
110+70.000	649.04	649.28	649.04		2.00%	2.1	2.00%	
110+75.000	649.12	649.36	649.12		2.00%	1.85	2.00%	
110+80.000	649.20	649.44	649.20		2.00%	1.61	2.00%	
110+85.000	649.26	649.50	649.26		2.00%	1,36	2.00%	
110+90.000	649.32	649.56	649.32	• • • • • • • • • • • • • • • • • • • •	2.00%	1.11	2.00%	
110+95.000	649.37	649.61	649.37		2.00%	1.11	2.00%	
111+00,000	649.43	649.67	649.43		2.00%	1.11	2.00%	
111+05.000	649.48	649.72	649,48		2.00%	1.11	2.00%	
111+10.000	649.54	649.78	649.54		2.00%	1.11	2.00%	
111+15.000	649.59	649.83	649.59		2.00%	1.11	2.00%	
111+20.000	649.65	649.89	649,65		2.00%	1.11	2.00%	
111+25.000	649.71	649.95	649.71	"	2.00%	1.11	2.00%	
111+30.000	649.76	650.00	649.76		2.00%	1.11	2.00%	
111+35.000	649.82	650.06	649.82		2.00%	1.11	2.00%	
111+40.000	649.87	650.11	649.87		2.00%	1.11	2.00%	
111+45.000	649.93	650.17	649.93		2.00%	1.11	2.00%	
111+50.000	649.98	650.22	649.98		2.00%	1.11	2.00%	
111+55.000	650.04	650.28	650.04		2.00%	1.11	2.00%	
111+60.000	650.09	650.33	650.09		2.00%	1.11	2.00%	
111+65.000	650.15	650.39	650.15		2.00%	1.07	2.00%	
111+70.000	650.20	650.44	650.20		2.00%	1.02	2.00%	
111+75.000	650.24	650.48	650.24		2.00%	0.98	2.00%	
111+80.000	650.29	650.53	650.29		2.00%	0.93	2.00%	
111+85.000	650.33	650.57	650.33		2.00%	0.89	2.00%	
111+90.000	650.37	650.61	650.37		2.00%	0.85	2.00%	
111+95.000	650.41	650.65	650.41		2.00%	0.8	2.00%	
112+00.000	650.45	650.69	650.45		2.00%	0.76	2.00%	
112+05.000	650.48	650.72	650.48		2.00%	0.71	2.00%	
112+10.000	650.52	650.76	650.52		2.00%	0.67	2.00%	•
112+15.000	650.55	650.79	650.55		2.00%	0.62	2.00%	
112+20.000	650.57	650.81	650.57	····	2.00%	0.58	2.00%	
112+25.000	650.60	650.84	650.60		2.00%	0.53	2.00%	
112+30.000	650.62	650.86	650.62		2.00%	0.49	2.00%	
112+35.000	650.64	650.88	650.64		2.00%	0.44	2.00%	
112+40.000	650.66	650.90	650.66		2.00%	0.4	2.00%	
112+45.000	650.68	650.92	650.68		2.00%	0.35	2.00%	
112+50.000	650.69	650.93	650.69		2.00%	0.31	2.00%	
112+55.000	650.71	650.95	650.71		2.00%	0.31	2.00%	
112+60.000	650.73	650.97	650.73		2.00%	0.31	2.00%	
112+65,000	650.74	650.98	650.74		2.00%	0.31	2.00%	
112+70.000	650.76	651.00	650.76		2.00%	0.31	2.00%	

	LT EOP	Centerline	RT EOP	LT X-Slope	CL Grade	RT X-Slope	
Station	Elevation	Elevation	Elevation	Percent	Line (%)	Percent	
112+75.000	650.77	651.01	650.77	2.00%	0.31	2.00%	
112+80.000	650.79	651.03	650.79	 2.00%	0.31	2.00%	1
112+85.000	650.80	651.04	650.80	2.00%	0.31	2.00%	
112+90.000	650.82	651.06	650.82	2.00%	0.31	2.00%	
112+95.000	650.83	651.07	650.83	2.00%	0.31	2.00%	· · · · · · · · · · · · · · · · · · ·
113+00.000	650.85	651.09	650.85	2.00%	0.31	2.00%	



# GEOCON Engineering, Inc.

Project Name: Proposed Road and Bridge Construction

Location:

Webster Street Catlin, Illinois

Boring: C-1

Project No.: 53040 Date of Boring: 8/1/05

Field Representative: J. Lubben

VISUAL SOIL GLASSIFICATION		SAMPLE	4.5	Qp	Qu	MC	Recovery	
GROUND SURFACE ELEVATION: 648.2 ft.	(Feet)	NO.	N	(tsf)	(tsf)	(%)	(inches)	REMARKS
0-2" Tar and Chip 2-12" Stone				,,,,				
		1-SS	<u> 1</u> 1	0.75	3,3	16.8	12	•
		70						
	i _	300	8	0,75	2.3	13.7	14	
	5_	2-88	-6	70,35	2,0	1911		the second of
e - Line (1944), de l'égé de la company de la line de l'égé de la company de la line de l'égé de l'égé de l'égé								Dry While Drilling and
Brown silty CLAY, trace sand and gravel, stiff to hard, moist	_	3-SS	12	3,5	5.1	12.7	16	Upon Upon
and the second second								Completion
	<u> </u>	4-88	28	4.5+	6,0	10,8	16	
_	10_	4-33	. 20	466	"	10,74		
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	-	_	i.					1
		5-\$8	38	4,5+	9.0	7.0	12	
-	15	-	ł				ļ:	}
Gray highly weathered SHALE,		-			İ		1	
	] -	-						
	1	6-SS	50	4.5+		8.8	14	
	20	+					10.00	1
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END OF BORING = 20 FEET	· ·		ŀ	1				
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Groundwater was not encountered while		_[	1	].	1	1	1	1
drilling or upon completion of the borehole.  The borehole caved at a depth of	35_	_				1		
approximately 11.5 feet upon completion.		_				1	1	1
ese saturation of the second	1	<del>-</del> -	ľ			1		
	į.	_		1		-		
	1	-						
<u></u>	40_		1			1		
		4		1	P.			
		-1	1				1	
Boring backfilled With auger cuttings.		===						
,7° 0	1	1.	1	1.	l l	1	3	1

# **GEOCON Engineering, Inc.**

Project Name: Proposed Road and Bridge Construction

Location:

Webster Street Catlin, Illinois

Boring: C-2

Project No.: 53040 Date of Boring: 8/1/05

Field Representative: J. Lubben

VISUAL SOIL CLASSIFICATION GROUND SURFACE ELEVATION:	DEPTH			Qр	Qu	MC	Recovery	
	(Feet)	NO.	'n	(tsf)	(tsf)	(%)	(inches)	REMARKS
0-6" Tar and chip 6-8" stone								_
	_	1-SS	22	3.0	3.2	18.7	10	-
─ Brown silty CLAY, trace sand and gravel,							·	
stiff to very stiff, moist		2-88	16	3.0	ļ	17.2	10	12
	5	2-00	10	3:0	P#	17.2	, "	]
								-
Brown sandy CLAY, very stiff, moist	-	3-85	14	3.0	2.5	8.1	14	
Siddle Sellot Octob Lead and Indian							[	Dry While
_	] -	4-SS	133/10"	ينت		; <del>aŭ</del>	8	Drilling and
Brown highly weathered SHALE	10				ł	h	1,	Upon —
and in the American br><del>Ma</del> nagan					l		]	Completion .
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±°		5-88	160/8"	·	·	-	10	-
<del>- ;</del>	15_	2					) ·	].
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<b></b>	-	1						
- Gray SHALE		1			<u>.</u>			·
_ :	20	5-SS	100/5"	, <del></del> -,	-	-	5	1
<del></del>								]
···	-	1				<u> </u>	t ë	•
<b>-</b> :	1 -	4						
<del></del>	25	7-SS	100/3"		-	- 12	2	
				,,				
_ END OF BORING = 25 FEET	1				ŀ		ļ.	1
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<u></u>		1			1	]	}-	
Groundwater was not encountered while	30	ļ.				· ·		_
<ul> <li>drilling or upon completion of the boring;</li> </ul>	1 -		]		-	}		·
_ The borehole caved at a depth of	1 -			ļ. 	Ì		<u> </u>	
approximately 15.5 feet upon completion.	-	-						
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<u>.                                    </u>	i	1		ŀ	<b>†</b>		1	
	*	1				ļ	1	
<ul> <li>Boring backfilled with auger cuttings.</li> </ul>	'	-						
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# **GEOCON Engineering, Inc.**

Location:

Project Name: Proposed Road and Bridge Construction

Webster Street Catiln, Illinois

Boring: C-3

Project No.: 53040 Date of Boring: 8/1/05

Field Representative: J. Lubben

VISUAL SOIL CLASSIFICATION	DEPTH	SAMPLE		Qp	Qu	MC	Recovery	
GROUND SURFACE ELEVATION: 631,3 ft.	(Feet)	NO.	, N	(tsf)	(tsf)	(%)	(inches)	REMARKS
0-8" Tar and chip 8-12" stone	(8.33.4)			- :-	100 140000			1,00
	7	1-55	16	2.5		11.4	10	· ·
Brown sandy CLAY, medium stiff to very		1,00	1.7	Earles				
stiff, moist			7	3.5	·	12.0	8	
	5_	2-55	7	ა: <del>ა</del>	.==	12.0	"	<u>.</u>
<u> </u>	· _				·			Í -
<ul> <li>Brown clayey fine to coarse SAND,</li> </ul>	_	3-88	8	<u> </u>		<u>-</u>	12	
Medium dense to dense, moist	-					ļ		Dry While -
<u>.                                    </u>	10	4-55	104	2.0		شية	14	Orilling and
Brown highly weathered SHALE	10	<del>                                     </del>					1	Upon — Completion _
Signature and the second secon	1 -	· <u> </u>		<u> </u>	1 .		*	
<u>-:</u>	<u> </u>	]					!	
<del>वि</del> षे रि		5-SS	155/8"		22	44	8	_
	15_	5-55	15510			-	. <del></del>	<u> </u>
<b>_</b> ·	-					ļ		
<u></u>					1		1	4
÷	-	<u>-</u>						-
 Gray SHALE	20	6-SS	198/8"	. –	-		6	<del>-</del>
- Gray Survey	20_	-						-
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	1	7-SS	400.00	ļ	141	2.30	.5	-
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	30	8-SS	100/5"	,	k =	. सम	4	·
CF-3. *	30	†			1			
END OF BORING # 30 FEET	] ;	1			1	1		]
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Groundwater was not encountered while	.	7					1	4 -
<ul> <li>drilling or upon completion of the boring.</li> </ul>			ļ	1			1	- <del>-</del>
The borehole caved at a depth of approximately 19 feet upon completion.	40	-[						-
abbioximatery is feet abou combismon.	40_	<u>-</u>				1		<del></del>
i <del>ng</del> r	1	_						1
Boring backfilled with auger cultings.			1	1			<b>.</b>	]
boiling backlined with adder contings.						:		· -
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## **GEOCON Engineering, Inc.**

Project Name: Proposed Road and Bridge Construction

Location:

Websier Street Catlin, Illinois

Boring: C-4

Project No.: 53040 Date of Boring: 8/1/05

Field Representative: J. Lubben

VISUAL SOIL CLASSIFICATION	DEPTH	SAMPLE		Оp	Qu	MC	Recovery	
GROUND SURFACE ELEVATION: 630.7 ft.	(Feet)	NO.	N	(tsf)	(tsf)	(%)	(inches)	REMARKS
0 -7" Tar and chip 7-11" stone			· · · · · · · · · · · · · · · · · · ·					
Dark brown silty CLAY, stiff to very stiff, moist	\	1-88	34	3,25		9.6	14	. <del>-</del>
Brown sandy CLAY, sliff to very stiff, moist	5	2-SS	7	1.5	<b>-</b>	11.9	10	
Brown highly weathered SHALE	<del>-</del>	3-\$5	52	<del>-</del>	. <del></del> .	<del></del>	14	
	10	4-SS	141/9"	·	<del>.</del> :	<del></del>	8	Dry While Drilling and Upon Completion
Gray SHALE	15	5-SS	147/9"	, <del>,</del>		<del>let</del> :	<b>ė</b> j.	
	- - 20	6-SS	180/8"	=		. <del></del>	·· <b>6</b>	
		7-SS	100/2"		<del></del>	المناب	2	
END OF BORING = 25 FEET	-					10 to		
Groundwater was not encountered while drilling or upon completion of the boring. The borehole caved at a depth of approximately 15,5 feet upon completion.	30 <u> </u>							
= = 	35	3						- -
		:		·				
	40 <u> </u>	·j						
Boring backfilled with auger cuttings.							: :	

## **GEOCON** Engineering, Inc.

Project Name: Proposed Road and Bridge Construction

Location:

Webster Street Catlin, Illinois

Boring: C-5

Project No.: 53040 Date of Boring: 8/1/05

Field Representative: J. Lubben

VISUAL SOIL CLASSIFICATION	DEPTH	SAMPLE	N	Qp (***	Qu (ten)	MC	Recovery (inches)	DEMARKS
GROUND SURFACE ELEVATION: 644.9 ft.	(Feet)	NO.	N	(tsf)	(tsf)	(%)	(mcnes)	REMARKS
0-6" Tar and chip. 6-12" stone	ي ا		·	***				<u>-</u>
	_	1-88	21	4.5	6.9	12.0	18	<u></u>
:	_			2.47	11.5		1	
Brown silty CLAY, little grave), trace sand,								
stiff to hard, moist	5_	2-SS	14	1.75	1,5	10.5	18	
- Adding Anipa Sisa As	_	1					•	
<u></u>	ļ. <del>"</del>	3-88	15	2.0	2.4	13.2	18	-
<del>-</del> .	<del>-</del>	3-35	15	2.0	2,3	10,2	"	. =
The second secon	<u> </u>	Reserved to			]			Dry While
<u>-</u>	<u> </u>	4-SS	12	0.75	2.1	10.4	18	Drilling and
Gray silty CLAY, little sand and gravel,	10	<u> </u>					1	Upon —
_ medium stiff to stiff, moist	<u>.</u>	.]			ļ			Completion _
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^^ <del>=</del> =:	<u>.</u>	<del> </del>	54		:	i:	4.4	
	15_	5-88	54	<b></b>		_	14	
Gray SHALE							1	
	_						İ	1
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ح تون د د د د د د د د د د د د د د د د د د د		6-SS	100/4"		l -		10	-
The second secon	20	<del> </del>					1000	Team December 1
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END OF BORING = 20 FEET	-	.			i .	ļ.	Ì	1 -
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يبخذ	25						:	
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Groundwater was not encountered while drilling or upon completion of the boring.					<u>.</u>			
The borehole caved at a depth of	ļ	] :			1		-	, , , , ,
approximately 12.5 feet upon completion,	-				i	<u> </u>	j.	7
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<ul> <li>Boring backfilled with auger cuttings.</li> </ul>	-	1	*:		-		1	-
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## **GEOCON Engineering, Inc.**

Project Name: Proposed Road and Bridge Construction

Location:

Webster Street Catlin, Illinois

Boring: C-6

Project No.: 53040 Date of Boring: 8/2/05

Field Representative: N. Richmond

VISUAL SOIL CLASSIFICATION	DEPTH	SAMPLE	8.9	Qp (ref)	Qu (tof)	MC (%)	Recovery (inches)	REMARKS
GROUND SURFACE ELEVATION: 648.8 ft.	(Feet)	NO.	N	(tsf)	(tsf)	(70)	finionas)	1/LIMMIND
O-6" Tar and chip 6-8" stone  Brown silty CLAY, little gravel, trace sand, very stiff, moist	_	1-55	12	2,5	2.8	21.6	12	
Brown and gray mottled silly CLAY, trace — sand and gravel, soft to medium stiff, moist	5	2-SS	:6	0.5	1.4	20.4	16	
Brown and gray sandy CLAY, very soft,		3-55	- <b>4</b>	0,5	0.4	20.8	12	
very moist  Brown silty CLAY to clayey SILT, frace sand and gravel, very stiff, moist	10	4-SS	<b>41</b> 1.	2.25	3.7	12.7	16	Dry While Drilling and — Upon — Completion —
Gray silty CLAY, little gravel, trace sand, very stiff to hard, moist	- 15	5-5\$	19"	4.5 <del>+</del>	: 	. <del></del>	jo:	-
Gray weathered SHALE		6-88	121	<u> </u>		<u></u>	.14	_
END OF BORING = 20 FEET	-							
Groundwater was not encountered while drilling or upon completion of the boring.	.25				:	ļ		- -
The borehole caved at a depth of approximately 8 feet upon completion;  —	30	-						
는 군 또.	35	<del>.</del>						
<del></del>	-	: - - -						-
	40							
Boring backfilled with auger cuttings.		-		· .			•	-

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

# SPECIAL PROVISION FOR COOPERATION WITH UTILITIES

Effective: January 1, 1999 Revised: January 1, 2007

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

Replace Article 105.07 of the Standard Specifications with the following:

"105.07 Cooperation with Utilities. The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.

- (a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:
  - (1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 ft) distant at right angles from the plan or revised slope limits.
  - In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 1.2 m (4 ft) outside the edges of structure footings or the structure where no footings are required.
  - (2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
  - (3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.
- (b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:
  - (1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.
  - (2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done:

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

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

#### SPECIAL PROVISION FOR NATIONWIDE No. 14 PERMITS AND CONDITIONS

Effective: February 1, 2004 Revised: March 1, 2005

The following information presents the requirements for the nationwide 404/10 permits No. 14 used on this highway project.

Contractors wishing to conduct activities under the nationwide permits must comply with the terms of the applicable permit and the conditions below.

- A. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation crossings (e.g., highways, railways, trails, airport runways, and taxiways) in waters of the US, including wetlands, if the activity meets the following criteria:
  - This NWP is subject to the following acreage limits:
    - (a) For linear transportation projects in non-tidal waters, provided the discharge does not cause the loss of greater than 1/2- acre of waters of the US; or
    - (b) For linear transportation projects in tidal waters, provided the discharge does not cause the loss of greater than 1/3-acre of waters of the US.
  - The permittee must notify the District Engineer in accordance with General Condition 13 if any of the following criteria are met:
    - (a) The discharge causes the loss of greater than 1/10 acre of waters of the US; or
    - (b) There is a discharge in a special aquatic site, including wetlands;
  - 3. The notification must include a compensatory mitigation proposal to offset permanent losses of waters of the US to ensure that those losses result only in minimal adverse effects to the aquatic environment and a statement describing how temporary losses will be minimized to the maximum extent practicable;
  - For discharges in special aquatic sites, including wetlands, and stream riffle and pool complexes, the notification must include a delineation of the affected special aquatic sites;
  - 5. The width of the fill is limited to the minimum necessary for the crossing;
  - This permit does not authorize stream channelization, and the authorized activities must not cause more than minimal changes to the hydraulic flow characteristics of the stream, increase flooding, or cause more than minimal degradation of water quality of any stream (see General Conditions 9 and 21);
  - 7. This permit cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars; and
  - 8. The crossing is a single and complete project for crossing waters of the US. Where a road segment (i.e., the shortest segment of a road with independent utility that is part of a larger project) has multiple crossings of streams (several single and complete projects) the Corps will consider whether it should use its discretionary authority to require an Individual Permit. (Sections 10 and 404)
- B. Nationwide Permit General Conditions. The following General Conditions must be followed in order for any authorization by an NWP to be valid:
  - 1. Navigation. No activity may cause more than a minimal adverse effect on navigation.
  - 2. Proper Maintenance. Any structure or fill authorized shall be properly maintained, including maintenance to ensure public safety.

- 3. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 4. Aquatic Life Movements. No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. Culverts placed in streams must be installed to maintain low flow conditions.
- 5. Equipment. Heavy equipment working in wetlands must be placed on mats, or other measures must be taken to minimize soil disturbance
- Regional and Case-By-Case Conditions. The activity must comply with any regional conditions
  that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case
  specific conditions added by the Corps or by the state or tribe in its Section 401 Water Quality
  Certification.
- 7. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System; or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status; unless the appropriate Federal agency, with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation, or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency in the area (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 8. Water Quality.
  - (a) In certain states and tribal lands an individual 401 Water Quality Certification must be obtained or waived (See 33 CFR 330.4(c)).
  - (b) For NWP 14 where the state 401 certification (either generically or individually) does not require or approve water quality management measures, the permittee must provide water quality management measures that will ensure that the authorized work does not result in more than minimal degradation of water quality (or the Corps determines that compliance with state or local standards, where applicable, will ensure no more than minimal adverse effect on water quality). An important component of water quality management includes stormwater management that minimizes degradation of the downstream aquatic system, including water quality (refer to General Condition 21 for stormwater management requirements). Another important component of water quality management is the establishment and maintenance of vegetated buffers next to open waters, including streams (refer to General Condition 19 for vegetated buffer requirements for the NWPs). This condition is only applicable to projects that have the potential to affect water quality. While appropriate measures must be taken, in most cases it is not necessary to conduct detailed studies identify such measures or to require monitoring.

#### 9. Notification.

- (a) Timing; where required by the terms of the NWP, the prospective permittee must notify the District Engineer with a preconstruction notification (PCN) as early as possible. The District Engineer must determine if the notification is complete within 30 days of the date of receipt and can request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the District Engineer will notify the prospective permittee that the notification is still incomplete and the PCN review process will not commence until all of the requested information has been received by the District Engineer. The prospective permittee shall not begin the activity:
  - (1) Until notified in writing by the District Engineer that the activity may proceed under the NWP with any special conditions imposed by the District or Division Engineer, or
  - (2) If notified in writing by the District or Division Engineer that an Individual Permit is required; or

- (3) Unless 45 days have passed from the District Engineer's receipt of the complete notification and the prospective permittee has not received written notice from the District or Division Engineer. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) Contents of Notification: The notification must be in writing and include the following information:
  - (1) Name, address and telephone numbers of the prospective permittee;
  - (2) Location of the proposed project;
  - (3) Brief description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause; any other NWP(s), Regional General Permit(s), or Individual Permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP (Sketches usually clarify the project and when provided result in a quicker decision.);
  - (4) For NWPs 7, 12, 14, 18, 21, 34, 38, 39, 40, 41, 42, and 43, the PCN must also include a delineation of affected special aquatic sites, including wetlands, vegetated shallows (e.g., submerged aquatic vegetation, seagrass beds), and riffle and pool complexes (see paragraph 13(f)):
  - (5) For activities that may adversely affect Federally-listed endangered or threatened species, the PCN must include the name(s) of those endangered or threatened species that may be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work; and
  - (6) For activities that may affect historic properties listed in, or eligible for listing in, the National Register of Historic Places, the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property.
- (c) Form of Notification: The standard Individual Permit application form (Form ENG 4345) may be used as the notification but must clearly indicate that it is a PCN and must include all of the information required in (b) (1)-(18) of General Condition 13. A letter containing the requisite information may also be used.
- (d) District Engineer's Decision: In reviewing the PCN for the proposed activity, the District Engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. The prospective permittee may submit a proposed mitigation plan with the PCN to expedite the process. The District Engineer will consider any proposed compensatory mitigation the applicant has included in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed work are minimal. If the District Engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the District Engineer will notify the permittee and include any conditions the District Engineer deems necessary.

The District Engineer must approve any compensatory mitigation proposal before the permittee commences work. If the prospective permittee is required to submit a compensatory mitigation proposal with the PCN, the proposal may be either conceptual or detailed. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the District Engineer will expeditiously review the proposed compensatory mitigation plan. The District Engineer must review the plan within 45 days of receiving a complete PCN and determine whether the conceptual or specific proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the District Engineer to be minimal, the District Engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP.

If the District Engineer determines that the adverse effects of the proposed work are more than minimal, then the District Engineer will notify the applicant either. (1) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an Individual Permit; (2) that the project is authorized under the NWP subject to the applicant's submission of a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level; or (3) that the project is authorized under the NWP with specific modifications or conditions. Where the District Engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period. The authorization will include the necessary conceptual or specific mitigation or a requirement that the applicant submit a mitigation proposal that would reduce the adverse effects on the aquatic environment to the minimal level. When conceptual mitigation is included, or a mitigation plan is required under item (2) above, no work in waters of the US will occur until the District Engineer has approved a specific mitigation plan.

(e) Agency Coordination: The District Engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a minimal level.

For activities requiring notification to the District Engineer that result in the loss of greater than 1/2-acre of waters of the US, the District Engineer will provide immediately (e.g., via facsimile transmission, overnight mail, or other expeditious manner) a copy to the appropriate Federal or state offices (USFWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO), and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will then have 10 calendar days from the date the material is transmitted to telephone or fax the District Engineer notice that they intend to provide substantive, site-specific comments. If so contacted by an agency, the District Engineer will wait an additional 15 calendar days before making a decision on the notification. The District Engineer will fully consider agency comments received within the specified time frame, but will provide no response to the resource agency, except as provided below. The District Engineer will indicate in the administrative record associated with each notification that the resource agencies' concerns were considered. As required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act, the District Engineer will provide a response to NMFS within 30 days of receipt of any Essential Fish Habitat conservation recommendations. Applicants are encouraged to provide the Corps multiple copies of notifications to expedite agency notification.

(f) Wetland Delineations: Wetland delineations must be prepared in accordance with the current method required by the Corps (For NWP 29 see paragraph (b)(9)(iii) for parcels less than (1/4-acre in size). The permittee may ask the Corps to delineate the special aquatic site. There may be some delay if the Corps does the delineation. Furthermore, the 45-day period will not start until the wetland delineation has been completed and submitted to the Corps, where appropriate.

- 10. Compliance Certification. Every permittee who has received NWP verification from the Corps will submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the Corps with the authorization letter and will include:
  - (a) A statement that the authorized work was done in accordance with the Corps authorization, including any general or specific conditions;
  - (b) A statement that any required mitigation was completed in accordance with the permit conditions; and
  - (c) The signature of the permittee certifying the completion of the work and mitigation.

- 11. Endangered Species. (a) No activity is authorized under any NWP which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will destroy or adversely modify the critical habitat of such species. Non-federal permittees shall notify the District Engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or is located in the designated critical habitat and shall not begin work on the activity until notified by the District Engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that may affect Federally-listed endangered or threatened species or designated critical habitat, the notification must include the name(s) of the endangered or threatened species that may be affected by the proposed work or that utilize the designated critical habitat that may be affected by the proposed work. As a result of formal or informal consultation with the FWS or NMFS the District Engineer may add species-specific regional endangered species conditions to the NWPs.
  - (b) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the USFWS or the NMFS, both lethal and non-lethal "takes" of protected species are in violation of the ESA. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the USFWS and NMFS or their world wide web pages at http://www.fws.gov/r9endspp/endspp.html and http://www.nmfs.noaa.gov/prot\_res/overview/es.html respectively
- 12. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the US authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit (e.g. if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the US for the total project cannot exceed 1/3-acre).
- 13. Water Supply Intakes. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may occur in the proximity of a public water supply intake except where the activity is for repair of the public water supply intake structures or adjacent bank stabilization.
- 14.Suitable Material. No activity, including structures and work in navigable waters of the US or discharges of dredged or fill material, may consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.) and material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the CWA).
- 15. Spawning Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., excavate, fill, or smother downstream by substantial turbidity) of an important spawning area are not authorized.

16.Management of Water Flows. To the maximum extent practicable, the activity must be designed to maintain preconstruction downstream flow conditions (e.g., location, capacity, and flow rates). Furthermore, the activity must not permanently restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters) and the structure or discharge of dredged or fill material must withstand expected high flows. The activity must, to the maximum extent practicable, provide for retaining excess flows from the site, provide for maintaining surface flow rates from the site similar to preconstruction conditions, and provide for not increasing water flows from the project site, relocating water, or redirecting water flow beyond preconstruction conditions. Stream channelizing will be reduced to the minimal amount necessary, and the activity must, to the maximum extent practicable, reduce adverse effects such as flooding or erosion downstream and upstream of the project site, unless the activity is part of a larger system designed to manage water flows. In most cases, it will not be a requirement to conduct detailed studies and monitoring of water flow.

This condition is only applicable to projects that have the potential to affect waterflows. While appropriate measures must be taken, it is not necessary to conduct detailed studies to identify such measures or require monitoring to ensure their effectiveness. Normally, the Corps will defer to state and local authorities regarding management of water flow.

- 17.Adverse Effects from Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to the acceleration of the passage of water, and/or the restricting its flow shall be minimized to the maximum extent practicable. This includes structures and work in navigable waters of the US, or discharges of dredged or fill material.
- 18.Waterfowl Breeding Areas. Activities, including structures and work in navigable waters of the US or discharges of dredged or fill material, into breeding areas for migratory waterfowl must be avoided to the maximum extent practicable.
- 19. Removal of Temporary Fills. Any temporary fills must be removed in their entirety and the affected areas returned to their preexisting elevation.
- 20.Designated Critical Resource Waters. Critical resource waters include, NOAA-designated marine sanctuaries, National Estuarine Research Reserves, National Wiid and Scenic Rivers, critical habitat for Federally listed threatened and endangered species, coral reefs, state natural heritage sites, and outstanding national resource waters or other waters officially designated by a state as having particular environmental or ecological significance and identified by the District Engineer after notice and opportunity for public comment. The District Engineer may also designate additional critical resource waters after notice and opportunity for comment.
  - (a) Except as noted below, discharges of dredged or fill material into waters of the US are not authorized by NWP 14 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters. Discharges of dredged or fill materials into waters of the US may be authorized by the above NWP in National Wild and Scenic Rivers if the activity complies with General Condition 7. Further, such discharges may be authorized in designated critical habitat for Federally listed threatened or endangered species if the activity complies with General Condition 11 and the USFWS or the NMFS has concurred in a determination of compliance with this condition.

### C. Regional Conditions within Illinois:

NOTE: The Chicago District has proposed alternate regional conditions for work in McHenry, Kane, Lake, DuPage, Will and Cook Counties in Illinois. Information regarding Chicago District requirements can be accessed through their website at http://www.lrc.usace.army.mil/co-r/. If you have any questions regarding the Chicago District proposal, please contact Ms. Karon Marzec, Senior Project Manager, by telephone at 312/353-6400, ext. 4030 or e-mail <a href="mailto:karon.m.marzec@usace.army.mil">karon.m.marzec@usace.army.mil</a>.

1. Bank stabilization projects involving armoring of the streambank with riprap or the construction of retaining walls within High Value Subwatersheds exceeding 250 feet will require a PCN to the Corps of Engineers in accordance with Notification Condition (Number 13).

2. A proposed activity to be authorized under Nationwide Permits 12 or 14 within the Cache River Wetlands Areas (Alexander and Pulaski Counties), Kaskaskia River (Clinton, St. Clair, and Washington Counties), or Wabash River (Gallatin and White Counties) will require a PCN to the Corps of Engineers in accordance with the Notification Condition (Number 13).

Stormwater management facilities shall not be located within an intermittent stream.

4. High Value Subwatersheds - The state of Illinois has defined these areas through a combination of factors. Various sources of information were used to analyze and rank subwatersheds. Federal Threatened and Endangered Species, % of wetlands in the watershed, Natural Areas Inventory, and Biological Stream Categorization were factors used for High Value designation. A map highlighting these areas is attached with a numerical listing of the 8-digit hydrologic units.

#### D. Further Information

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other Federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project.

E. Definitions are as provided in the Federal Register Vol. 67, No. 10 dated January 15, 2002.

# Department of Transportation Bureau of Local Roads and Streets SPECIAL PROVISION

# FOR CONSTRUCTION AND MAINTENANCE SIGNS

State of Illinois

Effective: January 1, 2004 Revised: January 1, 2007

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

701.14. Signs. Add the following paragraph to subparagraph (a) in Article 701.14:

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

### **CEMENT (BDE)**

Effective: January 1, 2007

Revise Section 1001 of the Standard Specifications to read:

#### "SECTION 1001. CEMENT

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

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

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

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

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

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

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

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

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

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

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

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

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

chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al<sub>2</sub>O<sub>3</sub>), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO<sub>3</sub>), 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."

### DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: January 1, 2007

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

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.

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

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

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

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of

- (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.

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

(a) In order to assure the timely award of the contract, the as-read low bidder shall submit a Disadvantaged Business Utilization Plan on Department form SBE 2026 within seven working days after the date of letting. To meet the seven day requirement, the bidder may send the Plan by certified mail or delivery service within the seven working day 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;
  - A description, including pay item numbers, of the commercially useful work to be done by each DBE;
  - (3) The price to be paid to each DBE for the identified work specifically stating the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
  - (4) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
  - (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five working day period in order to cure the deficiency.

<u>CALCULATING DBE PARTICIPATION</u>. The Utilization Plan values represent work anticipated to be performed and paid for upon satisfactory completion. The Department is only able to

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE firm does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contact. Credit will be given for the full value of all such DBE trucks operated using DBE employed drivers. Goal credit will be limited to the value of the reasonable fee or commission received by the DBE if trucks are leased from a non-DBE company.
- (e) DBE as a material supplier:
  - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
  - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
  - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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.

## **ERRATA FOR THE 2007 STANDARD SPECIFICATIONS (BDE)**

Effective: January 1, 2007

Page 60 Article 109.07(a). In the second line of the first paragraph change "amount" to "quantity".

Page 207 Article 406.14. In the second line of the second paragraph change "MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS, of the mixture composition specified;" to "MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS;".

Page 398 Article 540.07(b). Add the following two paragraphs after the third paragraph:

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

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

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

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

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

Page 465 Article 551.06. In the second line of the first paragraph change "or" to "and/or".

Page 585 Article 701.19(a). Add "701400" to the second line of the first paragraph.

Page 586 Article 701.19(c). Delete "701400" from the second line of the first paragraph.

Page 586 Article 701.19. Add the following subparagraph to this Article:

"(f) Removal of existing pavement markings and raised reflective pavement markers will be measured for payment according to Article 783.05."

Page 587 Article 701.20(b). Delete "TRAFFIC CONTROL AND PROTECTION 701400;" from the first paragraph.

Page 588 Article 701.20. Add the following subparagraph to this Article.

"(j) Removal of existing pavement markings and raised reflective pavement markers will be paid for according to Article 783.06."

Page 762 Article 1020.04. In Table 1 Classes of Portland Cement Concrete and Mix Design Criteria, add to the minimum cement factor for Class PC Concrete "5.65 (TY III)", and add to the maximum cement factor for Class PC Concrete "7.05 (TY III)".

- Page 765 Article 1020.04. In Table 1 Classes of Portland Cement Concrete and Mix Design Criteria (metric), add to the minimum cement factor for Class PC Concrete "335 (TY III)", and add to the maximum cement factor for Class PC Concrete "418 (TY III)".
- Page 809 Article 1030.05. Revise the subparagraph "(a) Quality Assurance by the Engineer." to read "(e) Quality Assurance by the Engineer."
- Page 946 Article 1080.03(a)(1). In the third line of the first paragraph revise "(300 μm)" to "(600 μm)".
- Page 963 Article 1083.02(b). In the second line of the first paragraph revise "ASTM D 4894" to "ASTM D 4895".
- Page 1076 In the Index of Pay Items delete the pay item "BITUMINOUS SURFACE REMOVAL BUTT JOINT".
- Page 1081 In the Index of Pay Items add "Section 406, HOT-MIX ASPHALT SURFACE REMOVAL BUTT JOINT, Page 207".

### HOT-MIX ASPHALT EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE)

Effective: January 1, 2005 Revised: January 1, 2007

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

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

### 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.

### RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007 Revised: January 2, 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<sub>mm</sub>) 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<sub>mm</sub>. 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>17</sup>	± 0.5 %		
G <sub>mm</sub>	± 0.02 % <sup>2/</sup>			

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

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

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

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

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

(d) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

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

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

### Max RAP Percentage

SUPERPAVE MIXTURES 17, 8/	MAXIMUM % RAP				
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified		
30	30	30	10		
50	25	15	10		
70	15 / 25 <sup>2/</sup>	10 / 15 <sup>2/</sup>	10		
90	10	10	10		
105	10	10	10		

Note 1: For HMA Shoulder and Stabilized Sub-Base (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.

Note 2: Value of Max % RAP if 3/8 RAP is utilized.

Note 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 mixture proportions and asphalt binder content. The asphalt binder content as a percentage of the total mix shall be printed as well as the individual percentages of virgin asphalt binder and residual asphalt binder from the RAP.

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."

## REINFORCEMENT BARS (BDE)

Effective: November 1, 2005 Revised: January 1, 2007

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

"(a) Reinforcement Bars. Reinforcement bars will be accepted according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reinforcement Bar and Dowel Bar Plant Certification Procedure". The Department will maintain an approved list of producers.

- (1) Reinforcement Bars (Non-Coated). Reinforcement bars shall be according to ASTM A 706 (A 706M), Grade 60 (420) for deformed bars and the following.
  - a. Chemical Composition. The chemical composition of the bars shall be according to the following table.

	CHEMICAL COMPOS	SITION
Element 1/	Heat Analysis (% maximum)	Product Analysis (% maximum)
Carbon	0.30	0.33
Manganese	1.50	1.56
Phosphorus	0.035	0.045
Sulfur	0.045	0.055
Silicon	0.50	0,55
Nickel	2/	2/
Chromium	2/	2/
Molybdenum	2/	2/
Copper	2/	2/
Titanium	2/	2/
Vanadium	2/	2/
Columbium	2/	2/
Aluminum	21, 31	2/, 3/
Tin <sup>4/</sup>	0.040	0.044

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

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

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

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

- Heat Numbers. Bundles or bars at the construction site shall be marked or tagged with heat identification numbers of the bar producer.
- c. Guided Bend Test. Bars may be subject to a guided bend test across two pins which are free to rotate, where the bending force shall be centrally applied with a fixed or rotating pin of a certain diameter as specified in Table 3 of ASTM A 706 (A 706M). The dimensions and clearances of this guided bend test shall be according to ASTM E 190.
- d. Spiral Reinforcment. Spiral reinforcement shall be deformed or plain bars conforming to the above requirements or cold-drawn steel wire conforming to AASHTO M 32.
- (2) Epoxy Coated Reinforcement Bars. Epoxy coated reinforcement bars shall be according to Article 1006.10(a)(1) and shall be epoxy coated according to AASHTO M 284 (M 284M) and the following.
  - a. Certification. The epoxy coating applicator shall be certified under the Concrete Reinforcing Steel Institute's (CRSI) Epoxy Plant Certification Program.
  - b. Coating Thickness. The thickness of the epoxy coating shall be 7 to 12 mils (0.18 to 0.30 mm). When spiral reinforcment is coated after fabrication, the thickness of the epoxy coating shall be 7 to 20 mils (0.18 to 0.50 mm).
  - c. Cutting Reinforcement. Reinforcement bars may be sheared or sawn to length after coating, providing the end damage to the coating does not extend more than 0.5 in. (13 mm) back and the cut is patched before any visible rusting appears. Flame cutting will not be permitted."

## SEEDING (BDE)

Effective: July 1, 2004 Revised: January 1, 2007

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

		ole 1—SEEDING MIXTURES	
	Class – Type	Seeds	lb/acre (kg/hectare)
2	Roadside Mixture 7/	Inferno Tall Fescue, Tarheel II Tall Fescue, or	(19.112.0)
		Quest Tall Fescue	100 (110)
		Perennial Ryegrass	50 (55)
		Creeping Red Fescue	40 (50)
		Red Top	10 (10)
2A	Salt Tolerant Roadside Mixture 7/	Inferno Tall Fescue, Tarheel II Tall Fescue, or	
		Quest Tall Fescue	60 (70)
		Perennial Ryegrass	20 (20)
		Audubon Red Fescue	30 (20)
		Rescue 911 Hard Fescue	30 (20)
		Fults Salt Grass 1/	60 (70)"

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

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

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

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

## STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 2, 2004 Revised: January 1, 2007

<u>Description</u>. At the bidder's option, a steel cost adjustment will be made to provide additional compensation to the Contractor or a credit to the Department for fluctuations in steel prices. The bidder must indicate on the attached form whether or not steel cost adjustments will be part of this contract. This attached form shall be submitted with the bid. Failure to submit the form shall make this contract exempt of steel cost adjustments.

<u>Types of Steel Products</u>. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling) Structural Steel Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), frames and grates, and other miscellaneous items will be subject to a steel cost adjustment when the pay item they are used in has a contract value of \$10,000 or greater.

 $\underline{\text{Documentation}}.$  Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) Evidence that increased or decreased steel costs have been passed on to the Contractor.
- (b) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (c) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

Q = quantity of steel incorporated into the work, in lb (kg)

D = price factor, in dollars per lb (kg)

 $D = CBP_M - CBP_L$ 

Where:  $CBP_M =$  The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the

American Metal Market (AMM) for the day the steel is shipped from the mill. The indices will be converted from dollars per ton to dollars per lb (kg).

CBP<sub>L</sub> = The average of the Consumer Buying Price indices for Shredded Auto Scrap (Chicago) and No. 1 Heavy Melt (Chicago) as published by the AMM for the day the contract is let. The indices will be converted from dollars per ton to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the  $CBP_M$  will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

<u>Basis of Payment</u>. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the  $CBP_L$  and  $CBP_M$  in excess of five percent, as calculated by:

Percent Difference =  $\{(CBP_L - CBP_M) \div CBP_L\} \times 100$ 

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the steel items are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

Affa	ch	mor	4
MILA	1211	119161	

Metal Piling (excluding temporary sheet piling)   Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)   Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)   Turnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)   37 lb/ft (48 kg/m)   37 lb/ft (55 kg/m)   37 lb/ft (56 kg/m)	Attachment	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)   Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)   Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)   Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)   Cher piling Structural Steel	<u>item</u>	Unit Mass (Weight)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	Metal Piling (excluding temporary sheet piling)	1
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Structural Steel	[] Furnishing Metal Pile Shelis 12 in, (305 mm), 0.250 in, (6.35 mm) wall thickness)	
See plans for weights (masses)   Reinforcing Steel	Femishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	
See plans for weights (masses)   Dowel Bars and Tie Bars.	OBIET DIVING	
Reinforcing Steel   See plans for weights (masses)	Structural Steel	
See plans for weights (masses)		
Dowel Bars and Tie Bars	Reinforcing Steel	<del></del>
Mesh Reinforcement   63 lb/100 sq ft (310 kg/sq m)		1
Mesh Reinforcement         63 lb/100 sg ft (310 kg/sq m)           Guardraii         Steel Plate Beam Guardraii, Type A w/steel posts         20 lb/ft (30 kg/m)           Steel Plate Beam Guardraii, Type B w/steel posts         30 lb/ft (45 kg/m)           Steel Plate Beam Guardraii, Type A and B w/wood posts         8 lb/ft (12 kg/m)           Steel Plate Beam Guardraii, Type 2         305 lb (140 kg) each           Steel Plate Beam Guardraii, Type 6         1260 lb (570 kg) each           Traffic Barrier Terminal, Type 1 Special (Flared)         730 lb (330 kg) each           Traffic Signal and Light Poles, Towers and Mast Arms         410 lb (185 kg) each           Traffic Signal Post         11 lb/ft (16 kg/m)           Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m)         11 lb/ft (16 kg/m)           Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m)         21 lb/ft (21 kg/m)           Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m)         13 lb/ft (19 kg/m)           Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)         13 lb/ft (28 kg/m)           Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)         65 lb/ft (97 kg/m)           Metal Railings (excluding wire fence)         Steel Railing, Type S-1         39 lb/ft (58 kg/m)           Steel Railing, Type S-1         39 lb/ft (79 kg/m)           Steel Bridge Rail         52 lb	Dowel Bars and Tie Bars	
Steet Plate Beam Guardrail, Type A w/steet posts   20 lb/ft (30 kg/m)		
Steel Plate Beam Guardrall, Type B w/steel posts   30 lb/ft (45 kg/m)   Steel Plate Beam Guardrall, Types A and B w/wood posts   8 lb/ft (12 kg/m)   305 lb (140 kg) each   305 lb (140 kg) each   1260 lb (570 kg)   1260 l		63 ID/ 100 SQ IL (310 Kg/sq m)
Steel Plate Beam Guardrall, Type B w/steel posts   30 lb/ft (45 kg/m)   Steel Plate Beam Guardrall, Types A and B w/wood posts   8 lb/ft (12 kg/m)   305 lb (140 kg) each   305 lb (140 kg) each   1260 lb (570 kg)   1260 l	Steel Plate Beam Guardrail Type A wisterl nosts	00 # # (00 ! ()
Steel Plate Beam Guardrail, Types A and B w/wood posts   Steel Plate Beam Guardrail, Type 2   305 lb (140 kg) each   Steel Plate Beam Guardrail, Type 6   1260 lb (570 kg) each   1260 lb (570 kg) each   17affic Barrier Terminal, Type 1 Special (Tangent)   730 lb (330 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (330 kg) each   1260 lb (350 kg/m)   1260 lb (126 kg/m)	Steel Plate Beam Guardrail Type B wisters posts	
Steel Plate Beam Guardrail, Type 2   305 lb (140 kg) each   Steel Plate Beam Guardrail, Type 5   1260 lb (570 kg) each   1260 lb (570 kg) each   1260 lb (570 kg) each   1261 lb (570 kg) each   126	Steel Plate Beam Guardrail Types A and B w/wood posts	
Steel Plate Beam Guardrail, Type 6   1260 lb (570 kg) each   Traffic Barrier Terminal, Type 1 Special (Tangent)   730 lb (330 kg) each   730 lb (350 kg) each   730 lb (350 kg) each   730 lb (350 kg) each   741 lb (185 kg) each   741 lb (185 kg) each   742 lb (185 kg) each   743 lb (185 kg) each   744 lb (185 kg) each   745 lb (185 kg) each	Steel Plate Beam Guardrail Type 2	8 lb/π (12 kg/m)
Traffic Barrier Terminal, Type 1 Special (Tangent) Traffic Barrier Terminal, Type 1 Special (Flared)  Steel Traffic Signal and Light Poles, Towers and Mast Arms Traffic Signal Post Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m) Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m) Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m) Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m) Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m) Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m) Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)  Metal Railings (excluding wire fence) Steel Railing, Type SM Steel Railing, Type S-1 Steel Bridge Rail  Frames and Grates Frame Lids and Grates  Frame Lids and Grates	Steel Plate Beam Guardrail, Type 6	305 lb (140 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms   Traffic Signal Post	Traffic Barrier Terminal, Type 1 Special (Tangent)	1260 lb (570 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms   Traffic Signal Post	Traffic Barrier Terminal, Type 1 Special (Flared)	
Traffic Signal Post   Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m)   14 lb/ft (21 kg/m)   Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m)   21 lb/ft (31 kg/m)   Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m)   13 lb/ft (19 kg/m)   Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m)   19 lb/ft (28 kg/m)   Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)   31 lb/ft (46 kg/m)   Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)   65 lb/ft (97 kg/m)   Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)   80 lb/ft (119 kg/m)   Metal Railings (excluding wire fence)   Steel Railing, Type Sh   64 lb/ft (95 kg/m)   Steel Railing, Type Sh   39 lb/ft (58 kg/m)   Steel Railing, Type Th   53 lb/ft (79 kg/m)   Steel Bridge Rail   52 lb/ft (77 kg/m)   Frame   Lids and Grates   250 lb (115 kg)	Steel Traffic Signal and Light Poles, Towers and Mact Armo	410 fb (185 kg) each
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m)  Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m)  Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m)  Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m)  Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)  Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)  Light Tower w/Luminaire Mount, 120 - 160 ft (45.5 - 48.5 m)  Metal Railings (excluding wire fence)  Steel Railing, Type SM  Steel Railing, Type S-1  Steel Railing, Type T-1  Steel Bridge Rail  Frames and Grates  Frame  Lids and Grates  250 lb (115 kg)	Traffic Signal Post	44 51-18 (40 1 4)
Light Pole, Lenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m)  Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m)  Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m)  Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)  Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)  Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)  Metal Railings (excluding wire fence)  Steel Railing, Type SM  Steel Railing, Type S-1  Steel Railing, Type T-1  Steel Bridge Rail  Frames and Grates  Frame  Lids and Grates  Frame	Light Pole, Tenon Mount and Twin Mount 30 - 40 ft (0 12 m)	
Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m) Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m) Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m) Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m) Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)  Metal Railings (excluding wire fence) Steel Railing, Type SM Steel Railing, Type S-1 Steel Railing, Type S-1 Steel Bridge Rail Frames and Grates Frame Lids and Grates  250 lb (115 kg)	Light Pole, Tenon Mount and Twin Mount 45 - 55 ft (13 5 - 16 5 m)	
Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m)  Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)  Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)  Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)  Metal Railings (excluding wire fence)  Steel Railing, Type SM  Steel Railing, Type S-1  Steel Railing, Type S-1  Steel Railing, Type T-1  Steel Bridge Rail  Frames and Grates  Frame  Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m)  19 lb/ft (28 kg/m)  31 lb/ft (46 kg/m)  65 lb/ft (97 kg/m)  66 lb/ft (97 kg/m)  64 lb/ft (95 kg/m)  53 lb/ft (58 kg/m)  53 lb/ft (79 kg/m)  52 lb/ft (77 kg/m)	Light Pole w/Mast Arm. 30 - 50 ft (9 - 15.2 m)	
Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)  Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)  Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)  Steph Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)  Metal Railings (excluding wire fence)  Steel Railing, Type SM  Steel Railing, Type S-1  Steel Railing, Type S-1  Steel Railing, Type T-1  Steel Bridge Rail  Frames and Grates  Frame  Light Tower w/Luminaire Mount, 180 - 140 ft (46.8 m)  65 lb/ft (97 kg/m)  64 lb/ft (95 kg/m)  53 lb/ft (79 kg/m)  52 lb/ft (77 kg/m)	Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m)	
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)  Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)  Metal Railings (excluding wire fence)  Steel Railing, Type SM  Steel Railing, Type S-1  Steel Railing, Type T-1  Steel Bridge Rail  Frames and Grates  Frame  Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)  65 lb/ft (97 kg/m)  64 lb/ft (95 kg/m)  39 lb/ft (58 kg/m)  39 lb/ft (58 kg/m)  52 lb/ft (77 kg/m)  250 lb (115 kg)	Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33 5 m)	
Light   Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)   80 lb/ft (119 kg/m)	Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)	
Metal Railings (excluding wire fence) Steel Railing, Type SM Steel Railing, Type S-1 Steel Railing, Type S-1 Steel Railing, Type T-1 Steel Bridge Rail Frames and Grates Frame Lids and Grates 250 lb (115 kg)	Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)	
Steel Railing, Type SM       64 lb/ft (95 kg/m)         Steel Railing, Type S-1       39 lb/ft (58 kg/m)         Steel Railing, Type T-1       53 lb/ft (79 kg/m)         Steel Bridge Rail       52 lb/ft (77 kg/m)         Frames and Grates       250 lb (115 kg)	Metal Railings (excluding wire fence)	on iour (119 kg/lig)
Steel Railing, Type S-1   39 lb/ft (58 kg/m)   Steel Railing, Type T-1   53 lb/ft (79 kg/m)   Steel Bridge Rail   52 lb/ft (77 kg/m)   Frames and Grates   Frame   250 lb (115 kg)	Steel Railing, Type SM	64 lb/ft (05 kg/m)
Steel Railing, Type T-1 Steel Bridge Rail Frames and Grates Frame Lids and Grates 250 lb (115 kg)	Steel Railing, Type S-1	
Steel Bridge Rail  Frames and Grates  Frame  Frame  250 lb/ft (77 kg/m)  250 lb (115 kg)	Steel Railing, Type T-1	53 lb/8 (70 kg/m)
Frames and Grates Frame Lids and Grates 250 lb (115 kg)	Steel Bridge Rail	
Lids and Grates 250 lb (115 kg)		oz ibiti (17 kg/ill)
	Frame	250 lb (115 kg)
	Lids and Grates	250 lb (115 kg) 150 lb (70 kg)

### Return With Bid

## ILLINOIS DEPARTMENT OF TRANSPORTATION

# OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this form with his/her bid. Failure to submit the form shall make this contract exempt of steel cost adjustments. After award, this form, when submitted shall become part of the contract.

Contract No.:	:		<u> </u>	_	
Company Na	me:			<del></del>	
Contractor's	Option	<u>n</u> :			
ls your compa	any opt	ing to inclu	de this spe	cial provisio	on as part of the contract plans
	Yes		No		
					Date:

### STEEL PLATE BEAM GUARDRAIL (BDE)

Effective: November 1, 2005 Revised: January 1, 2007

Revise the first paragraph of Article 1006.25 of the Standard Specifications to read:

"1006.25 Steel Plate Beam Guardrail. Steel plate beam guardrail, including bolts, nuts, and washers, shall be according to AASHTO M 180. Guardrails shall be Class A, with Type II coatings. The weight (mass) of the galvanized coating for each side of the guardrail shall be at least 2.00 oz/sq ft (610 g/sq m). The overall combined weight (mass) of the coating on both sides shall meet or exceed 4.00 oz/sq ft (1220 g/sq m). The thickness of the zinc or zinc alloy will be determined for each side using the average of at least three non-destructive test readings taken on that side of the guardrail. The minimum average thickness for each side shall be 3.1 mils (79  $\mu$ m)."

## SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

### **TEMPORARY EROSION CONTROL (BDE)**

Effective: November 1, 2002 Revised: January 1, 2007

Revise the second sentence of the first paragraph of Article 280.04(a) of the Standard Specifications to read:

"Temporary ditch checks shall be constructed with rolled excelsior, products from the Department's approved list, or with aggregate when specified."

Revise Article 1081.15(f) of the Standard Specifications to read:

"(f) Rolled Excelsior. Rolled excelsior shall consist of an excelsior fiber filling totally encased inside netting and sealed with metal clips or knotted at the ends. Each roll shall be a minimum of 20 in. (500 mm) in diameter and a minimum of 10 ft (3 m) in length. Each 10 ft (3 m) roll shall have a minimum weight (mass) of 30 lbs (13.6 kg). The excelsior fiber filling shall be weed free. At least 80 percent of the fibers shall be a minimum of 6 in. (150 mm) in length. The fiber density shall be a minimum of 1.38 lb/cu ft (22 kg/cu m). The netting shall be composed of a polyester or polypropylene material which retains 70 percent of its strength after 500 hours of exposure to sunlight. The maximum opening of the net shall be 1 x 1 in. (25 x 25 mm)."

## WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 145 working days.

# 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 word performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.
- A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.
- 4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4 and 7; Section V, paragraphs 1 and 2a through 2g.

- 5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (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.

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60 (and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 et seg.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of FFO:
  - a. The contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.
  - b. The contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job-training."

- 2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above

Page 1

agreement will be met, the following actions will be taken as a minimum:

- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- 4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
  - a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
  - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
  - c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
- 5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
  - a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
  - b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any

paid within each classification to deter

evidence of discriminatory wage practices.

- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
- d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

#### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
  - a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
  - b. The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
  - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to

the SHA and shall set forth what efforts have been made to obtain such information.

- d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
- 8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
  - a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
  - b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.
  - c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
- 9. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
  - a. The records kept by the contractor shall document the following:
  - The number of minority and non-minority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
  - (4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

#### **III. NONSEGREGATED FACILITIES**

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

- a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.
- b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).
- c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

#### IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

#### 1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the

contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

- b. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

#### 2. Classification:

- a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- (2) the additional classification is utilized in the area by the construction industry:
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- (4) with respect to helpers, when such a classification prevails in the area in which the work is performed.
- c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or

disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

- d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

#### 3. Payment of Fringe Benefits:

- a. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.
- b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided that the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- 4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

#### a. Apprentices:

- (1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.
- (2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not

be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable  $\,$ wage rate on the wage determination for the work actually performed. Where a contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

- (3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.
- (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

#### b. Trainees:

- (1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.
- (2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.
- (3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits

Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

#### c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

#### 5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

#### 6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federallyassisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the SHA contracting officer may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

#### 8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

#### V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

- 2. Payrolls and Payroll Records:
  - a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
  - b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan

or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period).

The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V.

This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all suncontractors.

- d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.
- e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for

inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

- 1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:
  - a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.
  - b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
  - c. Furnish, upon the completion of the contract, to the SHA resident engineer on /Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- 2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

#### VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in he contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted form the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635).
  - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
  - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a

whole and in general are to be limited to minor components of the overall contract.

- 2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract.

Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

#### VIII. SAFETY: ACCIDENT PREVENTION

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

#### IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification,

distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

# NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

# X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- 3. That the firm shall promptly notify the SHA of the receipt of

any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

# XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible,""lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled

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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 tie participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.
- Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

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# Certification Regarding Debarment, Suspension, Ineligibility And Voluntary Exclusion-Lower Tier Covered Transactions:

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

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# XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

- 1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief. that:
  - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- 2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
- 3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

# MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision

#### **NOTICE**

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <a href="http://www.dot.il.gov/desenv/delett.html">http://www.dot.il.gov/desenv/delett.html</a>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at <a href="http://www.dot.il.gov/desenv/subsc.html">http://www.dot.il.gov/desenv/subsc.html</a>.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.