#### 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.

73

1121 91111 111111 212
Proposal Submitted By
Name
Address
City

### Letting August 5, 2005

### 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. 72118
MASON County
Section SAND RIDGE STATE FOREST 2004
District 6 Construction Funds
Route PARK ROADS

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

Prepared by

S

Checked by

(Printed by authority of the State of Illinois

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

#### **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.

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

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



TO THE DEPARTMENT OF TRANSPORTATION

**PROPOSAL** 

1.	Proposal of			

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

Contract No. 72118
MASON County
Section SAND RIDGE STATE FOREST 2004
Route PARK ROADS
District 6 Construction Funds

4.28 miles of reconstruction of internal park roads and parking areas at Sand Ridge State Forest located northeast of Havana.

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>A</u>	mount (		posal <u>aranty</u>	<u>.</u>	Amount o	f 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 consid	dered as
also covering the combination bid.					

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

Attach Cashier's Check or Cert	ified Check Here
In the event that one proposal guaranty check is intended to cover two or more propo of the proposal guaranties which would be required for each individual proposal. If th 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	Cents		

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

State Job # - C-96-554-04 PPS NBR - 6-00002-0600

County Name - MASON- -

Code - 125 - - District - 6 - -

Project Number	Route
	PARK RDS

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
X0300626	CURB & GUTTER REMOV	FOOT	75.000				
X0325056	F & I POND LINER	SQ YD	3,571.000				
X0325057	DRIL & INS WATER WELL	EACH	1.000				
X3550500	BIT BC SUPER 8	SQ YD	41.000				
X4066414	BC SC SUPER "C" N50	TON	1,577.000				
X4066765	LEV BIND MM SUPER N50	TON	1,051.000				
Z0007800	BUMPER BLOCKS	EACH	18.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
20100110	TREE REMOV 6-15	UNIT	134.000				
20100210	TREE REMOV OVER 15	UNIT	17.000				
20100500	TREE REMOV ACRES	ACRE	14.530				
20200100	EARTH EXCAVATION	CU YD	16,016.000				
25000200	SEEDING CL 2	ACRE	5.500				
25000400	NITROGEN FERT NUTR	POUND	1,053.000				
25000500	PHOSPHORUS FERT NUTR	POUND	1,053.000				

State Job # - C-96-554-04 PPS NBR - 6-00002-0600

County Name - MASON- - Code - 125 - -

Code - 125 - District - 6 - -

Project Number	Route	
	PARK RDS	

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
25000600	POTASSIUM FERT NUTR	POUND	1,053.000				
25000700	AGR GROUND LIMESTONE	TON	23.400				
25001750	SEEDING CL 4 SPL	ACRE	6.300				
25100115	MULCH METHOD 2	ACRE	10.500				
25101005	HD EXCELSIOR BLANKET	SQ YD	3,000.000				
28000200	EARTH EXC - EROS CONT	CU YD	125.000				
28000300	TEMP DITCH CHECKS	EACH	68.000				
28000600	SEEDING CL 7	ACRE	10.000				
28000700	MULCH METHOD 1	ACRE	10.000				
28000900	FENCE - EROS CONT	FOOT	1,287.000				
31101000	SUB GRAN MAT B	TON	12,324.000				
40200100	AGG SURF CSE A	TON	6,958.000				
40300200	BIT MATLS PR CT	TON	58.200				
40300400	BIT MATLS C&S CT	TON	174.000				
40300500	COVER COAT AGG	TON	815.000				

State Job # - C-96-554-04 PPS NBR - 6-00002-0600

County Name - MASON- -

Code - 125 - - District - 6 - -

Project Number	Route
	PARK RDS

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
40300600	SEAL COAT AGG	TON	408.000				
40600200	BIT MATLS PR CT	TON	7.200				
40600300	AGG PR CT	TON	26.800				
40600990	TEMPORARY RAMP	SQ YD	40.000				
44004700	SIDEWALK REM SPL	SQ FT	287.000				
44200120	PAVT PATCH T2 10	SQ YD	100.000				
48101200	AGGREGATE SHLDS B	TON	216.000				
54200433	P CUL 1 RCCP 18	FOOT	450.000				
54200640	P CUL 1 CS/A CP 15	FOOT	390.000				
54213663	PRC FLAR END SEC 18	EACH	30.000				
54215550	MET END SEC 15	EACH	4.000				
60260100	INLETS ADJUST	EACH	3.000				
60603800		FOOT	91.000				
63500105	DELINEATORS	EACH	30.000				
	ENGR FIELD OFFICE A	CAL MO	10.000				

State Job # - C-96-554-04 PPS NBR - 6-00002-0600

County Name - MASON- -

Code - 125 - - District - 6 - -

Project Number	Route
	PARK RDS

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
67100100	MOBILIZATION	L SUM	1.000				
70100450	TRAF CONT-PROT 701201	L SUM	1.000				
70100500	TRAF CONT-PROT 701326	L SUM	1.000				
70101830	TRAF CONT-PROT BLR 21	L SUM	1.000				
70101835	TRAF CONT-PROT BLR 22	L SUM	1.000				
72000100	SIGN PANEL T1	SQ FT	96.500				
72800100	TELES STL SIN SUPPORT	FOOT	165.000				
78000100	THPL PVT MK LTR & SYM	SQ FT	111.000				
78000300		FOOT	1,624.000				
78000500		FOOT	374.000				
	THPL PVT MK LINE 12	FOOT	164.000				

THIS IS THE TOTAL BID	\$

#### NOTES:

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

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

#### I. GENERAL

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

#### **II. ASSURANCES**

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

#### B. Felons

1. The Illinois Procurement Code provides:

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

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

#### C. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

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

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

#### D. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

#### E. Inducements

1. The Illinois Procurement Code provides:

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

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

#### F. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

#### G. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

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

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

#### H. Confidentiality

1. The Illinois Procurement Code provides:

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

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

#### I. Insider Information

1. The Illinois Procurement Act provides:

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

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

#### **III. CERTIFICATIONS**

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

#### B. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

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

#### C. Educational Loan

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

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

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

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

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

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

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

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 inform accurate, and all forms are hereby incorporated by reforms or amendments to previously submitted forms	eference in this bid. Any	necessary additional
(Bidding Con	npany)	
Name of Authorized Representative (type or print)	Title of Authorized Represe	ntative (type or print)
Signature of Authorize	ed Representative	Date

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

D.

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 ed 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 entity. It 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	ler 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 lending 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 nce.
	ne 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)
(30 ILCS 500). Vendors desiring to enter in and potential conflict of interest information the publicly available contract file. This Fo	nto a contract with the State of as specified in this Disclosur form A must be completed for inpany may submit a 10K	Section 50-35 of the Illinois Procurement Code fillinois must disclose the financial information e Form. This information shall become part or bids in excess of \$10,000, and for all open disclosure (or equivalent if applicable) in a Form Instructions.
DISCLO	SURE OF FINANCIAL INF	FORMATION
terms of ownership or distributive income s \$90,420.00 (60% of the Governor's salary separate Disclosure Form A for each in	share in excess of 5%, or an i as of 7/1/01). <b>(Make copies</b>	of this form as necessary and attach a
FOR INDIVIDUAL (type or print information)	ation)	
NAME:		
ADDRESS		
Type of ownership/distributable inco	ome share:	
stock sole proprietorshi % or \$ value of ownership/distributable	·	other: (explain on separate sheet):
2. Disclosure of Potential Conflicts of I potential conflict of interest relationships a and describe.		to indicate which, if any, of the following estion is "Yes", please attach additional pages
(a) State employment, currently or in	the previous 3 years, including	g contractual employment of services.
If your answer is yes, please answ	er each of the following ques	YesNo tions.
<ol> <li>Are you currently an office Highway Authority?</li> </ol>	er or employee of either the C	apitol Development Board or the Illinois Toll YesNo
		gency of the State of Illinois? If you are e State of Illinois, and your annual salary

agency for which you are employed and your annual salary.

exceeds \$90,420.00, (60% of the Governor's salary as of 7/1/01) provide the name the State

	3.	If you are currently appointed to or employed by any agency of the Si salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1 (i) more than 7 1/2% of the total distributable income of your firm, corporation, or (ii) an amount in excess of the salary of the Governor's	/01) are you entitled to receive partnership, association or
	4.	If you are currently appointed to or employed by any agency of the Si salary exceeds \$90,420.00, (60% of the Governor's salary as of 7/1 or minor children entitled to receive (i) more than 15 % in the aggreincome of your firm, partnership, association or corporation, or (ii) are the salary of the Governor?	/01) are you and your spouse egate of the total distributable
		oyment of spouse, father, mother, son, or daughter, including contractions 2 years.	tual employment services
If your	ansv	wer is yes, please answer each of the following questions.	YesNo
	1.	Is your spouse or any minor children currently an officer or employee Board or the Illinois Toll Highway Authority?	of the Capitol Development YesNo
	2.	Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appagency of the State of Illinois, and his/her annual salary exceed Governor's salary as of 7/1/01) provide the name of your spouse ar of the State agency for which he/she is employed and his/her annual	pointed to or employed by any ls \$90,420.00, (60 % of the nd/or minor children, the name
	3.	If your spouse or any minor children is/are currently appointed to or State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% as of 7/1/01) are you entitled to receive (i) more then 71/2% of the tof firm, partnership, association or corporation, or (ii) an amount in Governor?	of the salary of the Governor tal distributable income of your
	4.	If your spouse or any minor children are currently appointed to or er State of Illinois, and his/her annual salary exceeds \$90,420.00, (60% 7/1/01) are you and your spouse or minor children entitled to rece aggregate of the total distributable income of your firm, partnership, (ii) an amount in excess of 2 times the salary of the Governor?	of the Governor's salary as of eive (i) more than 15 % in the
			YesNo
ù un	it of	re status; the holding of elective office of the State of Illinois, the gover local government authorized by the Constitution of the State of Illinois currently or in the previous 3 years.	
		onship to anyone holding elective office currently or in the previous 2 y daughter.	rears; spouse, father, mother, YesNo
Ar of	nerio	ntive office; the holding of any appointive government office of the Statca, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in exceptage of that office currently or in the previous 3 years.	ne State of Illinois or the statutes
٠,		nship to anyone holding appointive office currently or in the previous 2 daughter.	years; spouse, father, mother, YesNo
(g) Er	nplo	yment, currently or in the previous 3 years, as or by any registered lob	obyist of the State government. YesNo

(h) Relationship to a son, or daughter.	anyone who is or was a registered lobbyist in the previous 2 ye	ears; spouse, father, mother, YesNo
committee regist	nployment, currently or in the previous 3 years, by any regist tered with the Secretary of State or any county clerk of the Sta registered with either the Secretary of State or the Federal Bo	ate of Illinois, or any political
last 2 years by ar county clerk of the	inyone; spouse, father, mother, son, or daughter; who was a compressive election or re-election committee registered with the State of Illinois, or any political action committee registered eral Board of Elections.	the Secretary of State or any
	APPLICABLE STATEMENT	
This Disclosure Fo	orm A is submitted on behalf of the INDIVIDUAL named on	previous page.
Completed by:		
•	Name of Authorized Representative (type or print)	
Completed by:		
	Title of Authorized Representative (type or print)	
Completed by:		
	Signature of Individual or Authorized Representative	Date
	NOT APPLICABLE STATEMENT	
	that no individuals associated with this organization meet etion of this Form A.	the criteria that would
This Disclosure Fo	orm A is submitted on behalf of the CONTRACTOR listed o	n the previous page.
	Name of Authorized Representative (type or print)	
	Title of Authorized Representative (type or print)	
	Signature of Authorized Representative	Date

## ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Procurement Related Information Disclosure

		Disclosure	
Contractor Name			
Legal Address			
City, State, Zip			
Telephone Number	Email Address	Fax Number (if available)	
LCS 500). This informat	ation contained in this Form is required by the tion shall become part of the publicly availab D, and for all open-ended contracts.		
DISCLOSU	JRE OF OTHER CONTRACTS AND PROC	UREMENT RELATED INFORMA	<u>TION</u>
pending contracts (incluor of Illinois agency: Ye	ontracts & Procurement Related Informate uding leases), bids, proposals, or other ongo es No bidder only needs to complete the signature.	ing procurement relationship with	ether it has any any other State
	<ul> <li>Identify each such relationship by showing such as bid or project number (attach additions)</li> <li>S:</li> </ul>		
<u> </u>	THE FOLLOWING STATEMENT N	MUST BE SIGNED	
	Name of Authorized Representati	ve (type or print)	
	Title of Authorized Representativ	e (type or print)	
	Signature of Authorized Rep	resentative	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. 72118
MASON County
Section SAND RIDGE STATE FOREST 2004
Route PARK ROADS
District 6 Construction Funds

									Distr	ICT 6	Cons	tructio	n F	unas	•			
PART I. IDENTIFIC	ATION																	
Dept. Human Rights	s #						_ Dur	ation o	f Proje	ect:								
Name of Bidder:																		
PART II. WORKFO A. The undersigned which this contract wo projection including a p	bidder hark is to be	as analyz perform	ed mir ed, an	d for th d fema	ne locati	ons fro	m whic	ch the b	idder re	cruits	employe	es, and he	ereby	, subm	its the fol	owir con	ng workfo	n orce
		TOTA	AL Wo	rkforce	Project	tion for	Contra	act						C	CURREN			ES
				MIN	ORITY E	MPI C	YFFS			TRA	AINEES						RACT	
JOB CATEGORIES	_	TAL OYEES	BLA	ACK	HISP		*OT	HER IOR.		REN-	ON TI	HE JOB INEES			TAL OYEES		MINO	ORITY OYEES
	М	F	M	F	М	F	М	F	М	F	М	F		М	F		М	F
OFFICIALS (MANAGERS)																		
SUPERVISORS																		
FOREMEN																		
CLERICAL EQUIPMENT																		
OPERATORS  MECHANICS													-					
TRUCK DRIVERS													-					
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
	TAE	BLE C									Г.		^ DT	NACNIT	LICE OF	- \  \/		
TOTAL Training Projection for Contract  FOR DEPARTMENT USE ONLY																		
EMPLOYEES IN	_	TAL OYEES	RI A	ACK	НІСП	ANIC		THER NOR.										
TRAINING	M	F	M	F	М	F	M	F	1									
APPRENTICES																		
ON THE JOB																		

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

**TRAINEES** 

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

Note: See instructions on the next page

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Contract No. 72118
MASON County
Section SAND RIDGE STATE FOREST 2004
Route PARK ROADS
District 6 Construction Funds

#### PART II. WORKFORCE PROJECTION - continued

В.		ded in "Tot t the under							l numb	er o	f <b>new</b>	hire	<b>s</b> tha	it would	be e	mploy	ed in th	е
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	be	undersigne recruited	from	the	area	in` whi	ich th	ne .	contra	ct	proje	ct is	s lo	ocated;	and	d/or	(numbe	r)
	office	or base of	operati	on is l	ocated.	_ new hir	es wou	ıld b	e recru	iited	from 1	the ar	rea ır	n which	the b	dder's	principa	al
_			•								_							
C.		ded in "Tota rsigned bid															ctly by th	е
	The ι	undersigne rectly empl	d bidder	r estim	ates tha	at (numbe	er)									ре	rsons w	ill
		rectly empl oyed by su			rime co	ntractor a	and tha	t (nu	ımber)							perso	ns will b	е
PART	III. AF	FIRMATIVI	E ACTIO	ON PL	AN													
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Contract No. 72118
MASON County
Section SAND RIDGE STATE FOREST 2004
Route PARK ROADS
District 6 Construction Funds

#### PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)		
		-
	Firm Name	
(IF A CO-PARTNERSHIP)		
,		
		Name and Address of All Members of the Firm:
_		<del></del>
_		
	Ву	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
(IF A CORPORATION)		
(IF A JOINT VENTURE, USE THIS SECTION	Attest	Signature
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
,		
	Corporate Name	
	Ву	
		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
(IF A JOINT VENTURE)		
	Attest	Signature
	Business Address	
If more than two parties are in the joint venture	nlease attach an ac	dditional signature sheet



### Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

	Item No.
	Letting Date
KNOW ALL MEN BY THESE PRESENTS, That We	
RNOW ALE MEN DT THESE I RESERTS, That We	
as PRINCIPAL, and	
	as CUDETY are
Article 102.09 of the "Standard Specifications for Road and Bridge	as SURETY, are INOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in ge Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well nent of which we bind ourselves, our heirs, executors, administrators, successors and assigns.
	IS 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 Pla PRINCIPAL shall enter into a contract in accordance with the ter- coverages and providing such bond as specified with good and su- labor and material furnished in the prosecution thereof; or if, in the into such contract and to give the specified bond, the PRINCIPAL	I proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in an that is accepted and approved by the Department; and if, after award by the Department, the ms of the bidding and contract documents including evidence of the required insurance afficient surety for the faithful performance of such contract and for the prompt payment of the event of the failure of the PRINCIPAL to make the required DBE submission or to enter L pays to the Department the difference not to exceed the penalty hereof between the amount the Department may contract with another party to perform the work covered by said bid shall remain in full force and effect.
paragraph, then Surety shall pay the penal sum to the Depa	PRINCIPAL has failed to comply with any requirement as set forth in the preceding artment within fifteen (15) days of written demand therefor. If Surety does not make y bring an action to collect the amount owed. Surety is liable to the Department for tigation in which it prevails either in whole or in part.
In TESTIMONY WHEREOF, the said PRINCIPAL officers this day of	and the said SURETY have caused this instrument to be signed by their respectiveA.D.,
PRINCIPAL	SURETY
(Company Name)	(Company Name)
By:	By:
(Signature & Title)	By:(Signature of Attorney-in-Fact)
Note	ry Certification for Principal and Surety
STATE OF ILLINOIS, COUNTY OF	ny Ceremeaton for Frincipal and Surety
I,	, a Notary Public in and for said County, do hereby certify that
and	
	uals signing on behalf of PRINCIPAL & SURETY)
who are each personally known to me to be the same pers	ons whose names are subscribed to the foregoing instrument on behalf of person and acknowledged respectively, that they signed and delivered said
Given under my hand and notarial seal this da	ay of, A.D
My commission expires	
	Notary Public
	Form, the Principal may file an Electronic Bid Bond. By signing below the Principal cuted and the Principal and Surety are firmly bound unto the State of Illinois under the
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. 72118
MASON County
Section SAND RIDGE STATE FOREST 2004
Route PARK ROADS
District 6 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., August 5, 2005. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 72118
MASON County
Section SAND RIDGE STATE FOREST 2004
Route PARK ROADS
District 6 Construction Funds

4.28 miles of reconstruction of internal park roads and parking areas at Sand Ridge State Forest located northeast of Havana.

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

By Order of the Illinois Department of Transportation

Timothy W. Martin, Secretary

BD 351 (Rev. 01/2003)

## INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

#### Adopted March 1, 2005

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

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

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31		Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	
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Park Roads Section Sand Ridge State Forest 2004 Contract No. 72118 Mason County

### STATE OF ILLINOIS

#### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2002, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways," and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of Park Roads, Section Sand Ridge State Forest 2004, Mason County, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

#### PARK ROADS SECTION SAND RIDGE STATE FOREST 2004 MASON COUNTY

#### **LOCATION OF PROJECT**

This project is located in the Sand Ridge State Forest and Jake Wolf Memorial Fish Hatchery in Mason County, adjacent to the Goofy Ridge Blacktop. It includes improvements to the Jake Wolf Fish Hatchery Entrance Road and Parking Area (1.11 miles) and to Sand Ridge Road and adjacent parking areas (3.13 miles).

#### **DESCRIPTION OF PROJECT**

This work in Sand Ridge State Forest 2004 consists of furnishing all equipment, labor, and materials necessary for reconstruction of approximately 4.3 miles of internal roads and parking areas. The work includes earth excavation, pipe culvert installations, aggregate base course, preparation of base, aggregate base repair, bituminous resurfacing, bituminous surface treatment, seeding, pavement marking, haul road repair, and all other miscellaneous work required to complete this improvement in the Jake Wolf Memorial Fish Hatchery and in the Sand Ridge State Forest in Mason County.

#### TRAFFIC CONTROL PLAN

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

Special attention is called to Articles 107.09, 107.04 and 701.04 of the Standard Specifications for Road and Bridge Construction and the following Highway Standards relating to traffic control:

701001 701006 701011 701201 701326 702001 BLR21 BLR22

- 1. The Contractor will be responsible for the traffic devices at all times during construction activities and throughout winter shutdown periods.
- 2. Revise the first paragraph of Article 702.05(a): "General: Sign posts must be 100 x 100 mm (4 x 4 inches) wood posts according to Article 1093.01(b). The use of metal posts will not be permitted."
- 3. All required fluorescent orange signs shall be 48"x48" on this project. This overrules the BLR standards which allow 36"x36" signs.
- 4. All Type III barricades shall be equipped with Type A, bi-directional flashing lights and have high intensity striping on both sides only when R11-3 or R11-4 signs are attached. When R11-2 signs are attached, flashing lights are still required, but striping will only be required on the one side facing traffic.
- 5. Before beginning any work, the Contractor shall furnish and erect "Road Construction Ahead" signs (W20-1(0)-48) at each approach to the work zones on Goofy Ridge Blacktop, Sand Ridge Road, Cactus Drive, and on Forest City Road as directed by the Engineer.
- 6. Post mounted "Trucks Entering/Leaving Highway" signs (W21-I104/105-48) shall be installed during heavy truck traffic on the Goofy Ridge Blacktop, as directed by the Engineer.

<u>Staging of Construction and Keeping Roads Open to Traffic:</u> The Contractor shall schedule his/her sequence of construction to permit the construction of this section with the least inconvenience to the traveling public.

# Allowable Road Closures:

<u>Jake Wolf Fish Hatchery Entrance Road and Parking Area</u> will be allowed to be closed to thru traffic (to discourage use only, since dead end road) during patching and resurfacing operations. At least one-lane for local two-way traffic will be required to be kept open at all times. No night time lane closures will be allowed. Only areas in the parking area may be barricaded off for closure. Access is required at all times for the workers to the Fish Hatchery and for residents that live along the entrance road.

<u>Sand Ridge Road</u> will only be allowed to be closed during the excavation/embankment, culvert installation, placement of sub-base granular material / aggregate surface course, and bituminous surface treatment applications. All other improvements to the above-listed roads will be completed under traffic. Access is required at all times for the one residence that lives along this road.

All roads with no construction activities in progress shall be kept open (if suitable as determined by the Engineer). This may also involve closing roads during working hours and opening them back up at the end of the day (except when priming for the bituminous surface treatment).

Access for farm equipment to field entrances and for passenger vehicles to residence on all roads within the project limits shall be provided at all times during construction, except when the Contractor has contacted the property owners/tenants and it is agreed upon that access is not required. If access is required, the Contractor will be required to only fully close the roadway on one side of the entrance at a time; therefore, maintaining access at all times.

<u>Scheduling Road Closures</u>: Prior to any allowable road closures to all traffic, the Mason County Engineer shall be notified seven (7) calendar days prior to the closures to notify emergency services in the area of the closure. IDNR (the appropriate Site Manager) shall also be notified seven (7) calendar days prior to the proposed closures to obtain acceptance and make sure no conflicts are involved, such as planned bus tours of the fish hatchery.

# Barricades and Signing for Allowed Road Closures to All Traffic:

<u>Jake Wolf Fish Hatchery Entrance Road and Parking Area</u>: Type III barricades (3.6 m each) and all signing for complete road closures shall be placed in accordance with Standard BLR 21 / BLR 22 and as directed by the Engineer for each work area. In addition to BLR 21 / BLR 22, signs "Road Closed Ahead" (W-20-3(0)-48) shall be placed on Goofy Ridge Blacktop (with Rt and Lt Arrow plates attached below sign) at the intersection of Jake Wolf Fish Hatchery Road.

<u>Sand Ridge Road</u>: Type III barricades (3.6 m each) and all signing for complete road closures shall be placed in accordance with Standard BLR 21 and as directed by the Engineer for each work area. In addition to BLR 21, signs "Road Closed Ahead" (W-20-3(0)-48) shall be placed on Goofy Ridge Blacktop (with Rt and Lt Arrow plates attached below sign) at the intersection of Sand Ridge Road, on Sand Ridge Road in Forest City and directly east of the intersection with Cactus Drive / Forest City Road, on Forest City Road (with Lt Arrow plates attached below sign) just south of Sand Ridge Road and on Cactus Drive (with Rt Arrow plates attached below sign) just south of Sand Ridge Road.

Bituminous Surface Treatments on Sand Ridge Road shall be broken into separate work areas to provide access to the residence and Site Headquarters at all times. Each separate work area shall not be larger than one day's production of bituminous surface treatment application and shall only be closed for a maximum of two consecutive calendar days.

<u>Traffic Control and Protection, Standard 701201</u>: This traffic control and protection standard shall be used during patching and resurfacing operations to Jake Wolf Fish Hatchery Entrance Road and Parking Area, and during miscellaneous operations on Sand Ridge Road which requires traffic to be reduced to one lane, two-way traffic as shown in the standard located in the plans. Only daytime closures will be allowed.

<u>Traffic Control and Protection, Standard 701326</u>: This traffic control and protection shall be used during excavation, placement of aggregate sub-base / surface, bituminous paving, and any other road work adjacent to traffic lanes on the Goofy Ridge Blacktop.

<u>Traffic Control and Protection, Standards BLR 21 and BLR 22</u>: These traffic control and protection standards shall be used during allowed road closures as stated previously herein.

Measurement and Payment for Traffic Control and Protection: Traffic Control and Protection Standards 701201, 701326, BLR 21, and BLR 22 will be measured on a lump sum basis and paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION STANDARD 701201; TRAFFIC CONTROL AND PROTECTION STANDARD 701326; TRAFFIC CONTROL AND PROTECTION STANDARD BLR 21; AND TRAFFIC CONTROL AND PROTECTION STANDARD BLR 22.

All permanent signing will be paid for separately.

All pavement marking and pavement marking removal will be paid for separately.

All other traffic control and protection required will not be measured for payment and will be considered as included in the unit bid prices of the items included in the contract.

#### **PAYROLLS AND PROCEDURES**

Effective: February 5, 1975

Revised: November 7, 1986, January 14, 1994, and June 2001

The <u>prime Contractor and each Subcontractor</u> shall submit a weekly certified original and one copy of their companies payroll directly to the District Engineer.

Payrolls must be received within seven (7) days of the payroll ending period.

Payroll data shall be submitted on Payroll Form RE 48 or an approved facsimile to include every person paid by a Contractor or Subcontractor in any manner for his or her labor in the construction, prosecution, completion, or repair of this public work is employed and receiving "wages," regardless of any contractual relationship alleged to exist between him/her and the real employer.

Payroll data shall include all persons employed on the job site.

The following employee codes are to be used to identify each individual on the payroll:

- A. **Gender:** M Male F Female
- B. **Ethnic Group:** 1 White 2 Black 3 Hispanic 4 American Indian/Alaskan Native 5 Asian/Pacific Islander
- C. Work Classification:

**OF** – Officials **FO** – Foremen **CL** – Clerical **SU** – Supervisors **CA** – Carpenters **EO** – Operators **ME** – Mechanics **TD** – Truck Drivers **IW** – Ironworkers **PA** – Painters **CM** – Cement Masons **EL** – Electricians **LA** – Laborers **PP** –Pipefitters **TE** – Technical OT - Other

D. **Employee Status:** O – Owner Operator J – Journeyman C – Company

A - Apprentice T - Trainee

Payroll data shall be submitted by the prime Contractor and each Subcontractor for each consecutive week from the start to the completion of their work. When there has been no activity during a work week, a payroll is still required to be sent to the District Engineer with the appropriate box ("No Work," "Suspended," "Completed") checked at the bottom of the Payroll Form RE 48. DO NOT check any of these boxes when payroll data is being reported on the payroll.

The Department of Transportation is requesting disclosure of information necessary to accomplish the statutory purpose as outlined under 23CFR, part 230, and 41CFR, part 60.4, and the Illinois Human Rights Act. Disclosure of this information is REQUIRED. Failure to comply with this special provision may result in the withholding of payments to the Contractor and/or cancellation, termination, or suspension of the contract in whole or part.

Compliance with this Special Provision shall be considered incidental to the cost of the contract and no additional compensation will be allowed for any costs incurred.

#### **COMPLETION DATE**

All proposed work on <u>Jake Wolf Memorial Fish Hatchery Entrance Road and Parking Areas</u> shall be completed within 21 Calendar Days of the Contractor's initial start of work on this portion of the project and by the total project completion date of June 1, 2006, (Note: Resurfacing and Pavement Markings will not be allowed between November 1, 2005 and May 1, 2006).

On Sand Ridge Road, all proposed work shall be completed between October 1, 2005, and the interim completion date of February 1, 2006, (due to the possible impacts of known endangered species that exist in the immediate area during their active times), except installation of the water well, permanent seeding, and bituminous surface treatments which all shall be completed by the total project completion date of June 1, 2006. Bituminous Surface Treatments shall be completed between May 15, 2006, and June 1, 2006.

If the Contractor fails to complete the required work by the completion date(s) he/she shall be liable to the Department for liquidated damages in accordance with Article 108.09 of the Standard Specifications and any other additional special provision which may be attached herein which supplements Article 108.09. The Contractor will also be liable for additional items of work made necessary by not meeting the completion date(s).

Failure to complete the required proposed work on Sand Ridge Road by February 1, 2006, may result in liquidated damages being assessed per calendar day until the following October 1, 2006, when he/she will be allowed to proceed with continuation of work again.

# **HAUL ROADS**

The Contractor shall only use the roads designated as HAUL ROADS as shown in the plans. No other roads shall be used as haul roads by the Contractor or he/she will be liable for the damages.

A 'HAUL ROAD" is defined as a local road (not a State route) used by the Contractor to transport construction materials and equipment to the job site. Traffic on the haul roads shall be restricted to the legal and posted weight and size loads. The Contractor shall obtain from the County or Township permits for overweight or oversized loads. It shall be the responsibility of the Contractor to insure his/her subcontractors also use the designated HAUL ROADS in this project related to haul movements.

The maintenance of the designated HAUL ROADS will be the responsibility of the Contractor or Local Agency as determined by the Engineer. It will also be the responsibility of the Contractor or Local Agency to restore the designated HAUL ROAD to a condition equal to that which existed at the time the HAUL ROADS were established as determined by the Engineer. The Engineer will make the final decision of who will complete the maintenance or repairs, the Contractor or Local Agency. All labor, material, and equipment authorized by the Engineer to perform the necessary work described herein will be as provided for in the plans or will be paid for in accordance with Article 109.04 of the Standard Specifications, if performed by the Contractor; or in accordance with Article 109.05 of the Standard Specifications, if performed by the Local Agency.

It is not the intent of this Special Provision to authorize and compensate the Contractor for work performed in constructing and maintaining haul roads on or off the right-of-way that are not public roads or streets. Any roadway designed and constructed or used by the Contractor which is not part of the designated haul road system, as shown in the plans, shall be constructed and maintained at the expense of the Contractor.

# STATUS OF UTILITIES TO BE ADJUSTED

Effective: February 1, 1996

The following utilities are involved in this project. The utility companies have provided the estimated dates.

Name & Address of Utility

Menard Electric Cooperative

Type

Location

Estimated Date of Relocation Completed

Relocation Completed

None Anticipated

122 S. 6<sup>th</sup> St. P.O. Box 200 Petersburg, IL 62675

Contact: Mr. John Whitehurst

Phone: 632-7746

Ameren CIPS Gas Sand Ridge Rd None Anticipated

700 Jersey Street P.O. Box 1089 Quincy, IL 62306-1089

Contact: Mr. Steve Vestal Ph: 1-800-453-2477 ext. 10810

Gallatin River Communications Telephone Sand Ridge Rd Sept. 1, 2005

200 Interprize Drive Pekin, IL 61554

Contact: Mr. Tim Arnett Phone: 309-477-0361

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Article 102.05, 105.07, and 107.20 of the Standard Specifications for Road and Bridge Construction shall apply.

If any utility adjustment or removal has not been completed when required by the Contractor's operations, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's operations were affected.

#### CONSTRUCTION LAYOUT RESPONSIBILITY

This special provision is included in addition to Check Sheet #11 of the recurring special provisions, special provision for Construction Layout Stakes, to clearly define the responsibility of the Contractor for construction layout.

It shall additionally be the responsibility of the Contractor to check the plans to assure the plans are accurate and that all roadway elements will fit the final proposed slopes. When the Contractor determines a portion of the plans is incorrect or a portion does not agree with another portion, he/she shall contact the Engineer to have the problem resolved and additional work, if any, agreed upon. The Contractor shall not proceed until authority is received from the Engineer and problems resolved. The Engineer/Contractor shall contact the District Studies and Plans Section if need be.

The Contractor shall set all horizontal control points at the end of construction and provide cross ties in a hardback survey book to the Engineer.

The Contractor shall also set and provide the Engineer with a list of final benchmarks in a hardback survey book at the end of construction for future vertical control.

No additional compensation will be allowed for complying with this special provision, but all costs shall be included in the contract lump sum price for CONSTRUCTION LAYOUT.

# **CONSTRUCTION BOUNDARIES**

The Contractor shall not have any equipment operating or parked outside the construction boundary limits, nor shall any of the workers' personal vehicles be parked or operating outside these limits unless authorized by IDNR Site Manager.

There are several critical areas, such as the natural habitat of known endangered species that exist along Sand Ridge Road, unpublished archeological sites, endangered plant species, and other natural resources not shown on the plans which <u>shall not be destroyed</u> within the site. These items are protected by federal laws and could result in fines if damaged.

#### TREE REMOVAL AREA

This work shall consist of tree removal necessary to complete the proposed grading and shaping of ditches as directed by the Engineer and in accordance with applicable portions of Section 201 of the Standard Specifications.

The Engineer shall avoid tree removal if at all possible, but not to jeopardize proposed drainage improvements.

The area for payment will be computed by the Engineer taking measurements to the outer perimeter of the actual tree removal area from station to station of where tree removal occurs (Note: This area for payment will include the existing road and other areas that do not have existing trees.). This work will be paid for at the contract unit price per acre for TREE REMOVAL, ACRES.

#### **REMOVE EXISTING CULVERTS**

This work shall consist of the removal and disposal of existing pipe culverts, including any headwalls or end sections, at the locations shown on the plans and in accordance with the applicable portions of Section 501 of the Standard Specifications and as directed by the Engineer.

This work will be paid for at the contract unit price per foot for REMOVING EXISTING CULVERTS.

# **REMOVAL OF MISCELLANEOUS ITEMS**

This work shall consist of removing and stockpiling items existing that are in the way of proposed work such items as, but not limited to concrete bumper blocks, landscaping rocks, wood bollards, wood gates, signs, horse ties, grills, etc.... Items shall not be damaged during the removal and shall be carefully stockpiled for reuse by IDNR at a location designated by the Site Manager.

This work will not be paid for separately, but will be considered as part of the contract unit bid for EARTH EXCAVATION. No additional compensation will be allowed.

#### **ON-SITE BORROW AREA AND MATERIAL DATA**

The borrow site as shown in the plans is the area where the Contractor shall obtain necessary additional material needed to complete the entire embankment along Sand Ridge Road. See the earthwork schedule located in the plans.

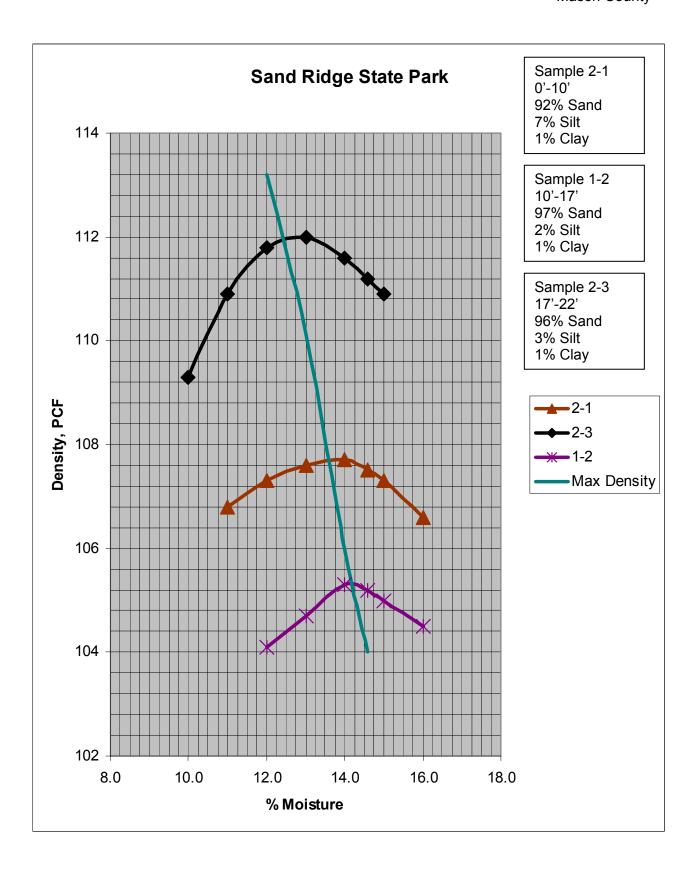
Proposed contours of a future pond are shown in the plans. All excavation for borrow material shall be obtained above these proposed grades/contour lines as directed by the Engineer. Tree removal will be necessary prior to excavation at this site.

This work will be measured and paid for at the contract unit price per cubic yard for EARTH EXCAVATION which includes, excavating, hauling, placing, processing, and compacting earth embankment to the proposed grades.

The following sheets include soil boring logs taken from the borrow site and Proctor curves anticipated for compaction efforts of this borrow material.

#### **ON-SITE BORROW MATERIAL DATA**

"The following information is included for bidding purposes."





# SOIL BORING LOG

Page <u>1</u> of <u>1</u>

Dividon of Highways Idot Dictriot8					Date <u>10/28/03</u>
ROUTEN/A DESCRIPT	TION	Sand Rdi	ge State Park Borrow Pit	LOGGE	D BY <u>M. Tappan</u>
SECTIONN/A	LOCATION _	SW 1/4, SEC	. 35, TWP. 23 N, RNG	.7W,3 PM	
COUNTYMason DRIL	LING METHOD	-	HSA	HAMMER TYPE	N/A
STRUCT, NO.         N/A           Station         N/A           BORING NO.         1 NE Corner           Station         N/A           Offset         Ground Surface Elev.         ft N/A           Light Brown Moist Medium         Grained SAND	- Р О Т W - Н S	U M C O S I S Qu T (tsf) (%)	Surface Water Elev. Stream Bed Elev.  Groundwater Elev.: First Encounter Upon Completion After Hrs.  Boring Completed	ft	D B U M E L C O P O S I T W S H S Qu T  (ft) //6" (tsf) (%)
SAMPLE 1-1 95% Sand 4% Silt 1% Clay Non Plastic 107.6 PCF @ 10.1% Moisture					
Light Brown Moist Medium Grained SAND SAMPLE 1-2 97% Sand 2% Silt 1% Clay Non Plastic 105.3 PCF @ 13.9% Moisture  Light Brown Moist Medium Grained SANDY GRAVEL Free Water SAMPLE 1-3 96% Sand, 3% Silt, 1% Clay, Non Plastic, 110.8 PCF @ 10.0% Moisture	-10 -10 -10 -15 -15 -15 -17 -17 -17 -17 -17 -17 -17 -17 -17 -17				



# SOIL BORING LOG

Division of Highways Idot Districts Date <u>10/28/03</u> LOGGED BY M. Tappan \_ DESCRIPTION Sand Rdige State Park Borrow Pit ROUTE N/A LOCATION SW 1/4, SEC. 35, TWP. 23 N, RNG. 7 W, 3 PM Mason DRILLING METHOD HAMMER TYPE U D В U М М STRUCT, NO. N/A Surface Water Elev. N/A ft Е L С 0 Е L С 0 N/A Stream Bed Elev. Station N/A ft Ρ 0 s 0 s 1 Т w S Т w S BORING NO. 2 SE Corner Groundwater Elev.: Н s Qu Т Н s Qu Т First Encounter Offset Upon Completion ft (ft) (ft) (tsf) (%) 76" (tsf) (%) Ground Surface Elev. After Plugged Light Brown Moist Medium Non Plastic 112.0 PCF @ 13.0% Moisture Grained SAND SAMPLE 2-1 92% Sand 7% Silt 1% Clay Non Plastic Boring Completed 107.7 PCF @ 14.0% Moisture Medium to Coarse Grained Medium Grained Tan Moist Medium Grained SAND SAMPLE 2-2 96% Sand 3% Silt 1% Clay Non Plastic 105.4 PCF @ 13.0% Moisture Medium Grained Wet SANDY GRAVEL Free Water SAMPLE 2-3 96% Sand 3% Silt

1% Clay

#### TEMPORARY EROSION CONTROL

This work shall consist of furnishing and erecting temporary erosion control systems as shown in Standard 280001 of the plans or as directed by the Engineer at locations designated by the Engineer and in accordance with the applicable portions of Section 280 of the Standard Specifications.

The cost of furnishing, installing, and removing temporary ditch checks for erosion control will be paid for at the contract unit price per each for TEMPORARY DITCH CHECKS, which price shall include any excavation or embedment, staking the bales in place, or any other installation requirements by the Engineer.

The cost of furnishing and removing inlet and pipe protection (temporary ditch checks and aggregate ditch checks) will be paid for at the contract unit price each for INLET AND PIPE PROTECTION, which price shall include any excavation or embedment, staking the bales in place, or any other installation requirements by the Engineer.

The cost of furnishing, installing, and removing (only if directed by the Engineer) stone dumped riprap ditch checks for temporary erosion control will be paid for at the contract unit price per ton for AGGREGATE (EROSION CONTROL), which price shall include any excavation required for embedment, furnishing the riprap material to the size specified by the Engineer, placing the riprap to the satisfaction of the Engineer, and removing portions or all of the ditch checks as directed by the Engineer.

The cost of excavation for the construction of sediment basins will be paid for at the contract unit price per cubic yard for EARTH EXCAVATION FOR EROSION CONTROL, which price shall include removal, hauling and disposal of material to a non-erodible location.

# **TEMPORARY SEEDING**

This work shall consist of preparing a seed bed, seeding with Seeding Class 7 mixture, and mulching by Method 1 at locations designated by the Engineer to prevent possible erosion in accordance with applicable portions of Sections 250 and 251 of the Standard Specifications.

The areas to be seeded will be determined by the Engineer and the Contractor shall perform this seeding within five calendar days of notice to proceed from the Engineer or he/she will be liable to the Department for each day of overrun in accordance with Article 108.10 of the Standard Specifications for Failure to Complete the Work on Time. The minimum area directed by the Engineer to be seeded by the Contractor will be at least 5 acres per notice.

The seed bed preparation, seeding application, and seeding method shall be in accordance with Section 250 of the Standard Specifications. The main areas to be seeded will be on side slopes and in ditches that are temporarily completed and are not anticipated to be disturbed for a period of time. No fertilizing will be required for temporary seeding.

All seeding areas will not be required to be mulched. The Engineer in the field will designate any areas to be mulched by Method 1 and the rate of application. Mulching shall be completed in accordance with Method 1 of applicable portions of Section 251 of the Standard Specifications.

Temporary seeding and mulching will be measured for payment in accordance with Articles 250.08 and 251.05 of the Standard Specifications. Temporary seeding will be paid for at the contract unit price per acre for SEEDING, CLASS 7 and temporary mulching will be paid for at the contract unit price per acre for MULCH, METHOD 1. No other compensation will be allowed for performing these operations.

The Contractor shall understand estimated quantities are included in the plans to establish a contract unit price. The Engineer has the right to increase, decrease, or totally delete these quantities in the contract.

#### **HEAVY DUTY EXCELSIOR BLANKET**

This work shall consist of furnishing, transporting, and placing erosion control blanket over seeded areas in accordance with applicable portions of Section 251 of the Standard Specifications.

Materials shall meet Article 1081.10(a) with an additional requirement of both sides of the blanket shall be covered with a polypropylene mesh having ultraviolet additives to reduce breakdown and approximate maximum opening of 16 mm x 16 mm (5/8" x 5/8") or Article 1081.10(f) included in the special provision for Erosion Control Materials herein.

This work will be paid for at the contract unit price per square yard for HEAVY DUTY EXCELSIOR BLANKET, as measured in place.

# SUBBASE GRANULAR MATERIAL, TYPE B

This work shall meet the requirements of Section 311 of the Standard Specifications, except the gradation will be restricted to CA 02. No additional compensation will be allowed.

# AGGREGATE SURFACE COURSE, TYPE A

This work shall meet the requirements of Section 402 of the Standard Specifications, except the gradation will be restricted to CA 06. No additional compensation will be allowed.

#### CLEANING CULVERTS AT COMPLETION

At the end of construction all culverts shall be cleaned from excess debris from erosion and siltation to the satisfaction of the Engineer.

Proper erosion control methods shall be utilized during construction to prevent this occurrence.

This work will not be paid for separately, but shall be included in the contract unit bid price per cubic meter for EARTH EXCAVATION.

#### **FURNISH AND INSTALL POND LINER**

<u>Description</u>: This work shall consist of earth excavation three feet below the proposed grade of the bottom of the proposed wetland, furnishing and installing the proposed pond liner as detailed in the plans and specified herein, and placing a 3' thick layer of earth backfill on top of the liner. All as directed by the Engineer.

Excavation, installation of the liner, and backfilling with earth material over the liner shall be completed by February 1, 2006. Wetland Plantings will be completed later by IDNR staff.

<u>Materials</u>: Materials for the proposed pond liner shall meet the following requirements:

- A. General: Provide impervious geomembrane liner fabricated from sheet material indicated, complying with specified product characteristics.
- B. Synthetic rubber, formulated from CSPE for use in hydraulic structures, formed into uniform, flexible sheets, and as follows:
  - 1. Reinforcing Scrim: One-ply polyester fabric totally encapsulated between two sheets. a. Construction: 10x10x1000D.
  - 2. Nominal Thickness: 45-mil-(1.1-mm-) thick sheet per ASTM D751.
  - 3. Minimum Thickness over Scrim: 11-mil-(0.28-mm-) thick sheet over NSF 54, Optical Method, Annex A.
  - 4. Hydrostatic Resistance: Not less that 250-psi (1724-kPa) resistance per ASTM D 751, Method A, Procedure 1.
  - 5. Dimensional Stability, Reinforced Sheet: Not more than plus or minus 2 percent per ASTM D 1204.
  - Breaking Strength: Not less than 200 lbf (0.89) kN) per ASTM D 751, Procedure A.
  - 7. Tearing Resistance: Not less that 70 lbf (0.31 kN), initial, and 25 lbf (0.11 kN), aged, per ASTM D 751, Procedure B.
  - 8. Low-Temperature Flexibility: Pass, 1/8-inch (3-mm) mandrel, four hours at minus 40 deg. F (minus 40 deg C), and per ASTM D 2136.
  - 9. Ply Adhesive: Not less than 7 lbf/in. (1.2 kN/m) of seam width, or film tearing bond, according to ASTM D 413, Machine Method, as modified by NSF 54, Annex A.
  - 10. Volatile Loss: Not more than 0.5 percent per ASTM D 1203, Method A, 30-mil-(0.0-mm-) thick sheet.
  - 11. UV-Light Resistance: Pass, 4000 hours at 176 deg F (21 deg C), per ASTM G 26, Test Method A, Apparatus Type BH or Type C.
  - 12. Water Absorption: Not more than 2 percent at 70 deg F (21 deg C) and not more than 30 percent at 158 deg F (70 deg C) for 30 days each per ASTM D 471, 30-mil-(0.8-mm-) thick sheet.

# Miscellaneous Materials:

- A. Adhesives: Provide types of adhesive compounds, solvents, and tapes recommended in writing by liner manufacturer for bonding to structures (if required), for sealing of seams in geomembrane, and for sealing projections through liner.
- B. Penetration Assemblies: Provide manufacturer's standard factory-fabricated assemblies for sealing penetrations. Include joint sealant, recommended in writing by liner manufacturer, compatible with geomembrane and containment conditions and materials.
- C. Battens: Long-length strips of material indicated, size as shown on Drawings. Fabricate battens with sharp projections removed, and edges eased and pre-drilled or punched for anchors. Provide anchors, or other type of attachment, of type and spacing recommended in writing by liner manufacturer for attaching geomembrane line system to substrate and as indicated.
  - 1. Batten Material: Liner manufacturer's standard system.

#### Submittals

- A. Product Data: For each type of the following:
  - 1. Geomembrane.
  - 2. Seaming adhesive, solvent, and extrusion.
  - 3. Penetration assembly.
- B. Shop Drawings: Show fabrication and installation details for geomembrane liner. Show panel layout, seams, penetrations, perimeter anchorage, and methods of sealing to other construction. Differentiate between factory and field seams and joints.
- C. Sample for Verification: For each geomembrane, not less than one 12-inch (300-mm) seam length of factory-bonded sheets and one 12-inch (300-mm) seam length of field bonded sheets.
- D. Installer Certificates: Signed by manufacturer certifying that the installers comply with requirements.
- E. Manufacturer Certificates: Signed by manufacturer's certifying that they comply with the requirements.
- F. Qualification Data: For firms and persons specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include lists of completed projects with the project names and addresses, names and addresses of architects and owners, and other information specified.
- G. Material and Product Test Reports: Indicating materials, geomembrane, and seams comply with requirements, based on comprehensive testing of current product formulations and products.

- H. Field Test Reports: Indicate and interpret test results for compliance with performance requirements.
- I. Maintenance Data: For geomembrane system to include in maintenance manuals specified in Division 1.
- J. Warranties: Special warranties specified in this Section.

# **Quality Assurance**

- A. Installer Qualifications: Fabricator of products.
- B. Installer Qualifications: An experienced installer who employs workers trained and approved by geomembrane panel manufacturer to install manufacturer's products.
- C. Installer Qualifications: A firm experienced in manufacturing geomembrane liner panels similar to those indicated for this Project and with a record of successful in-service performance.
- D. Manufacturer Qualifications: A firm experienced in manufacturing geomembrane liner panels similar to those indicated for this Project and with a record of successful in-service performance.
- E. Source Limitations: Obtain geomembrane liner panels, accessories, and required seaming materials, solvents and adhesives through tone source from a single manufacturer.
- F. Pre-installation Conference: Conduct conference at Project site to comply with requirements in Division I Section "Project Meetings." Review methods and procedures related to product including, but not limited to, the following:
  - 1. Inspect and discuss condition of substrate and other preparatory work performed by other trades.
  - 2. Review structural load limitation.
  - 3. Review limitations on equipment and Installer's personnel.
  - 4. Review and finalize construction schedule and verify availability of materials. Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
  - 5. Review required testing, inspecting, and certifying procedures.
  - 6. Review weather and forecasted weather conditions and procedures for unfavorable conditions.

# Products -- Manufacturers

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include; but are not limited to, the following:
  - Burke Environmental Products
  - CMS Industries, Inc.
  - Environmental Protection, Inc.
  - Fabrico Environmental Liners, Inc.
  - GSE Lining Technology, Inc.
  - Intergra Plastics, Inc.
  - Manhatten Environmental, Inc.

- National Seal Co.
- Plastic Fusion Fabricators, Inc.
- Poly-Flex, Inc.
- · Reef Industries, Inc.
- Serrot Corp.
- Staff Industries, Inc.
- Watersaver Company, Inc.

#### Fabrication

A. Fabricate geomembrane liner panels from sheets in sizes as large as possible with factorysealed seams. Consistent with limitations of weight and installation procedures. Minimize field seaming.

# Source Quality Control

- A. General: Test for bonded seam strength and peel adhesion every 3000 feet (915 m) or once per panel, whichever is more frequent, per NSF 54, Table 14.
- B. CSPE Liner: Test and inspect factory seams for peel adhesion not less than 10 lbf/in. (1.75 kN/m) of seam width, according to ASTM D 413, as modified by NSF 54, Annex A, and for bonded seam strength indicated according to ASTM D 751, as modified by NSF 54, Annex A.
  - 1. Bonded Seam Strength: Not less than 180 lbf/in. (32 kN/m) of seam width for seam constructed from two scrim reinforced sheets, each with nominal sheet thickness of not less than 45 mils (1.1 mm).

<u>Material and Installation Warranty</u>: The proposed pond liner shall have the following warranty conditions to be honored by the manufacturer and installer:

- A. <u>General Warranty</u>: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. <u>Special Warranty</u>: Written warranty, signed by geomembrane manufacturer, liner manufacturer, and liner Installer agreeing to repair or replace geomembrane liner that fails in materials and workmanship or that deteriorates under conditions of normal weather within specified warranty period. Warranty does not include deterioration or failure of geomembrane liner due to exposure to harmful chemicals, gases or vapors, abnormal and severe weather phenomena, fire, earthquakes, floods, vandalism, or abuse by persons, animals, or equipment Failures include, but are not limited to, the following:
  - 1. Leaks.
- C. Warranty Period: 10 years from date of Substantial Completion.

<u>Pregrading Requirements</u>: The proposed pond area shall first be excavated 36" below the proposed bottom grades of the pond and proposed pond area dewatered (if necessary). An existing pond currently occupies a portion of the proposed pond area in which removal of the existing liner and dewatering of the area will be necessary considered as part of Earth Excavation. Examination of the site shall be the responsibility of the Contractor prior to submitting his/her bid. The final excavation grade shall be smooth to the proposed grade (<u>+</u> 6") as shown in the plans, to the requirements of the liner manufacture, and to the satisfaction of the Engineer.

After proposed pond area is satisfactory graded, an anchor trench shall be cut along the outer edge of the proposed pond for securing the liner after placement.

# Examination

- A. Examine substrates, with Installer present, for freedom from sharp projections and voids; for compliance with requirements for soil compaction and grading; for subgrade free from angular rocks, rubble, roots, vegetation, debris, voids, protrusions, and ground water; and for other conditions affecting performance of liner.
  - 1. Examine anchor trench excavation, where liner is to be secured, for substrate conditions indicated above and for correct location and configuration.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

# **Installation Requirements:**

#### **Project Conditions**

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit placement and seaming of geomembrane to be performed according to manufacturers' written instructions and warranty requirements. Do not place or seam geomembrane during conditions of precipitation, excessive atmospheric moisture, glowing dust, strong wind, or at temperatures outside manufacturers' recommended range.

#### Preparation:

- A. Provide temporary ballast that does not damage geomembrane liner or substrate, to prevent uplift of liner in areas with prevailing winds, until edges are permanently secured.
- B. Prepare surfaces of construction penetrating through liner according to liner manufacturer's written instructions.
- C. Remove curing compounds and coatings from concrete surfaces to be sealed to geomembrane liner.

#### Installation:

A. <u>General</u>: Place geomembrane liner over prepared surfaces to ensure minimum handling. Install according to Shop Drawings and to comply with liner manufacturer's written instructions. In areas with prevailing winds, begin placing liner ay Project's upwind direction and proceed downwind. Install liner in a relaxed condition, free from stress and tension. Fit closely and seal around inlets, outlets, and other projections through geomembrane liner. Permanently secure edges.

- B. <u>Field Seams</u>: Comply with liner manufacturer's written instructions. Form lapped seams by lapping edges of panels 2 to 4 inches (50 to 100 mm), unless instructions require a larger overlap. Wipe contact surfaces clean and free of dirt, dust, moisture, and other foreign materials. Use solvent-cleaning methods and grid geomembrane seam surfaces if recommended by liner manufacturer. Proceed with seaming at required temperatures for materials and ambient conditions. Continuously bond sheet to sheet to construct single or double seams of width recommended for method of seaming used. Seal or fuse free seam edges as instructed. Inspect seams and reseal voids.
  - Adhesive Bonding: Apply bonding cement to both contact surfaces in seam area and press together immediately, or use other seaming methods as instructed by liner manufacturer. Roll to press surfaces together, to distribute adhesive to leading edges of panels, and to remove wrinkles and fish mouths. Remove excess adhesive.
  - 2. <u>Thermal Bonding</u>: Use thermal-welding technique recommended by liner manufacturer. Apply pressure to smoothly bond surfaces together. Inspect for and patch wrinkles and fish mouths.
- C. <u>Liner Attached to Concrete</u>: Use liner manufacturer's standard system to suit project conditions. Support adhesive and liner fabric on not less that 8-inch-(200-mm) wide concrete substrate, unless otherwise indicated.
  - 1. Install batten strips over bonded liner as shown on Drawings.
- D. <u>Liner Repairs</u>: Repair tears, punctures, and other imperfections in liner field and seams using patches of liner material, liner-to-liner bonding materials, and bonding methods according to liner manufacturer's written instructions. Apply bonding solvent or weld to contact surfaces of both patch and liner and press together immediately. Roll to remove wrinkles.

#### Field Quality Control:

A. <u>Nondestructive Testing</u>: Visually inspect all seams and patches. Comply with ASTM D 4437 for Air Lance Test, Vacuum Box Testing, or Ultrasonic (High Frequency) Pulse Echo Testing or with GRI Test Method GM6, as applicable to geomembrane and seam construction. Record locations of failed seams and patches. For the record, individually number and date occurrences and details of leak and remedial action. Repair leaking seams and patches.

#### Protection:

- A. Protect installed geomembrane line according to liner manufacturer's written instructions. Repair or replace areas of liner damaged by scuffing, punctures, traffic, rough subgrade, or other unacceptable conditions.
- B. Before initial filling of the pond, or placement of earth or other cover, inspect seams and patched areas to ensure tight, continuously bonded installation. Repair damaged membrane, seams, and re-inspect repaired work.

<u>Backfill Requirements</u>: After the liner has been installed and edge trench backfilled anchoring the liner securely, backfill, 36" thick, shall be placed with care meeting the requirements of the manufacture and to the satisfaction of the Engineer. The backfill material obtained from the original over excavation of the site shall be clean of all debris prior to the placement to make sure no debris (sticks, rocks, etc...) will puncture a hole in the liner. Equipment used shall be able to place the backfill material without being in direct contact of the pond liner, which could lead to possibly tearing or puncturing a hole in the liner. Material shall be placed from the outer edges toward the center or as directed by the manufacture to avoid direct contact of the equipment to the liner. A track hoe with a long arm should be considered to place the material to avoid driving equipment directly over the liner. The backfill material shall be leveled out to the satisfaction of the Engineer ( <u>+</u> 6" within the proposed grade). The material shall be lightly compacted to the satisfaction of the Engineer or as directed by the manufacturer.

<u>Method of Measurement</u>: The pond liner will be measured for payment by the Engineer computing the actual surface area of the liner (after being anchored) plus adding a three foot times the perimeter of the liner in place.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per square yard for FURNISH AND INSTALL POND LINER, which price shall include all costs involved in preparing the site (removing debris that may puncture the liner and smoothly grading/preparing the area for the liner), furnishing and installing the pond liner (include cutting and backfilling the anchor trench), possible repairs and/or replacement of the liner (to satisfy warranty requirements), and required backfilling of material over the liner as detailed in the plans and to the satisfaction of the Engineer.

The necessary earth excavation (three feet below the bottom of the proposed pond grade) for the liner installation will be measured and paid for separately at the contract unit price per cubic yard for EARTH EXCAVATION. Excess excavation not required for backfilling over the liner shall be used in the roadway embankment (paid for as part of the Earth Excavation pay item). No other compensation will be allowed.

#### DRILLING AND INSTALLING WATER WELL

This work shall consist of furnishing, drilling and installing water well at the location shown in the plans, in accordance with the following requirements, and as directed by the Engineer. The exact location of the well will be approved by the Sand Ridge State Forest Site Manager. This work additionally includes supplying the proposed piping system (plumbing), concrete slab, etc... as detailed in the plans to transfer water from the well location to the proposed wetland site.

The well pump shall have a 230-volt AC one-horsepower motor with a pump rate of 25 gallons per minute at 120 feet of head. The well shall have a 6-inch casing and an 8-foot stainless steel screen. The depth of the well shall be 100-feet deep.

The power source to the proposed well will be from an IDNR supplied generator. The Site Manager will supply the generator when needed for installation purposes, testing, and later use to fill the wetland with water.

The piping system shall consist of flexible plastic and galvanized metal pipe as detailed in the plans, and meeting the satisfaction of the Site Manager and County Health Codes.

<u>Warranty</u>: The proposed water well and pump shall have the following warranty conditions to be honored by the manufacture and installer:

- a. <u>General Warranty</u>: Special warranty specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.
- B. <u>Special Warranty</u>: Written warranty, signed by pump manufacturer, and water well installer agreeing to repair or replace water well that fails in materials and workmanship or that deteriorates under conditions of normal weather within specified warranty period. Warranty does not include deterioration or failure of water well casing, pipes, or pump due to exposure to harmful chemicals, gases or vapors, abnormal and severe weather phenomena, fire, earthquakes, floods, vandalism, dry conditions, using in dry conditions, or abuse by persons, animals, or equipment. Failures include, but are not limited to, the following:
  - 1. Leaks.
  - 2. Failure of pump to operate properly.
- C. <u>Warranty Period</u>: Ten (10) years from date of Substantial Completion.

This work will be measured on an each basis and paid for at the contract unit price each for DRILLING AND INSTALLING WATER WELL, which includes the cost of all materials, equipment and labor for furnishing and installing the water well, outlet piping system, and possible repairs and/or replacement of the water well (to satisfy warranty requirements). No additional compensation will be allowed.

#### **BITUMINOUS MATERIAL REQUIREMENTS**

All bituminous materials for the application of bituminous surface treatments shall be in accordance with applicable portions of Section 403 of the Standard Specifications but will be restricted to the following:

- MC-30 shall be required to be used for Bituminous Materials (prime coat).
- CRS-2, HFE-90, HFE-150 or HFRS-2 shall be required to be used for Bituminous Materials (cover and seal coats).
- HFRS-2 shall meet the requirements of applicable portions of Section 1009 of the Standard Specifications and the following:

<u>Tests on Emulsion</u>	<u>Minimum</u>	<u>Maximum</u>
Viscosity, Saybolt Furol at 50 °C (122 °F.), sec.	75	400
Storage Stability Test, 24 hours		1
Demulsibility, 35ml, 0.02N,CaCl %	60	
Sieve Test (850 $\mu$ m) (No. 20) retained, %		0.10
Residue by distillation test to 260 °C (500 °F.) percent oil distillate, by volume percent	63	
Tests on Residue From Distillation Test		
Penetration at 25 °C(77 °F.) 100g, 5 sec.	100	200
Ductility at 25 °C(77 °F.) cm	40	
Solubility in Trichloroethylene, %	97.5	
Float Test at 60 °C (140 °F.) sec.	1,200	

# AGGREGATE COVER AND SEAL COAT REQUIREMENTS

All aggregate cover and seal coats for the application of bituminous surface treatments shall be in accordance with applicable portions of Section 403 and Article 1004.03 of the Standard Specifications but will be restricted to the following:

- Crushed Limestone meeting gradation CA 14 shall be required to be used for Cover Coat Aggregate.
- Crushed Limestone meeting gradation CA 16 shall be required to be used for Seal Coat Aggregate.

# STOCKPILING OF AGGREGATE

Aggregate for this project CA 6, CA 14, and CA 16 will be allowed to be stockpiled within Sand Ridge State Forest boundaries at areas approved by the Sand Ridge Manager; however, trucks shall still be weighed prior to the final placement to obtain contract measurements of the pay items as specified in the Standard Specifications.

# **SEEDING, CLASS 4 (SPECIAL)**

This work shall be completed in accordance with applicable portions of Section 250 of the Standard Specifications, as directed by the Engineer, and in accordance with the following revisions to Section 250. This seeding mixture is required to be used on all back slopes of proposed ditches along Sand Ridge Road and around the created wetland area (as shown on the plans) to satisfy required mitigation measures for the possible incidental take of the known endangered species that exist in the immediate area.

Revise Article 250.06, Seeding Methods: The seeding dates for Seeding, Class 4, shall be completed in the early Spring (late March/early April) when field and weather conditions allow as directed by the Engineer.

# Revise Article 250.07, Seeding Mixtures:

Forbs		
Common name	Scientific name	Oz / Acre
Thimbleweed	Anemone cylindrica	1.375
Butterfly weed	Asclepias tuberosa	6.125
Whorled milkweed	Asclepias verticillata	1.625
Heath aster	Aster ericoides	0.25
Cream wild indigo	Baptisia leucophaea	0.25
Pale indian plantain	Cacalia atriplicifolia	1.5
Partridge pea	Casia fasciculata	16.125
Wild senna	Cassia hebecarpa	0.625
Lance leved coreopsis	Coreopsis lanceolata	1.75
Prairie coreopsis	Coreopsis palmata	1.25
Purple prairie clover	Dalea purpureum	1.875
Illinois tick trefoil	Desmodium illinoensis	2
Sessile-leaf tick trefoil	Desmodium sessilifolium	0.875
Sweet everlasting	Gnaphalium obtusofolium	0.125
Woodland sunflower	Helianthus divaricata	0.375
Rough sunflower	Helianthus hirsutus	0.25
Western sunflower	Helianthus occidentalis	0.125
Stiff sunflower	Helianthus rigidus	0.25
Early sunflower	Heliopsis helianthoides	0.375
Dotted St. John's Wort	Hypericum punctatum	0.125
Round headed bush clover	Lespedeza capitata	3.25
Rough blazing star	Liatris aspera	0.25
Wild bergamont	Monarda fistulosa	0.625
Spotted bee balm	Monarda punctata	0.375
Pale beardstongue	Penstemon pallidus	0.25
Hairy mountain mint	Pycnanthemum pilosum	0.25
Yellow coneflower	Ratibida pinnata	1.125
Black eyed susan	Rudbeckia hirta	0.5
Wild petunia	Ruellia humilis	0.125
Prairie ragwort	_Senicio plattensis	0.125
Goats rue	Tephrosia virginiana	3.5
Ohio spiderwort	Tradescantia ohiensis	5.5
Bird foot's violet	Viola pedata	0.5
Prairie violet	Viola pedatifida	0.625
Arrowleaf violet	Viola sagittata	0.375
SUB-TOTAL =		54.625
Grasses and Sedges		
Common name	Scientific name	Oz / Acre
Side oats grama	Bouteloua curtipendula	37
Canada wild rye	Elymus candensis	6
Little bluestem	Schyzachyrium scoparium	22
SUB-TOTAL =		65

Note: Mulch shall not be applied to the proposed seeding area along the created wetland along Sand Ridge Road. IDNR does not want all the other possible types of grass or weeds that mulch can contain introduced to the area.

Oats at 20 lbs/acre shall be additionally applied to the back slope areas at the same time as Seeding, Class 4 Special, along Sand Ridge Road. The sewing of oats will be paid for as Temporary Erosion Control Seeding.

#### **BUMPER BLOCKS**

This work shall consist of furnishing all materials, equipment, and labor to install proposed precast, reinforced concrete bumper blocks, as detailed in the plans and directed by the Engineer.

This work will be paid for at the contract unit price each for BUMPER BLOCKS which includes all costs involved.

# SIDEWALK REMOVAL (SPECIAL)

This work shall consist of the removal and satisfactory disposal of sidewalk ramps at the parking area for the Jake Wolf Memorial Fish Hatchery at the locations shown on the plans and in accordance with Section 440 of the Standard Specifications and as directed by the Engineer.

This work will be paid for at the contract unit price per square foot for SIDEWALK REMOVAL (SPECIAL).

# BITUMINOUS BASE COURSE / WIDENING SUPERPAVE (BDE)

Effective: April 1, 2002 Revised: August 1, 2005

<u>Description</u>. This work shall consist of constructing bituminous base course Superpave and bituminous concrete base course widening Superpave according to Sections 355 and 356 respectively, of the Standard Specifications and the special provision, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures" except as modified herein.

Revise Article 355.02(d) of the Standard Specifications to read:

"(d) RAP Material (Note 3)"

Revise Note 2 of Article 355.02 of the Standard Specifications to read:

"Note 2. Unless otherwise specified on the plans, the bituminous material shall be performance graded (PG) asphalt cement (AC), PG58-22. When more than 15 percent RAP is used, a softer PG binder may be required as determined by the Engineer. When the pavement has a structural number (D<sub>t</sub>) of 3.00 or less, the low temperature grade of the asphalt cement shall be lowered one grade (i.e. PG58-28 replaces PG58-22)."

Add the following to the end Article 355.02 of the Standard Specifications:

"Note 3. RAP shall meet the requirements of the special provision "RAP for Use in Bituminous Concrete Mixtures"."

Revise Article 355.05 of the Standard Specifications to read:

"355.05 Mixture Design. The Contractor shall submit mix designs for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have completed the course, "Superpave Mix Design Upgrade". The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below:

AASHTO MP 2	Standard Specification for Superpave Volumetric Mix Design
AASHTO R 30	Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)
AASHTO PP 28	Standard Practice for Designing Superpave HMA
AASHTO T 209	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
AASHTO T 312	Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO T 308	Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method

(a) Job Mix Formula (JMF). The JMF shall be according to the following limits:

<u>Ingredient</u>	Percent by Dry Weight
Aggregate	
Asphalt Cement	4.0 to 7.0
Dust/AC Ratio	1.4

When RAP material is being used, the JMF shall be according to the following limits:

<u>Ingredient</u>	Percent by Dry Weight
Virgin Aggregate(s)	46.0 to 96.0
RAP Material(s) (Note 1)	0 to 50
Mineral Filler (if required)	0 to 5.0
Asphalt Cement	
Dust/AC Ratio	

Note 1. If specified on the plans, the maximum percentage of RAP shall be as specified therein.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.

Bituminous concrete binder course Superpave mixture IL-25.0 or IL-19.0 meeting the requirements of the special provision, "Superpave Bituminous Concrete Mixtures" may also be used. The minimum compacted lift thickness specified therein shall apply.

# (b) Volumetric Requirements.

Design Compactive	Design Air Voids
Effort	Target (%)
N <sub>DES</sub> =50	2.0

(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283 using 4 in. Marshall bricks. To be considered acceptable by the Engineer as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSR) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSR values less than 0.75 will be considered unacceptable.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.

Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Engineer. The method of application shall be according to Article 406.12 of the Standard Specifications."

Revise Article 355.06 of the Standard Specifications to read:

"355.06 Mixture Production. The asphalt cement shall be transferred to the asphalt tanks and heated to a temperature of 120 °C (250 °F) to 175 °C (350 °F). If the loading temperature exceeds 175 °C (350 °F), the asphalt shall not be used until it has cooled to 175 °C (350 °F). Wide variations in temperature which affect the amount of asphalt delivered will not be permitted.

When a hot-mix plant conforming to Article 1102.01 is used, the aggregate shall be dried and heated in the revolving dryer to a temperature of 120 °C (250 °F) to 175 °C (350 °F).

The aggregate and bituminous material used in the bituminous aggregate mixture shall be measured separately and accurately by weight or by volume. When the aggregate is in the mixer, the bituminous material shall be added and mixing continued for a minimum of 30 seconds and until a homogeneous mixture is produced in which all particles of the aggregate are coated. The mixing period, size of the batch and the production rate shall be approved by the Engineer.

The ingredients shall be heated and combined in such a manner as to produce a mixture which, when discharged from the mixer, shall be workable and vary not more 10 °C (20 °F) from the temperature set by the Engineer.

When RAP material(s) is used in the bituminous aggregate mixture, the virgin aggregate(s) shall be dried and heated in the dryer to a temperature that will produce the specified resultant mix temperature when combined with the RAP material.

The heated virgin aggregates and mineral filler shall be combined with RAP material in such a manner as to produce a bituminous mixture which when discharged from the mixer shall not vary more than 15 °C (30 °F) from the temperature set by the Engineer. The combined ingredients shall be mixed for a minimum of 35 seconds and until a homogeneous mixture as to composition and temperature is obtained. The total mixing time shall be a minimum of 45 seconds consisting of dry and wet mixing. Variation in wet and dry mixing times may be permitted, depending on the moisture content and amount of salvaged material used. The mix temperature shall not exceed 175 °C (350 °F). Wide variations in the mixture temperature will be cause for rejection of the mix.

- (a) Personnel. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".
- (b) Required Tests. Testing shall be conducted to control the production of the bituminous mixture using the test methods identified and performed at a frequency not less than indicated in the following table.

Parameter	ameter Frequency of Tests Non-Class I Mixtures	
Aggregate Gradation	1 gradation per day of production.	Illinois Procedure (See Manual of
Hot bins for batch and continuous plants.  Individual cold-feeds or combined belt-feed for drier-drum plants.  (% passing seives: 12.5 mm (1/2 ln.), 4.75 mm (No. 4), 75 µm (No. 200))	The first day of production shall be washed ignition oven test on the mix. Thereafter, the testing shall alternate between dry gradation and washed ignition oven test on the mix.  The dry gradation and the washed ignition oven test results shall be plotted on the same control chart.	Test Procedures for Materials).
Asphalt Content by ignition oven (Note 1.)	1 per day	Illinois-Modified AASHTO T 308
Air Voids		
Bulk Specific Gravity of Gyratory Sample	1 per day	Illinois-Modified AASHTO T 312
Maximum Specific Gravity of Mixture	1 per day	Illinois-Modified AASHTO T 209

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine AC content.

During production, the ratio of minus 75  $\mu$ m (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.6, and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75  $\mu$ m (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resumption of production.

During production, mixture containing an anti-stripping additive will be tested by the Engineer for stripping according to Illinois Modified AASHTO T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

(c) Control Charts/Limits. Control charts/limits shall be according to QC/QA requirements for Non-Class I Mixtures, except air voids and density shall be plotted on the control charts within the following control limits:

Individual Test Control Limits		
Voids ±1.2%		
Density <sup>1/</sup>	93.0 – 97.4% of G <sub>mm</sub>	

1/ Except when placed as first lift over unimproved subgrade. When the exception applies, the first lift over unimproved subgrade shall be compacted to an average density of not less than 95 percent nor greater than 102 percent of the target density obtained on the growth curve.

Revise Article 355.08 of the Standard Specifications to read:

"355.08 Placing. The bituminous mixture shall be placed with a spreading and finishing machine. The minimum compacted thickness of each lift shall be according to the following table:

Nominal Maximum Aggregate Size of Mixture	Minimum Compacted Lift Thickness
CA 10 - 19 mm (3/4 in.)	57 mm (2 1/4 in.)
CA 6 – 25 mm (1 in.)	76 mm (3 in.)

The maximum compacted thickness of each lift shall be 100 mm (4 in.). If the Contractor elects to substitute an approved vibratory roller for one of the required rollers, the maximum compacted thickness of the each lift, excluding the top lift, may be increased to 150 mm (6 in.) provided the required density is obtained.

The surface of each lift shall be clean and dry before succeeding lifts are placed."

Revise Article 355.13 of the Standard Specifications to read:

"355.13 Basis of Payment. This work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS BASE COURSE SUPERPAVE of the thickness specified."

Revise Article 356.02 of the Standard Specifications to read:

"356.02 Materials. The materials for the bituminous concrete mixture shall meet the requirements of Article 355.02, be designed according to Article 355.05 and produced according to Article 355.06. Bituminous concrete binder course Superpave mixture IL-25.0 or IL-19.0 meeting the requirements of the special provision, "Superpave Bituminous Concrete Mixtures" may also be used. The minimum compacted lift thickness specified therein shall apply."

Revise the first paragraph of Article 356.06 of the Standard Specifications to read:

"356.06 Base Course Widening. The bituminous concrete mixture shall be transported according to Article 406.14."

Revise the second sentence of the fifth paragraph of Article 356.06 of the Standard Specifications to read:

"The minimum compacted thickness of each lift shall be according to the table shown in Article 355.08."

Revise the first paragraph of Article 356.11 of the Standard Specifications to read:

"356.11 Basis of Payment. Where the Department requires that bituminous concrete be used, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE BASE COURSE WIDENING SUPERPAVE of the thickness specified."

80065

# BITUMINOUS CONCRETE SURFACE COURSE (BDE)

Effective: April 1, 2001 Revised: April 1, 2003

Replace the fourth paragraph of Article 406.23(b) of the Standard Specifications with the following:

"Mixture for cracks, joints, flangeways, leveling binder (machine method), leveling binder (hand method) and binder course in excess of 103 percent of the quantity specified by the Engineer will not be measured for payment.

Surface course mixture in excess of 103 percent of adjusted plan quantity will not be measured for payment. The adjusted plan quantity for surface course mixtures will be calculated as follows:

Adjusted Plan Quantity = C x quantity shown on the plans or as specified by the Engineer.

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

and where:

 $G_{mb}$  = average bulk specific gravity from approved mix design.

U = Unit weight of surface course shown on the plans in kg/sq m/25 mm (lb/sq yd/in.), used to estimate plan quantity.

24.99 = metric constant.

46.8 = English constant.

If project circumstances warrant a new surface course mix design, the above equations shall be used to calculate the adjusted plan quantity for each mix design using its respective average bulk specific gravity."

80050

# BITUMINOUS EQUIPMENT, SPREADING AND FINISHING MACHINE (BDE)

Effective: January 1, 2005

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

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

80142

# **BUTT JOINTS (BDE)**

Effective: April 1, 2004 Revised: April 1, 2005

Revise Article 406.18 of the Standard Specifications to read:

"406.18 Butt Joints. Butt joints shall be constructed according to the details shown on the plans. The surface removal shall be performed according to Section 440. Construction of butt joints shall not begin prior to beginning general operations on the project.

When butt joints are to be constructed under traffic, temporary ramps shall be constructed and maintained at both the upstream and downstream ends of the surface removal areas immediately upon completion of the surface removal operation. The temporary ramps shall be constructed by the following methods.

- (a) Temporary Bituminous Ramps. Temporary bituminous ramps shall have a minimum taper rate of 1:40 (V:H). The bituminous material used shall meet the approval of the Engineer. Cold-milled bituminous tailings will not be acceptable.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 55 mph or less. The ramps shall have a minimum taper rate of 1:30 (V:H). The leading edge of the rubber ramp shall have a maximum thickness of 6 mm (1/4 in.) and the trailing edge shall match the height of the adjacent pavement ± 6 mm (1/4 in.).

The rubber material shall conform to the following.

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	80 ±10
Tensile Strength	ASTM D 412	5500 kPa (800 psi) min.
Elongation, percent	ASTM D 412	100 min.
Specific Gravity	ASTM D 297	1.1-1.3
Brittleness	ASTM D 746	-40 °C (-40 °F)

The rubber ramps shall be installed according to the manufacturer's specifications and fastened with the anchors provided. Rubber ramps that fail to stay in place or create a traffic hazard shall be replaced immediately with temporary bituminous ramps at the Contractor's expense.

The temporary ramps shall be removed just prior to placing the proposed surface course. If work is suspended for the winter season prior to completion of surface course construction, precut but joints shall be filled to the elevation of the existing pavement surface with compacted bituminous concrete surface course or binder course."

80118

# CALCIUM CHLORIDE ACCELERATOR FOR PORTLAND CEMENT CONCRETE PATCHING (BDE)

Effective: January 1, 2001

The Contractor has the option to use a calcium chloride accelerator for Class PP-1 or Class PP-2 concrete.

80031

# COARSE AGGREGATE FOR TRENCH BACKFILL, BACKFILL AND BEDDING (BDE)

Effective: April 1, 2001 Revised: November 1, 2003

Revise Article 208.02 of the Standard Specifications to read:

**"208.02 Materials.** Materials shall be according to the following Articles of Section 1000 – Materials:

- (a) Fine Aggregate (Note 1)......1003.04
- - Note 1. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 2. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first sentence of the second paragraph of subparagraph (b) in Article 208.03 of the Standard Specifications to read:

"Any material meeting the requirements of Articles 1003.04 or 1004.06 which has been excavated from the trenches shall be used for backfilling the trenches."

Add the following to the end of Article 542.02 of the Standard Specifications:

- - Note 1. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 2. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first and second sentences of the second paragraph of subparagraph (a) of Article 542.04 of the Standard Specifications to read:

"The unstable and unsuitable material shall be removed to a depth determined by the Engineer and for a width of one diameter (or equivalent diameter) of the pipe on each side of the pipe culvert, and replaced with aggregate. Rock shall be removed to an elevation 300 mm (1 ft) lower than the bottom of the pipe or to a depth equal to 40 mm/m (1/2 in./ft) of ultimate fill height over the top of the pipe culvert, whichever is the greater depth, and for a width as specified in (b) below, and replaced with aggregate."

Revise the second paragraph of subparagraph (c) of Article 542.04 of the Standard Specifications to read:

"Well compacted aggregate, at least 100 mm (4 in.) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except well compacted impervious material shall be used for the outer 1 m (3 ft) at each end of the pipe. When the trench has been widened by the removal and replacement of unstable or unsuitable material, the foundation material shall be placed for a width not less than the above specified widths on each side of the pipe. The aggregate and impervious material shall be approved by the Engineer and shall be compacted to the Engineer's satisfaction by mechanical means."

Revise subparagraph (e) of Article 542.04 of the Standard Specifications to read:

"(e) Backfilling. As soon as the condition of the pipe culvert will permit, the entire width of the trench shall be backfilled with aggregate to a height of at least the elevation of the center of the pipe. The aggregate shall be placed longitudinally along the pipe culvert, except at the outer 1 m (3 ft) at each end of the culvert which shall be backfilled with impervious material. The elevation of the backfill material on each side of the pipe shall be the same. The space under the pipe shall be completely filled. The aggregate and impervious material shall be placed in 200 mm (8 in.) layers, loose measurement. When using PVC, PE, or corrugated metal pipe, the aggregate shall be continued to a height of at least 300 mm (1 ft) above the top of the pipe and compacted to a minimum of 85 percent of standard lab density by mechanical means. When reinforced concrete pipes are used and the trench is within 600 mm (2 ft) of the pavement structure, the backfill shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

When using PVC, PE, or corrugated metal pipe a minimum of 300 mm (1 ft) of cover from the top of the pipe to the top of the subgrade will be required.

The installed pipe and its embedment shall not be disturbed when using movable trench boxes and shields, sheet pile, or other trench protection.

The remainder of the trench shall be backfilled with select material, from excavation or borrow, free from large or frozen lumps, clods or rock, meeting the approval of the Engineer. The material shall be placed in layers not exceeding 200 mm (8 in.) in depth, loose measurement and compacted to 95 percent of the standard laboratory density. Compaction shall be obtained by use of mechanical tampers or with approved vibratory compactors. Before compacting, each layer shall be wetted or dried to bring the moisture content within the limits of 80 to 110 percent of optimum moisture content determined according to AASHTO T 99 (Method C). All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the culvert. The filling of the trench shall be carried on simultaneously on both sides of the pipe. The Contractor may, at his/her expense, backfill the entire trench with aggregate in lieu of select material. The aggregate shall be compacted to the satisfaction of the Engineer by mechanical means.

The backfill material for all trenches and excavations made in the subgrade of the proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder, or sidewalk shall be according to Section 208. The trench backfill material shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

The Contractor may, at his/her expense, backfill the entire trench with controlled low strength material meeting the approval of the Engineer.

When the trench has been widened for the removal and replacement of unstable or unsuitable material, the backfilling with aggregate and impervious material, will be required for a width of at least the specified widths on each side of the pipe. The remaining width of each layer may be backfilled with select material. Each 200 mm (8 in.) layer for the entire trench width shall be completed before beginning the placement of the next layer."

Revise subparagraph (b) of Article 542.05 of the Standard Specifications to read:

"(b) Embankment. Embankment extending to an elevation of 300 mm (1 ft) over the top of the pipe shall be constructed according to Article 542.04(f), except the material up to the elevation of the center of the pipe and extending to a width of at least 450 mm (18 in.) on each side of the pipe, exclusive of the outer 1 m (3 ft) at each end of the pipe, shall consist of aggregate. At the outer 1 m (3 ft) at each end of the culvert, impervious material shall be used."

Add the following paragraph after the first paragraph of Article 542.10 of the Standard Specifications:

"Trench backfill will be measured for payment according to Article 208.03."

Add the following paragraph after the third paragraph of Article 542.11 of the Standard Specifications:

"Trench backfill will be paid for according to Article 208.04."

Add the following to of Article 550.02 of the Standard Specifications:

- - Note 2. The fine aggregate shall be moist to the satisfaction of the Engineer.
  - Note 3. The coarse aggregate shall be wet to the satisfaction of the Engineer."

Revise the first two sentences of the third paragraph of Article 550.04 of the Standard Specifications to read:

"Well compacted, aggregate bedding material at least 100 mm (4 in.) in depth below the pipe, shall be placed for the entire width of the trench and length of the pipe. The aggregate shall be compacted to the satisfaction of the Engineer by mechanical means."

Revise Article 550.07 of the Standard Specifications to read:

"550.07 Backfilling. As soon as the condition of the pipe will permit, the entire width of the trench shall be backfilled with aggregate to a height of at least the elevation of the center of the pipe. The aggregate shall be placed longitudinally along the pipe. The elevation of the backfill material on each side of the pipe shall be the same. The space under the pipe shall be

completely filled. The aggregate backfill material shall be placed in 200 mm (8 in.) layers, loose measurement and compacted to the satisfaction of the Engineer by mechanical means. When using PVC pipe, the aggregate shall be continued to a height of at least 300 mm (12 in.) above the top of the pipe.

The installed pipe and its embedment shall not be disturbed when using movable trench boxes and shields, sheet pile, or other trench protection.

The remainder of the trench and excavation shall be backfilled to the natural line or finished surface as rapidly as the condition of the sewer will permit. The backfill material shall consist of suitable excavated material from the trench or of trench backfill as herein specified. All backfill material shall be deposited in the trench or excavation in such a manner as not to damage the sewer and shall be compacted to the satisfaction of the Engineer by mechanical means. The filling of the trench shall be carried on simultaneously on both sides of the pipe.

The backfill material for trenches and excavation made in the subgrade of the proposed improvement, and for all trenches outside of the subgrade where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk shall be according to Section 208. The backfill material shall be compacted to 85 percent of standard lab density by mechanical means.

All backfill material up to a height of 300 mm (1 ft) above the pipe shall be deposited in uniform layers not exceeding 200 mm (8 in.) thick, loose measurement. The material in each layer shall be compacted to the satisfaction of the Engineer by mechanical means. The backfilling above this height shall be done according to Method 1, 2 or 3 as described below, with the following exceptions.

When trench backfill or excavated material meeting the requirements of Section 208 is required above the first 300 mm (1 ft) of the pipe, the layers shall not exceed 200 mm (8 in.). Gradations CA6 or CA10 shall not be used with Method 2 or Method 3.

- Method 1. The material shall be deposited in uniform layers not exceeding 300 mm (1 ft) thick, loose measurement, and each layer shall be compacted to the satisfaction of the Engineer by mechanical means.
- Method 2. The material shall be deposited in uniform layers not exceeding 300 mm (1 ft) thick, loose measurement, and each layer shall be either inundated or deposited in water.
- Method 3. The trench shall be backfilled with loose material, and settlement secured by introducing water through holes jetted into the backfill to a point approximately 600 mm (2 ft) above the top of the pipe. The holes shall be spaced as directed by the Engineer but shall be no farther than 2 m (6 ft) apart.

The water shall be injected at a pressure just sufficient to sink the holes at a moderate rate of speed. The pressure shall be such that the water will not cut cavities in the backfill material nor overflow the surface. If water does overflow the surface, it shall be drained into the jetted holes by means of shallow trenches.

Water shall be injected as long as it will be absorbed by the backfill material and until samples taken from test holes in the trench show a satisfactory moisture content. The Contractor shall bore the test holes not more than 15 m (50 ft) apart and at such other locations in the trench designated by the Engineer. As soon as the watersoaking has been completed, all holes shall be filled with soil and compacted by ramming with a tool approved by the Engineer.

Backfill material which has been watersoaked shall be allowed to settle and dry for at least 10 days before any surface course or pavement is constructed on it. The length of time may be altered, if deemed desirable, by the Engineer. Where the inner edge of the trench is within 600 mm (2 ft) of the edge of the proposed pavement, curb, gutter, curb and gutter, stabilized shoulder or sidewalk, the provisions of this paragraph shall also apply.

At the end of the settling and drying period, the crusted top of the backfill material shall be scarified and, if necessary, sufficient backfill material added, as specified in Method 1, to complete the backfilling operations.

The method used for backfilling and compacting the backfill material shall be the choice of the Contractor. If the method used does not produce results satisfactory to the Engineer, the Contractor will be required to alter or change the method being used so the resultant backfill will be satisfactory to the Engineer. Should the Contractor be required to alter or change the method being used, no additional compensation will be allowed for altering or changing the method.

The Contractor may, at his/her expense, backfill the entire trench with controlled low strength material meeting the approval of the Engineer.

When sheeting and bracing have been used, sufficient bracing shall be left across the trench as the backfilling progresses to hold the sides firmly in place without caving or settlement. This bracing shall be removed as soon as practicable. Any depressions which may develop within the area involved in the construction operation due to settlement of the backfilling material shall be filled in a manner approved by the Engineer.

When the Contractor constructs the trench with sloped or benched sides according to Article 550.04, backfilling for the full width of the excavation shall be as specified, except no additional compensation will be allowed for trench backfill material required outside the vertical limits of the specified trench width.

Whenever excavation is made for installing sewer pipe across earth shoulders or private property, the topsoil disturbed by excavation operations shall be replaced as nearly as possible in its original position, and the whole area involved in the construction operations shall be left in a neat and presentable condition.

When using any PVC pipe, the pipe shall be backfilled with aggregate to 300 mm (1 ft) over the top of the pipe and compacted to a minimum of 85 percent of standard lab density by mechanical means.

When reinforced concrete pipes are used and the trench is within 600 mm (2 ft) of the pavement structure, the backfill shall be compacted to a minimum of 85 percent of standard lab density by mechanical means.

Deflection Testing for Storm Sewers. All PVC storm sewers will be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted.

For PVC storm sewers with diameters 600 mm (24 in.) or smaller, a mandrel drag shall be used for deflection testing. For PVC storm sewers with diameters over 600 mm (24 in.), deflection measurements other than by a mandrel drag shall be used.

Where the mandrel is used, the mandrel shall be furnished by the Contractor and pulled by hand through the pipeline with a suitable rope or cable connected to each end. Winching or other means of forcing the deflection gauge through the pipeline will not be allowed.

The mandrel shall be of a shape similar to that of a true circle enabling the gauge to pass through a satisfactory pipeline with little or no resistance. The mandrel shall be of a design to prevent it from tipping from side to side and to prevent debris build-up from occurring between the channels of the adjacent fins or legs during operation. Each end of the core of the mandrel shall have fasteners to which the pulling cables can be attached. The mandrel shall have 9, various sized fins or legs of appropriate dimension for various diameter pipes. Each fin or leg shall have a permanent marking that states its designated pipe size and percent of deflection allowable.

The outside diameter of the mandrel shall be 95 percent of the base inside diameter, where the base inside diameter is:

For all PVC pipe (as defined using ASTM D 3034 methodology):

If the pipe is found to have a deflection greater than specified, that pipe section shall be removed, replaced, and retested."

Revise subparagraph (c) of Article 1003.04 of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation shall be as follows:

Backfill, bedding and trench backfill for pipe culverts and storm sewers FA 1, FA 2, FA 6, or FA 21 Porous granular embankment and backfill, french drains, and sand backfill for underdrains FA 1, FA 2, or FA20 (Note 1)

Note 1: For FA 1, FA 2, and FA 20 the percent passing the 75  $\,$  m (No. 200) sieve shall be 2  $\pm$  2."

Revise the title of Article 1004.06 of the Standard Specifications to read:

"Coarse Aggregate for Blotter, Embankment, Backfill, Trench Backfill, French Drains, and Bedding."

Add the following to the end of subparagraph (c) of Article 1004.06 of the Standard Specifications:

"Backfill, bedding, and trench backfill for pipe culverts and storm sewers CA 6, CA 10, and CA 18"

80051

# **CONCRETE ADMIXTURES (BDE)**

Effective: January 1, 2003 Revised: July 1, 2004

Revise Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. Except as specified, the use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted only when approved in writing by the Engineer. The Department will maintain an Approved List of Concrete Admixtures. When the Department permits the use of a calcium chloride accelerator, it shall be according to Article 442.02, Note 5.

When the atmosphere or concrete temperature is 18 °C (65 °F) or higher, a retarding admixture meeting the requirements of Article 1021.03 shall be used in the Class BD Concrete and portland cement concrete bridge deck overlays. The amount of retarding admixture to be used will be determined by the Engineer. The proportions of the ingredients of the concrete shall be the same as without the retarding admixture except that the amount of mixing water shall be reduced, as may be necessary, in order to maintain the consistency of the concrete as required. In addition, a high range water-reducing admixture shall be used in Class BD Concrete. The amount of high range water-reducing admixture will be determined by the Engineer. At the option of the Contractor, a water-reducing admixture may be used. Type I cement shall be used.

For Class PC and PS Concrete, a retarding admixture may be added to the concrete mixture when the concrete temperature is 18 °C (65 °F) or higher. Other admixtures may be used when approved by the Engineer, or if specified by the contract. If an accelerating admixture is permitted by the Engineer, it shall be the non-chloride type.

At the Contractor's option, admixtures in addition to an air-entraining admixture may be used for Class PP-1 concrete. The accelerator shall be the non-chloride type. If a water-reducing or retarding admixture is used, the cement factor may be reduced a maximum 18 kg/cu m (0.30 hundredweight/cu yd). If a high range water-reducing admixture is used, the cement factor may be reduced a maximum 36 kg/cu m (0.60 hundredweight/cu yd). Cement factor reductions shall not be cumulative when using multiple admixtures. An accelerator shall always be added prior to a high range water-reducing admixture, if both are used.

If Class C fly ash or ground granulated blast-furnace slag is used in Class PP-1 concrete, a water-reducing or high range water-reducing admixture shall be used. However, the cement factor shall not be reduced if a water-reducing, retarding, or high range water-reducing admixture is used. In addition, an accelerator shall not be used.

For Class PP-2 or PP-3 concrete, a non-chloride accelerator followed by a high range water-reducing admixture shall be used, in addition to the air-entraining admixture. For Class PP-3 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-2 or PP-3 concrete, the Contractor has the option to use a water-reducing admixture. A retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

When the air temperature is less than 13 °C (55 °F) for Class PP-1 or PP-2 concrete, the non-chloride accelerator shall be calcium nitrite.

For Class PP-4 concrete, a high range water-reducing admixture shall be used in addition to the air-entraining admixture. The Contractor has the option to use a water-reducing admixture. An accelerator shall not be used. For stationary or truck mixed concrete, a retarding admixture shall be used to allow for haul time. The Contractor has the option to use a mobile portland cement concrete plant according to Article 1103.04, but a retarding admixture shall not be used unless approved by the Engineer. A water-reducing, retarding, or high range water-reducing admixture shall not be used to reduce the cement factor.

If the Department specifies a calcium chloride accelerator for Class PP-1 concrete, the maximum chloride dosage shall be 1.0 L (1.0 quart) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.0 L (2.0 quarts) per 45 kg (100 lb) of cement if approved by the Engineer. If the Department specifies a calcium chloride accelerator for Class PP-2 concrete, the maximum chloride dosage shall be 1.3 L (1.3 quarts) of solution per 45 kg (100 lb) of cement. The dosage may be increased to a maximum 2.6 L (2.6 quarts) per 45 kg (100 lb) of cement if approved by the Engineer.

For Class PV, MS, SI, RR, SC and SH concrete, at the option of the Contractor, or when specified by the Engineer, a water-reducing admixture or a retarding admixture may be used. The amount of water-reducing admixture or retarding admixture permitted will be determined by the Engineer. The air-entraining admixture and other admixtures shall be added to the concrete separately, and shall be permitted to intermingle only after they have separately entered the concrete batch. The sequence, method and equipment for adding the admixtures shall be approved by the Engineer. The water-reducing admixture shall not delay the initial set of the concrete by more than one hour. Type I cement shall be used.

When a water-reducing admixture is added, a cement factor reduction of up to 18 kg/cu m (0.30 hundredweight/cu yd), from the concrete designed for a specific slump without the admixture, will be permitted for Class PV, MS, SI, RR, SC and SH concrete. When an approved high range water-reducing admixture is used, a cement factor reduction of up to 36 kg/cu m (0.60 hundredweight/cu yd), from a specific water cement/ratio without the admixture, will be permitted based on a 14 percent minimum water reduction. This is applicable to Class PV, MS, SI, RR, SC and SH concrete. A

cement factor below 320 kg/cu m (5.35 hundredweight/cu yd) will not be permitted for Class PV, MS, SI, RR, SC and SH concrete. A cement factor reduction will not be allowed for concrete placed underwater. Cement factor reductions shall not be cumulative when using multiple admixtures.

For use of admixtures to control concrete temperature, refer to Articles 1020.14(a) and 1020.14(b).

The maximum slumps given in Table 1 may be increased to 175 mm (7 in.) when a high range water-reducing admixture is used for all classes of concrete except Class PV and PP."

Revise Section 1021 of the Standard Specifications to read:

#### "SECTION 1021. CONCRETE ADMIXTURES"

1021.01 **General.** Admixtures shall be furnished in liquid form ready for use. The admixtures may be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer and trade name of the material. Containers shall be readily identifiable to the satisfaction of the Engineer as to manufacturer and trade name of the material they contain.

Prior to inclusion of a product on the Department's Approved List of Concrete Admixtures, the manufacturer shall submit a report prepared by an independent laboratory accredited by the AASHTO Accreditation Program. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications.

Tests shall be conducted using materials and methods specified on a "test" concrete and a "reference" concrete, together with a certification that no changes have been made in the formulation of the material since the performance of the tests. Per the manufacturer's option, the cement content for all required tests shall either be according to applicable specifications or 335 kg/cu m (5.65 cwt/cu yd). Compressive strength test results for six months and one year will not be required.

In addition to the report, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by the AASHTO Accreditation Program.

Prior to the approval of an admixture, the Engineer may conduct all or part of the applicable tests on a sample that is representative of the material to be furnished. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 335 kg/cu m (5.65 cwt/cu yd). For freeze-thaw testing, the Department will perform the test according to Illinois Modified AASHTO T 161, Procedure B.

The manufacturer shall include in the submittal the following information according to ASTM C 494; the average and manufacturing range of specific gravity, the average and manufacturing range of solids in the solution, and the average and manufacturing range of pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

When test results are more than seven years old, the manufacturer shall re-submit the infrared spectrophotometer trace and the report prepared by an independent laboratory accredited by the AASHTO Accreditation Program.

All admixtures, except chloride-based accelerators, shall contain no more than 0.3 percent chloride by mass (weight).

**1021.02 Air-Entraining Admixtures.** Air-entraining admixtures shall conform to the requirements of AASHTO M 154.

If the manufacturer certifies that the air-entraining admixture is an aqueous solution of Vinsol resin that has been neutralized with sodium hydroxide (caustic soda), testing for compliance with the requirements may be waived by the Engineer. In the certification, the manufacturer shall show complete information with respect to the formulation of the solution, including the number of parts of Vinsol resin to each part of sodium hydroxide. Before the approval of its use is granted, the Engineer will test the solution for its air-entraining quality in comparison with a solution prepared and kept for that purpose.

**1021.03 Retarding and Water-Reducing Admixtures.** The admixture shall comply with the following requirements:

- (a) The retarding admixture shall comply with the requirements of AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall comply with the requirements of AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

When a Type F or Type G high range water-reducing admixture is used, water-cement ratios shall be a minimum of 0.32.

Type F or Type G admixtures may be used, subject to the following restrictions:

For Class MS, SI, RR, SC and SH concrete, the water-cement ratio shall be a maximum of 0.44.

The Type F or Type G admixture shall be added at the jobsite unless otherwise directed by the Engineer. The initial slump shall be a minimum of 40 mm (1 1/2 in.) prior to addition of the Type F or Type G admixture, except as approved by the Engineer.

When a Type F or Type G admixture is used, retempering with water or with a Type G admixture will not be allowed. An additional dosage of a Type F admixture, not to exceed 40 percent of the original dosage, may be used to retemper concrete once, provided set time is not unduly affected. A second retempering with a Type F admixture may be used for all classes of concrete except Class PP and SC, provided that the dosage does not exceed the dosage used for the first retempering, and provided that the set time is not unduly affected. No further retempering will be allowed.

Air tests shall be performed after the addition of the Type F or Type G admixture.

**1021.04 Set Accelerating Admixtures.** The admixture shall comply with the requirements of AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating)"

80094

## **CORRUGATED METAL PIPE CULVERTS (BDE)**

Effective: August 1, 2003 Revised: July 1, 2004

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

"When corrugated steel or aluminum alloy culvert pipe (including bituminous coated steel or aluminum and pre-coated steel) is used, the pipe shall be placed such that the longitudinal lap is placed at the sides and separate sections of pipe shall be joined with a hugger-type band. When the pipes are fabricated with a smooth sleeve-type coupler, the gasket shall meet the requirements of Article 1006.01."

Add the following paragraph after the first paragraph of Article 1006.01 of the Standard Specifications:

"Round pipes 1200 mm (48 in.) in diameter and smaller may be fabricated with a smooth sleeve-type coupler. Gasket material on the smooth sleeve-type coupler shall be polyisoprene or equal with a durometer hardness of 45±5 (ASTM D 2240, Shore A). Pipe used with smooth sleeve-type couplers shall contain a homing mark that indicates when the joint is tight. The homing mark shall consist of a painted stripe around the circumference of the male end of the pipe."

Delete the last sentence of the first paragraph of Article 1006.01(a) of the Standard Specifications.

Add the following paragraph after the first paragraph of Article 1006.03 of the Standard Specifications:

"Round pipes 1200 mm (48 in.) in diameter and smaller may be fabricated with a smooth sleeve-type coupler. Gasket material on the smooth sleeve-type coupler shall be polyisoprene or equal with a durometer hardness of 45±5 (ASTM D 2240, Shore A). Pipe used with smooth sleeve-type couplers shall contain a homing mark that indicates when the joint is tight. The homing mark shall consist of a painted stripe around the circumference of the male end of the pipe."

#### 80102

## **CURING AND PROTECTION OF CONCRETE CONSTRUCTION (BDE)**

Effective: January 1, 2004

Revise the second and third sentences of the eleventh paragraph of Article 503.06 of the Standard Specifications to read:

"Forms on substructure units shall remain in place at least 24 hours. The method of form removal shall not result in damage to the concrete."

Delete the twentieth paragraph of Article 503.22 of the Standard Specifications.

Revise the "Unit Price Adjustments" table of Article 503.22 of the Standard Specifications to read:

"UNIT PRICE ADJUSTMENTS	
Type of Construction	Percent Adjustment in Unit Price
For concrete in substructures, culverts (having a waterway opening of more than 1 sq m (10 sq ft)), pump houses, and retaining walls (except concrete pilings, footings and foundation seals):  When protected by:	
Protection Method II Protection Method I	115% 110%
For concrete in superstructures: When protected by: Protection Method II Protection Method I	123% 115%
For concrete in footings:  When protected by:  Protection Method I, II or III	107%
For concrete in slope walls: When protected by: Protection Method I	107%"

Delete the fourth paragraph of Article 504.05(a) of the Standard Specifications.

Revise the second and third sentences of the fifth paragraph of Article 504.05(a) of the Standard Specifications to read:

"All test specimens shall be cured with the units according to Article 1020.13."

Revise the first paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"Curing and Low Air Temperature Protection. The curing and protection for precast, prestressed concrete members shall be according to Article 1020.13 and this Article."

Revise the first sentence of the second paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"For curing, air vents shall be in place, and shall be so arranged that no water can enter the void tubes during the curing of the members."

Revise the first sentence of the third paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"As soon as each member is finished, the concrete shall be covered with curing material according to Article 1020.13."

Revise the eighth paragraph of Article 504.06(c)(6) of the Standard Specifications to read:

"The prestressing force shall not be transferred to any member before the concrete has attained the compressive strength of 28,000 kPa (4000 psi) or other higher compressive release strength specified on the plans, as determined from tests of 150 mm (6 in.) by 300 mm (12 in.) cylinders cured with the member according to Article 1020.13. Members shall not be shipped until 28-day strengths have been attained and members have a yard age of at least 4 days."

Delete the third paragraph of Article 512.03(a) of the Standard Specifications.

Delete the last sentence of the second paragraph of Article 512.04(d) of the Standard Specifications.

Revise the "Index Table of Curing and Protection of Concrete Construction" table of Article 1020.13 of the Standard Specifications to read:

"INDEX TABLE OF CURING AND PROTECTION OF CONCRETE CONSTRUCTION				
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS	
Cast-in-Place Concrete: 11/				
Pavement Shoulder	1020.13(a)(1)(2)(3)(4)(5) <sup>3/5/</sup>	3	1020.13(c)	
Base Course Base Course Widening	1020.13(a)(1)(2)(3)(4)(5) <sup>1/2/</sup>	3	1020.13(c)	
Driveway Median Curb Gutter Curb and Gutter Sidewalk Slope Wall	1020.13(a)(1)(2)(3)(4)(5) <sup>4/5/</sup>	3	1020.13(c) <sup>16/</sup>	
Paved Ditch Catch Basin Manhole Inlet Valve Vault	1020.13(a)(1)(2)(3)(4)(5) <sup>4/</sup>	3	1020.13(c)	
Pavement Patching	1020.13(a)(1)(2)(3)(4)(5) <sup>2/</sup>	3 <sup>12/</sup>	1020.13(c)	
Pavement Replacement	1020.13(a)(1)(2)(3)(4)(5) <sup>1/2/</sup>	3	442.06(h) and 1020.13(c)	
Railroad Crossing	1020.13(a)(3)(5)	1	1020.13(c)	
Piles	1020.13(a)(3)(5)	7	1020.13(e)(1)(2)(3)	
Footings Foundation Seals	1020.13(a)(1)(2)(3)(4)(5) <sup>4/6/</sup>	7	1020.13(e)(1)(2)(3)	
Substructure	1020.13(a)(1)(2)(3)(4)(5) <sup>1/7/</sup>	7	1020.13(e)(1)(2)(3)	
Superstructure (except deck)	1020.13(a)(1)(2)(3)(5) <sup>8/</sup>	7	1020.13(e)(1)(2)	
Deck	1020.13(a)(5)	7	1020.13(e)(1)(2) <sup>17/</sup>	
Retaining Walls	1020.13(a)(1)(2)(3)(4)(5) <sup>1/7/</sup>	7	1020.13(e)(1)(2)	
Pump Houses	1020.13(a)(1)(2)(3)(4)(5) <sup>1/</sup>	7	1020.13(e)(1)(2)	
Culverts	1020.13(a)(1)(2)(3)(4)(5) <sup>4/6/</sup>	7	1020.13(e)(1)(2) <sup>18/</sup>	
Other Incidental Concrete	1020.13(a)(1)(2)(3)(5)	3	1020.13(c)	
Precast Concrete: 11/				
Bridge Beams Piles Bridge Slabs Nelson Type Structural Member	1020.13(a)(3)(5) 9/10/	•	504.06(c)(6), 1020.13(e)(2) <sup>19/</sup>	
All Other Precast Items	1020.13(a)(3)(4)(5) <sup>2/9/10/</sup>	As required. 14/	504.06(c)(6), 1020.13(e)(2) <sup>19/</sup>	
Precast, Prestressed Concrete: 11/				
All Items	1020.13(a)(3)(5) <sup>9/10/</sup>		d504.06(c)(6), 1020.13(e)(2) <sup>19/</sup> s	

#### Notes-General:

- 1/ Type I, membrane curing only
- 2/ Type II, membrane curing only
- 3/ Type III, membrane curing only
- 4/ Type I, II and III membrane curing
- 5/ Membrane curing will not be permitted between November 1 and April 15.
- 6/ The use of water to inundate footings, foundation seals or the bottom slab of culverts is permissible when approved by the Engineer, provided the water temperature can be maintained at 7 °C ( 45 °F) or higher.
- 7/ Asphalt Emulsion for Waterproofing may be used in lieu of other curing methods when specified and permitted according to Article 503.18.
- 8/ On non-traffic surfaces which receive protective coat according to Article 503.19, a linseed oil emulsion curing compound may be used as a substitute for protective coat and other curing methods. The linseed emulsion curing compound will be permitted between April 16 and October 31 of the same year, provided it is applied with a mechanical sprayer according to Article 1101.09 (b), and meets the material requirements of Article 1022.07.
- 9/ Steam curing (heat and moisture) is acceptable and shall be accomplished by the method specified in Article 504.06(c)(6).
- 10/ A moist room according to AASHTO M 201 is acceptable for curing.
- 11/ If curing is required and interrupted because of form removal for cast-in-place concrete items, precast concrete products, or precast prestressed concrete products, the curing shall be resumed within two hours from the start of the form removal.
- 12/ Curing maintained only until opening strength is attained, with a maximum curing period of three days.
- 13/ The curing period shall end when the concrete has attained the mix design strength. The producer has the option to discontinue curing when the concrete has attained 80 percent of the mix design strength or after seven days. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 14/ The producer shall determine the curing period or may elect to not cure the product. All strength test specimens shall remain with the units and shall be subjected to the same curing method and environmental condition as the units, until the time of testing.
- 15/ The producer has the option to continue curing after strand release.
- 16/ When structural steel or structural concrete is in place above slope wall, Article 1020.13(c) shall not apply. The protection method shall be according to Article 1020.13(e)(1).
- 17/ When Article 1020.13(e)(2) is used to protect the deck, the housing may enclose only the bottom and sides. The top surface shall be protected according to Article 1020.13(e)(1).
- 18/ For culverts having a waterway opening of 1 sq m (10 sq ft) or less, the culverts may be protected according to Article 1020.13(e)(3).
- 19/ The seven day protection period in the first paragraph of Article 1020.13(e)(2) shall not apply. The protection period shall end when curing is finished. For the third paragraph of Article 1020.13(e)(2), the decrease in temperature shall be according to Article 504.06(c)(6)."

Add the following to Article 1020.13(a) of the Standard Specifications:

"(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry cotton mats. The cotton mats shall be placed in a manner which will not mar the concrete surface. A texture resulting from the cotton mat material is acceptable. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. For bridge decks, a foot bridge shall be used to place and wet the cotton mats.

The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without marring the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 1.2 m (4 ft) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

After placement of the soaker hoses, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets.

For construction items other than bridge decks, soaker hoses or a continuous wetting system will not be required if the alternative method keeps the cotton mats wet. Periodic wetting of the cotton mats is acceptable.

For areas inaccessible to the cotton mats on bridge decks, curing shall be according to Article 1020.13(a)(3)."

Revise the first paragraph of Article 1020.13(c) of the Standard Specifications to read:

"Protection of Portland Cement Concrete, Other Than Structures, From Low Air Temperatures. When the official National Weather Service forecast for the construction area predicts a low of 0 °C (32 °F), or lower, or if the actual temperature drops to 0 °C (32 °F), or lower, concrete less than 72 hours old shall be provided at least the following protection:"

Delete Article 1020.13(d) and Articles 1020.13(d)(1),(2),(3),(4) of the Standard Specifications.

Revise the first five paragraphs of Article 1020.13(e) of the Standard Specifications to read:

"Protection of Portland Cement Concrete Structures From Low Air Temperatures. When the official National Weather Service Forecast for the construction area predicts a low below 7 °C (45 °F), or if the actual temperature drops below 7 °C (45 °F), concrete less than 72 hours old shall be provided protection. Concrete shall also be provided protection when placed during the winter period of December 1 through March 15. Concrete shall not be placed until the materials, facilities and equipment for protection are approved by the Engineer.

When directed by the Engineer, the Contractor may be required to place concrete during the winter period. If winter construction is specified, the Contractor shall proceed with the construction, including concrete, excavation, pile driving, steel erection and all appurtenant work required for the complete construction of the item, except at times when weather conditions make such operations impracticable.

Regardless of the precautions taken, the Contractor shall be responsible for protection of the concrete placed and any concrete damaged by cold temperatures shall be removed and replaced by the Contractor at his/her own expense."

Add the following at the end of the third paragraph of Article 1020.13(e)(1) of the Standard Specifications:

"The Contractor shall provide means for checking the temperature of the surface of the concrete during the protection period."

Revise the second sentence of the first paragraph of Article 1020.13(e)(2) of the Standard Specifications to read:

"The Contractor shall provide means for checking the temperature of the surface of the concrete or air temperature within the housing during the protection period."

Delete the last sentence of the first paragraph of Article 1020.13(e)(3) of the Standard Specifications.

Add the following Article to Section 1022 of the Standard Specifications:

"1022.06 Cotton Mats. Cotton mats shall consist of a cotton fill material, minimum 400 g/sq m (11.8 oz/sq yd), covered with unsized cloth or burlap, minimum 200 g/sq m (5.9 oz/sq yd), and be tufted or stitched to maintain stability.

Cotton mats shall be in a condition satisfactory to the Engineer. Any tears or holes in the mats shall be repaired.

Add the following Article to Section 1022 of the Standard Specifications:

"1022.07 Linseed Oil Emulsion Curing Compound. Linseed oil emulsion curing compound shall be composed of a blend of boiled linseed oil and high viscosity, heavy bodied linseed oil emulsified in a water solution. The curing compound shall meet the requirements of a Type I, II, or III according to Article 1022.01, except the drying time requirement will be waived. The oil phase shall be  $50 \pm 4$  percent by volume. The oil phase shall consist of 80 percent by mass (weight) boiled linseed oil and 20 percent by mass (weight) Z-8 viscosity linseed oil. The water phase shall be  $50 \pm 4$  percent by volume."

Revise Article 1020.14 of the Standard Specifications to read:

**"1020.14 Temperature Control for Placement.** Temperature control for concrete placement shall conform to the following requirements:

(a) Temperature Control other than Structures. The temperature of concrete immediately before placing, shall be not less than 10 °C (50 °F) nor more than 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

Plastic concrete temperatures up to 35 °C (96 °F), as placed, may be permitted provided job site conditions permit placement and finishing without excessive use of water on and/or overworking of the surface. The occurrence within 24 hours of unusual surface distress shall be cause to revert to a maximum 32 °C (90 °F) plastic concrete temperature.

Concrete shall not be placed when the air temperature is below 5 °C (40 °F) and falling or below 2 °C (35 °F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to not less than 20 °C (70 °F) nor more than 65 °C (150 °F). The aggregates may be heated by either steam or dry heat prior to being placed in the mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

For pavement patching, refer to Article 442.06(e) for additional information on temperature control for placement.

(b) Temperature Control for Structures. The temperature of concrete as placed in the forms shall be not less than 10 °C (50 °F) nor more than 32 °C (90 °F). Aggregates and/or water shall be heated or cooled as necessary to produce concrete within these temperature limits. When insulated forms are used, the temperature of the concrete mixture shall not exceed 25 °C (80 °F). If the Engineer determines that heat of hydration might cause excessive temperatures in the concrete, the concrete shall be placed at a temperature between 10 °C (50 °F) and 15 °C (60 °F), per the Engineer's instructions. When concrete is placed in contact with previously placed concrete, the temperature of the concrete may be increased as required to offset anticipated heat loss.

Concrete shall not be placed when the air temperature is below 7  $^{\circ}$ C (45  $^{\circ}$ F) and falling or below 4  $^{\circ}$ C (40  $^{\circ}$ F), without permission of the Engineer. When placing of concrete is authorized during cold weather, the Engineer may require the water and/or the aggregates to be heated to not less than 20  $^{\circ}$ C (70  $^{\circ}$ F) nor more than 65  $^{\circ}$ C (150  $^{\circ}$ F). The aggregates may be heated by either steam or dry heat prior to being placed in the

mixer. The apparatus used shall heat the mass uniformly and shall be so arranged as to preclude the possible occurrence of overheated areas which might damage the materials. No frozen aggregates shall be used in the concrete.

When the temperature of the plastic concrete reaches 30 °C (85 °F), an approved retarding admixture shall be used or the approved water reducing admixture in use shall have its dosage increased by 50 percent over the dosage recommended on the Department's Approved List of Concrete Admixtures for the temperature experienced. The amount of retarding admixture to be used will be determined by the Engineer. This requirement may be waived by the Engineer when fly ash compensated mixtures are used.

(c) Temperature. The concrete temperature shall be determined according to ASTM C 1064."

80114

#### **DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION**

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

<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% state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100% state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

<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 DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 9.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

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

<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 (7) working days after the date of letting. To meet the seven (7) day requirement, the bidder may send the Plan by certified mail or delivery service within the seven (7) working day period. If a question arises concerning the mailing date of a Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt

from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure that the postmark or receipt date is affixed within the seven (7) working days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Plan is to be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). It is the responsibility of the bidder to obtain confirmation of telefax delivery. The Department will not accept a Utilization Plan if it does not meet the seven (7) day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. The signatures on these forms must be original signatures. All elements of information indicated on the said form shall be provided, including but not limited to the following:
  - (1) The name and address of each DBE to be used;
  - (2) A description, including pay item numbers, of the commercially useful work to be done by each DBE;
  - (3) The price to be paid to each DBE for the identified work specifically stating the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
  - (4) A commitment statement signed by the bidder and each DBE evidencing availability and intent to perform commercially useful work on the project; and
  - (5) If the bidder is a joint venture comprised of DBE firms and non-DBE firms, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s).
- (d) The contract will not be awarded until the Utilization Plan submitted by the bidder is approved. The Utilization Plan will be approved by the Department if the Plan commits

sufficient commercially useful DBE work performance to meet the contract goal. The Utilization Plan will not be approved by the Department if the Plan does not commit sufficient DBE performance to meet the contract goal unless the bidder documents that it made a good faith effort to meet the goal. The good faith procedures of Section VIII of this special provision apply. If the Utilization Plan is not approved because it is deficient in a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no less than a five (5) working day period in order to cure the deficiency.

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

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

GOOD FAITH EFFORT PROCEDURES. If the bidder cannot obtain sufficient DBE commitments to meet the contract goal, the bidder must document in the Utilization Plan the good faith efforts made in the attempt to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which could reasonably be expected to obtain sufficient DBE participation. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts are not good faith efforts; rather, the bidder is expected to have taken those efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
  - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
  - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
  - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
  - (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

- b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that a good faith effort has not been made, the Department will notify the bidder of that preliminary determination by contacting the responsible company official designated in the Utilization Plan. The preliminary determination shall include a statement of reasons why good faith efforts have not been found, and may include additional good faith efforts that the bidder could take. The notification will designate a five (5) working day period during which the bidder shall take additional efforts. The bidder is not limited by a statement of additional efforts, but may take other action beyond any stated additional efforts in order to obtain additional DBE commitments. The bidder shall submit an amended Utilization Plan if additional DBE commitments to meet the contract goal are secured. If additional DBE commitments sufficient to meet the contract goal are not secured, the bidder shall report the final good faith efforts made in the time allotted. All additional efforts taken by the bidder will be considered as part of the bidder's good faith efforts. If the bidder is not able to meet the goal after taking additional efforts, the Department will make a pre-final determination of the good faith efforts of the bidder and will notify the designated responsible company official of the reasons for an adverse determination.

(c) The bidder may request administrative reconsideration of a pre-final determination adverse to the bidder within the five (5) working days after the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The pre-final determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. In addition, the request shall be considered a consent by the bidder to extend the time for award. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten (10) working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

CONTRACT COMPLIANCE. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. If a DBE listed in

the Utilization Plan is terminated for reasons other than convenience, or fails to complete its work on the contract for any reason, the Contractor shall make good faith efforts to find another DBE to substitute for the terminated DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, but only to the extent needed to meet the contract goal or the amended contract goal. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.

- (c) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefor to the DBE by the Contractor, but not later than thirty (30) calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

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# **EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)**

Effective: August 1, 2001 Revised: November 1, 2001

When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, he/she will direct the Contractor in writing to correct the deficiency. The Contractor shall then correct the deficiency within 24 hours. The deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit for Construction Site Activities.

If the Contractor fails to correct the deficiency(s) within 24 hours, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The time period will begin with the initial written notification to the Contractor and end with the Engineer's acceptance of the corrected work. The per calendar day deduction will be either \$1000.00 or 0.05 percent of the awarded contract value, whichever is greater.

If the Contractor fails to respond, the Engineer may correct the deficiencies and deduct the cost from monies due or which may become due the Contractor. This corrective action shall in no way relieve the Contractor of his/her contractual requirements or responsibilities.

80055

# FLAGGER VESTS (BDE)

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

Revise the first sentence of Article 701.04(c)(1) of the Standard Specifications to read:

"The flagger shall be stationed to the satisfaction of the Engineer and be equipped with a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments and approved flagger traffic control signs conforming to Standard 702001 and Article 702.05(e)."

Revise Article 701.04(c)(6) of the Standard Specifications to read:

"(6) Nighttime Flagging. Flaggers shall be illuminated by an overhead light source providing a minimum vertical illuminance of 108 lux (10 fc) measured 300 mm (1 ft) out from the flagger's chest. The bottom of any luminaire shall be a minimum of 3 m (10 ft) above the pavement. Luminaire(s) shall be shielded to minimize glare to approaching traffic and trespass light to adjoining properties.

The flagger vest shall be a fluorescent orange or fluorescent orange and fluorescent yellow/green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 3 garments."

80101

# FREEZE-THAW RATING (BDE)

Effective: November 1, 2002

Revise the first sentence of Article 1004.02(f) of the Standard Specifications to read:

"When coarse aggregate is used to produce portland cement concrete for base course, base course widening, pavement, driveway pavement, sidewalk, shoulders, curb, gutter, combination curb and gutter, median, paved ditch or their repair using concrete, the gradation permitted will be determined from the results of the Department's Freeze-Thaw Test."

80079

## **MULCHING SEEDED AREAS (BDE)**

Effective: January 1, 2005

Delete Article 251.02(a) of the Standard Specifications.

Add the following to Article 251.02 of the Standard Specifications:

Delete Article 251.03(b)(1) of the Standard Specifications.

Add the following to Article 251.03 of the Standard Specifications:

"(d) Method 4. This method shall consist of applying compost combined with a performance additive designed to bind/stabilize the compost. The compost/performance additive mixture shall be applied to the surface of the slope using a pneumatic blower at a depth of 50 mm (2 in.)."

Revise the first sentence of the first paragraph of Article 251.06(b) of the Standard Specifications to read:

"Mulch Methods 1, 2, 3, and 4 will be measured for payment in hectares (acres) of surface area mulched."

Revise Article 251.07 of the Standard Specifications to read:

"251.07 Basis of Payment. This work will be paid for at the contract unit price per hectare (acre) for MULCH, METHOD 1; MULCH, METHOD 2; MULCH, METHOD 3; or MULCH, METHOD 4; and at the contract unit price per square meter (square yard) for EROSION CONTROL BLANKET or HEAVY DUTY EROSION CONTROL BLANKET."

Add the following after the second paragraph of Article 1081.05(b) of the Standard Specifications:

"Chemical Compost Binder. Chemical compost binder shall be a commercially available product specifically recommended by the manufacturer for use as a compost stabilizer.

The compost binder shall be nonstaining and nontoxic to vegetation and the environment. It shall disperse evenly and rapidly and remain in suspension when agitated in water.

Prior to use of the compost binder, the Contractor shall submit a notarized certification by the manufacturer stating that it meets these requirements. Chemical compost binder shall be packaged, stored, and shipped according to the manufacturer's recommendations with the net quantity plainly shown on each package or container."

80138

## **PARTIAL PAYMENTS (BDE)**

Effective: September 1, 2003

Revise Article 109.07 of the Standard Specifications to read:

"109.07 Partial Payments. Partial payments will be made as follows:

(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the amount of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved. Furthermore, progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c).

(b) Material Allowances. At the discretion of the Department, payment may be made for materials, prior to their use in the work, when satisfactory evidence is presented by the Contractor. Satisfactory evidence includes justification for the allowance (to expedite the work, meet project schedules, regional or national material shortages, etc.), documentation of material and transportation costs, and evidence that such material is properly stored on the project or at a secure location acceptable and accessible to the Department.

Material allowances will be considered only for nonperishable materials when the cost, including transportation, exceeds \$10,000 and such materials are not expected to be utilized within 60 days of the request for the allowance. For contracts valued under

\$500,000, the minimum \$10,000 requirement may be met by combining the principal (material) product of no more than two contract items. An exception to this two item limitation may be considered for any contract regardless of value for items in which material (products) are similar except for type and/or size.

Material allowances shall not exceed the value of the contract items in which used and shall not include the cost of installation or related markups. Amounts paid by the Department for material allowances will be deducted from estimates due the Contractor as the material is used. Two-sided copies of the Contractor's cancelled checks for materials and transportation must be furnished to the Department within 60 days of payment of the allowances or the amounts will be reclaimed by the Department."

80116

#### PAYMENTS TO SUBCONTRACTORS (BDE)

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

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts no later than 30 days from the receipt of each payment made to the Contractor.

State law addresses the timing of payments to be made to subcontractors. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, generally requires that when a Contractor receives any payment from the Department, the Contractor is required to make corresponding, proportional payments to each subcontractor performing work within 15 calendar days after receipt of the state payment. Section 7 of the State Prompt Payment Act further provides that interest in the amount of 2% per month, in addition to the payment due, shall be paid to any subcontractor by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors throughout the contracting chain.

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

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

This Special Provision does not create any rights in favor of any subcontractor against the State

of Illinois or authorize any cause of action against the State of Illinois on account of any payment, nonpayment, delayed payment or interest claimed by application of the State Prompt Payment Act. The Department will neither determine the reasonableness of any cause for delay of payment nor enforce any claim to payment, including interest. Moreover, the Department will not approve any delay or postponement of the 15 day requirement. State law creates remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond in accordance with the Public Construction Bond Act, 30 ILCS 550.

80022

## PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: July 1, 2004

All personnel, excluding flaggers, working outside of a vehicle (car or truck) within 7.6 m (25 ft) of pavement open to traffic shall wear a fluorescent orange, fluorescent yellow/green or a combination of fluorescent orange and fluorescent yellow/.green vest meeting the requirements of the American National Standards Institute specification ANSI/ISEA 107-1999 for Conspicuity Class 2 garments. Other types of garments may be substituted for the vest as long as the garments have manufacturers tags identifying them as meeting the ANSI Class 2 requirement.

80130

# **PORTLAND CEMENT (BDE)**

Effective: January 1, 2005

Replace the first sentence of the second paragraph of Article 1001.01 of the Standard Specifications with the following:

"For portland cement according to ASTM C 150, the addition of up to 5.0 percent limestone by mass (weight) to the cement will not be permitted. Also, the total of all organic processing additions shall not exceed 1.0 percent by mass (weight) of the cement and the total of all inorganic processing additions shall not exceed 4.0 percent by mass (weight) of the cement."

80139

#### PORTLAND CEMENT CONCRETE (BDE)

Effective: November 1, 2002

Add the following paragraph after the fourth paragraph of Article 1103.01(b) of the Standard Specifications:

"The truck mixer shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Add the following paragraph after the first paragraph of Article 1103.01(c) of the Standard Specifications:

"The truck agitator shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Add the following paragraph after the first paragraph of Article 1103.01(d) of the Standard Specifications:

"The nonagitator truck shall be approved before use according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

Revise the first sentence of the first paragraph of Article 1103.02 of the Standard Specifications to read:

"The plant shall be approved before production begins according to the Bureau of Materials and Physical Research's Policy Memorandum, "Approval of Concrete Plants and Delivery Trucks"."

80083

#### PORTLAND CEMENT CONCRETE PATCHING (BDE)

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

Revise Note 1 of Article 442.02 of the Standard Specifications, to read:

"Note 1. When patching ramp pavements and two lane pavements with two way traffic, Class PP-2, PP-3, or PP-4 concrete shall be used for Class A, Class B and Class C patching. For all other pavements, Class PP-1, PP-2, PP-3, or PP-4 concrete shall be used, at the Contractor's option, for Class A, Class B and Class C patching."

Delete Note 2 of Article 442.02 of the Standard Specifications.

Add the following to Article 442.02 of the Standard Specifications:

Note 5. The calcium chloride accelerator, when permitted by the Department, shall be Type L (Liquid) with a minimum of 32.0 percent by mass (weight) of calcium chloride."

Revise the first paragraph of Article 442.06(e) of the Standard Specifications to read:

"(e) Concrete Placement. For Class A, Class B and Class C Patches, concrete shall be placed according to Article 420.07 and governed by the limitations set forth in Article 1020.14, except that the maximum temperature of the mixed concrete immediately before placing shall be 35 °C (96 °F), the required use of an approved retarding admixture when the plastic concrete reaches 30 °C (85 °F) shall not apply."

Revise the first paragraph of Article 442.06(h) of the Standard Specifications to read:

"(h) Curing and Protection. In addition to Article 1020.13, when the air temperature is less than 13 °C (55 °F), the Contractor shall cover the patch with minimum R12 insulation until opening strength is reached. Insulation is optional when the air temperature is 13 °C - 35 °C (55 °F - 96 °F). Insulation shall not be placed when the air temperature is greater than 35 °C (96 °F)."

Revise the second paragraph of Article 701.05(e)(1)d.1. of the Standard Specifications to read:

"No open holes, broken pavement, or partially filled holes shall remain overnight for bituminous patching or when the Department specifies only Class PP-2, PP-3, or PP-4 concrete be used. The only exception is conditions beyond the control of the Contractor."

Revise Article 701.05(e)(2)b. of the Standard Specifications to read:

"b. Strength Tests. For patches constructed with Class PP-1, PP-2, PP-3, or PP-4 concrete, the pavement may be opened to traffic when test specimens cured with the patches have obtained a minimum flexural strength of 4150 kPa (600 psi) or a minimum compressive strength of 22,100 kPa (3200 psi) according to Article 1020.09.

For patches constructed with Class PP-2, PP-3, or PP-4 concrete which can obtain a minimum flexural strength of 4150 kPa (600 psi) or a minimum of compressive strength of 22,100 kPa (3200 psi) in 16 hours, the pavement may be opened to traffic at a lower opening strength. The specimens cured with the patches shall have obtained a minimum flexural strength of 2050 kPa (300 psi) or a minimum compressive strength of 11,000 kPa (1600 psi) according to Article 1020.09, to permit opening pavement to traffic.

With the approval of the Engineer, concrete strength may be determined according to AASHTO T 276. The strength-maturity relationship shall be developed from concrete which has an air content near the upper specification limit. The strength-maturity relationship shall be re-established if the mix design or materials are changed."

Revise Article 701.05(e)(2)c. of the Standard Specifications to read:

"c. Construction Operations. For Class PP-2, PP-3, or PP-4 concrete used on ramp pavements and two lane pavements with two way traffic, or when the Department specifies only Class PP-2, PP-3, or PP-4 concrete be used for other pavements, Contractor construction operations shall be performed in a manner which allows the patches to be opened the same day and before nightfall. If patches are not opened before nightfall, the additional traffic control shall be at the Contractor's expense. Any time patches cannot be opened before nightfall, the Contractor shall change subsequent construction operations or the mix design. The changes shall be at no additional cost to the Department."

Revise Table 1 of Article 1020.04 of the Standard Specifications by replacing Class PP concrete with the following:

"TABLE 1. CLASSES OF PORTLAND CEMENT CONCRETE AND MIX DESIGN CRITERIA				
Class of Concrete	Use	Specification Section Reference	Cement Factor kg/cu m (cwt/cu yd)	Max. Water/Cement Ratio kg/kg (lb/lb)
PP-1	PCC Pavement Patching Bridge Deck Patching	442	Type I Cement 385 to 445 (6.50 to 7.50) Type III Cement 365 to 425 (6.20 to 7.20)	0.44
PP-2	PCC Pavement Patching Bridge Deck Patching	442	Type I Cement 435 (7.35)	0.38
PP-3	PCC Pavement Patching Bridge Deck Patching	442	Type III Cement 435 (7.35)	0.35
PP-4	PCC Pavement Patching Bridge Deck Patching	442	Rapid Hardening Cement 355 to 370 (6.00 to 6.25)	0.50

For PP-1, the Contractor has the option to replace the Type I Cement with Class C fly ash or ground granulated blast-furnace slag. The amount of cement replaced shall not exceed 15 percent by mass (weight), at a minimum replacement ratio of 1.5:1.

For PP-2, the Contractor has the option to replace the Type I cement with ground granulated blast-furnace slag. The amount of cement replaced shall not exceed 30 percent by mass (weight), at a minimum replacement ratio of 1:1.

For PP-3, in addition to the cement, 60 kg/cu m (100 lb/cu yd) of ground granulated blast-furnace slag and 30 kg/cu m (50 lb/cu yd) of microsilica are required. For an air temperature greater than 30 °C (85 °F), the Contractor has the option to replace the Type III cement with Type I cement.

For PP-4, the cement shall be from the Department's "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs".

TABLE 1. (CONT'D) CLASSES OF PORTLAND CEMENT CONCRETE AND MIX DESIGN CRITERIA					
Class of Concrete	Slump, mm (in.)	Mix Design Compressive Strength, kPa (psi) Hours 48	Mix Design Flexural Strength, kPa (psi) Hours 48	Air Content, %	Coarse Aggregate Gradations Permitted
PP – 1	100 (4) Max	22,100 (3200)	4150 (600)	4.0 – 7.0	CA-7, CA-11, CA-13, CA14, or CA-16
PP – 2	150 (6) Max	22,100 (3200)	4150 (600)	4.0 – 6.0	CA-7, CA-11, CA-13, CA14, or CA-16
PP – 3	100 (4) Max	22,100 (3200)	4150 (600)	4.0 – 6.0	CA-7, CA-11, CA-13, CA14, or CA-16
PP – 4	150 (6) Max	22,100 (3200)	4150 (600)	4.0 – 6.0	CA-7, CA-11, CA-13, CA14, or CA-16

For PP-1, PP-2, PP-3 or PP-4; only CA-13, CA-14, or CA-16 may be used for bridge deck patching. In addition, the mix design strength at 48 hours shall be increased to 27,500 kPa (4,000 psi) compressive or 4,650 kPa (675 psi) flexural for bridge deck patching.

For PP-1, the slump may be increased to 150 mm (6 in.) Max if a high range water-reducing admixture is used."

Delete Article 1020.05(g) of the Standard Specifications.

80036

# PRECAST CONCRETE PRODUCTS (BDE)

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

<u>Product Approval</u>. Precast concrete products shall be produced according to the Department's current Policy Memorandum, "Quality Control/Quality Assurance Program for Precast Concrete Products". The Policy Memorandum applies to precast concrete products listed under the Products Key of the "Approved List of Certified Precast Concrete Producers".

<u>Precast Concrete Box Culverts</u>. Add the following sentence to the end of the fourth paragraph of Article 540.06:

"After installation, the interior and exterior joint gap between precast concrete box culvert sections shall not exceed 38 mm (1 1/2 in.)."

<u>Portland Cement Replacement</u>. For precast concrete products using Class PC concrete or other mixtures, portland cement replacement with fly ash or ground granulated blast-furnace (GGBF) slag shall be governed by the AASHTO or ASTM standard specification referenced in the Standard Specifications.

For all other precast concrete products using Class PC concrete or other mixtures, portland cement replacement with fly ash or GGBF slag shall be approved by the Engineer. Class F fly ash shall not exceed 15 percent by mass (weight) of the total portland cement and Class F fly ash. Class C fly ash shall not exceed 20 percent by mass (weight) of the total portland cement and Class C fly ash. GGBF slag shall not exceed 25 percent by mass (weight) of the total portland cement and GGBF slag.

Concrete mix designs, for precast concrete products, shall not consist of portland cement, fly ash and GGBF slag.

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

<u>Shipping</u>. When a precast concrete product has attained the specified strength, the earliest the product may be loaded, shipped, and used is on the fifth calendar day. The first calendar day shall be the date casting was completed.

<u>Acceptance</u>. Products which have been lot or piece inspected and approved by the Department prior to July 1, 1999, will be accepted for use on this contract.

419.doc

#### RAP FOR USE IN BITUMINOUS CONCRETE MIXTURES (BDE)

Effective: January 1, 2000 Revised: April 1, 2002

Revise Article 1004.07 to read:

"1004.07 RAP Materials. RAP is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt pavement. RAP must originate from routes or airfields under federal, state or local agency jurisdiction. The Contractor shall supply documentation that the RAP meets these requirements.

- (a) Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP will be allowed on top of the pile after the pile has been sealed.
  - (1) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only and represent the same aggregate quality, but shall be at least C quality or better, the same type of crushed aggregate (either

crushed natural aggregate, ACBF slag, or steel slag), similar gradation and similar AC content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous", with a quality rating dictated by the lowest coarse aggregate quality present in the mixture. Homogenous stockpiles shall meet the requirements of Article 1004.07(d). Homogeneous RAP stockpiles not meeting these requirements may be processed (crushing and screening) and retested.

- (2) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I/ Superpave, or equivalent mixtures only. The coarse aggregate in this RAP shall be crushed aggregate only and may represent more than one aggregate type and/or quality but shall be at least C quality or better. This RAP may have an inconsistent gradation and/or asphalt cement content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 16 mm (5/8 in.) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate RAP stockpiles shall meet the requirements of Article 1004.07(d).
- (3) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP containing coarse aggregate (crushed or round) that is at least D quality or better. This RAP may have an inconsistent gradation and/or asphalt content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department. Conglomerate DQ RAP shall meet the requirements of Article 1004.07(d).
  - Reclaimed Superpave Low ESAL IL-9.5L surface mixtures shall only be placed in conglomerate DQ RAP stockpiles due to the potential for rounded aggregate.
- (4) Other. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Other". "Other" RAP stockpiles shall not be used in any of the Department's bituminous mixtures.
- (b) Use. The allowable use of a RAP stockpile shall be set by the lowest quality of coarse aggregate in the RAP stockpile. Class I/Superpave surface mixtures are designated as containing Class B quality coarse aggregate only. Superpave Low ESAL IL-19.0L binder and IL-9.5L surface mixtures are designated as Class C quality coarse aggregate only. Class I/Superpave binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate only. Bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate only. Any mixture not listed above shall have the designated quality determined by the Department.

RAP containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in Class I/Superpave (including Low ESAL) surface mixtures only. RAP stockpiles for use in Class I/Superpave mixtures (including Low ESAL), base course, base course widening and Class B mixtures shall be either homogeneous or conglomerate RAP stockpiles except conglomerate RAP stockpiles shall not be used in Superpave surface mixture Ndesign

50 or greater. RAP for use in bituminous aggregate mixtures (BAM) shoulders and BAM stabilized subbase shall be from homogeneous, conglomerate, or conglomerate DQ stockpiles.

Additionally, RAP used in Class I/Superpave surface mixtures shall originate from milled or crushed mixtures only, in which the coarse aggregate is of Class B quality or better. RAP stockpiles for use in Class I/Superpave (including Low ESAL) binder mixes as well as base course, base course widening and Class B mixtures shall originate from milled or processed surface mixture, binder mixture, or a combination of both mixtures uniformly blended to the satisfaction of the Engineer, in which the coarse aggregate is of Class C quality or better.

- (c) Contaminants. RAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.
- (d) Testing. All RAP shall be sampled and tested either during or after stockpiling.

For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 450 metric tons (500 tons) for the first 1800 metric tons (2,000 tons) and one sample per 1800 metric tons (2,000 tons) thereafter. A minimum of five tests shall be required for stockpiles less than 3600 metric tons (4,000 tons).

For testing existing stockpiles, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP pile either insitu or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to extract representative samples throughout the pile for testing.

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

All of the extraction results shall be compiled and averaged for asphalt content and gradation. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	Homogeneous / Conglomerate	Conglomerate "D" Quality
25 mm (1 in.)		± 5%
12.5 mm (1/2 in.)	± 8%	± 15%
4.75 mm (No. 4)	± 6%	± 13%
2.36 mm (No. 8)	± 5%	
1.18 mm (No. 16)		± 15%
600 μm (No. 30)	± 5%	
75 μm (No. 200)	± 2.0%	± 4.0%
AC	± 0.4%	± 0.5%

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

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

(e) Designs. At the Contractor's option, bituminous concrete mixtures may be constructed utilizing RAP material meeting the above detailed requirements. The amount of RAP included in the mixture shall not exceed the percentages specified in the plans.

RAP designs shall be submitted for volumetric verification. If additional RAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP stockpile and design, and meets all of the requirements herein, the additional RAP stockpiles may be used in the original mix design at the percent previously verified.

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

To remove or reduce agglomerated material, a scalping screen, crushing unit or comparable sizing device approved by the Engineer shall be used in the RAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If the RAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP and either switch to the virgin aggregate design or submit a new RAP design.

80011

# **SEEDING AND SODDING (BDE)**

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

Revise Class 1A and 2A seeding mixtures shown in Table 1 of Article 250.07 of the Standard Specifications to read:

"Table 1 - SEEDING MIXTURES				
Class – Type		Seeds	kg/hectare (lb/acre)	
1A	A Salt Tolerant Bluegrass		70 (60)	
	Lawn Mixture 7/	Perennial Ryegrass	20 (20)	
		Audubon Red Fescue	20 (20)	
		Rescue 911 Hard Fescue	20 (20)	
		Fults Salt Grass*	70 (60)	
2A	Salt Tolerant	Alta Fescue or Ky 31	70 (60)	
	Roadside Mixture 7/	Perennial Ryegrass	20 (20)	
		Audubon Red Fescue	20 (30)	
		Rescue 911 Hard Fescue	20 (30)	
		Fults Salt Grass 1/	70 (60)"	

Revise Note 7 of Article 250.07 of the Standard Specifications to read:

"Note 7. In Districts 1 through 6, the planting times shall be April 1 to June 15 and August 1 to November 1. In Districts 7 through 9, the planting times shall be March 1 to June 1 and August 1 to November 15. Seeding may be performed outside these dates provided the Contractor guarantees a minimum of 75 percent uniform growth over the entire seeded area(s) after one growing season. The guarantee shall be submitted to the Engineer in writing prior to performing the work. After one growing season, areas not sustaining 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at the Contractor's expense."

Add the following sentence to Article 252.04 of the Standard Specifications:

"Sod shall not be placed during the months of July and August."

Revise the first paragraph of Article 252.08 of the Standard Specifications to read:

"252.08 Sod Watering. Within two hours after the sod has been placed, water shall be applied at a rate of 25 L/sq m (5 gal/sq yd). Additional water shall be applied every other day at a rate of 15 L/sq m (3 gal/sq yd) for a total of 15 additional waterings. During periods exceeding 26 °C (80 °F) or subnormal rainfall, the schedule of additional waterings may be altered with the approval of the Engineer."

Revise Article 252.09 of the Standard Specifications to read:

"252.09 Supplemental Watering. During periods exceeding 26 °C (80 °F) or subnormal rainfall, supplemental watering may be required after the initial and additional waterings. Supplemental watering shall be performed when directed by the Engineer. Water shall be applied at the rate specified by the Engineer within 24 hours of notice."

Revise the first and third paragraphs of Article 252.12 of the Standard Specifications to read:

"252.12 Method of Measurement. Sodding will be measured for payment in place and the area computed in square meters (square yards). To be acceptable for final payment, the sod shall be growing in place for a minimum of 30 days in a live, healthy condition. When directed by the Engineer, any defective or unacceptable sod shall be removed, replaced and watered by the Contractor at his/her own expense."

"Supplemental watering will be measured for payment in units of 1000 L (1000 gal) of water applied on the sodded areas. Waterings performed in addition to those required by Article 252.08 or after the 30 day establishment period will be considered as supplemental watering."

Replace the first paragraph of Article 252.13 of the Standard Specifications with the following:

- "252.13 Basis of Payment. Sodding will be paid for at the contract unit price per square meter (square yard) for SODDING or SODDING, SALT TOLERANT according to the following schedule.
  - (a) Initial Payment. Upon placement of sod, 25 percent of the pay item will be paid.
  - (b) Final Payment. Upon acceptance of sod, the remaining 75 percent of the pay item will be paid."

Revise Article 1081.03(b) of the Standard Specifications to read:

"(b) Salt Tolerant Sod.

Variety	Percent by Weight
Buffalo Grass	30%
Buchloe Dactyloides	
Amigo Fineleaf Tall Fescue	20%
Audubon Red Fescue	15%
Rescue 911 Hard Fescue	15%
Rugby Kentucky Bluegrass	5%
Fults Pucinnellia Distans	15%"

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

TABLE II							
					Secondary		
	Hard Seed	Purity	Pure, Live	Weed	Noxious Weeds		
	Percent	Percent	Seed Percent	Percent	No. per kg (oz)		
Variety of Seeds	Maximum	Minimum	Minimum	Maximum	Max. Permitted*	Remarks	
Alfalfa	20	92	89	0.50	211 (6)	1/	
Brome Grass	-	90	75	0.50	175 (5)	-	
Clover, Alsike	15	92	87	0.30	211 (6)	2/	
Clover, Crimson	15	92	83	0.50	211 (6)	-	
Clover, Ladino	15	92	87	0.30	211 (6)	-	
Clover, Red	20	92	87	0.30	211 (6)	-	
Clover, White Dutch	30	92	87	0.30	211 (6)	3/	
Audubon Red Fescue	0	97	82	0.10	105 (3)	-	
Fescue, Alta or Ky. 31	-	97	82	1.00	105 (3)	-	
Fescue, Creeping Red	-	97	82	1.00	105 (3)	-	
Fults Salt Grass	0	98	85	0.10	70 (2)	-	
Kentucky Bluegrass	-	97	80	0.30	247 (7)	5/	
Lespedeza, Korean	20	92	84	0.50	211 (6)	3/	
Oats	-	92	88	0.50	70 (2)	4/	
Orchard Grass	-	90	78	1.50	175 (5)	4/	
Redtop	-	90	78	1.80	175 (5)	4/	
Ryegrass, Perennial, Annual	-	97	85	0.30	175 (5)	4/	
Rye, Grain, Winter	-	92	83	0.50	70 (2)	4/	
Rescue 911 Hard Fescue	0	97	82	0.10	105 (3)	<b>-</b> .	
Timothy	-	92	84	0.50	175 (5)	4/	
Vetch, Crown	30	92	67	1.00	211 (6)	3/ & 6/	
Vetch, Spring	30	92	88	1.00	70 (2)	4/	
Vetch, Winter	15	92	83	1.00	105 (3)	4/	
Wheat, hard Red Winter	-	92	89	0.50	70 (2)	4/	

80131

# SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004

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

<u>Usage</u>. Self-consolidating concrete may be used for precast concrete products. The design and testing of a self-consolidating concrete mixture shall be according to Section 1020 of the Standard Specifications except as modified herein.

<u>Materials</u>. Materials shall conform to the following requirements:

(a) <u>Self-Consolidating Admixtures</u>. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a flowable concrete that does not require mechanical vibration.

The high range water-reducing admixture shall comply with the requirements of AASHTO M 194, Type F.

The viscosity modifying admixture will be evaluated according to the test methods and mix design proportions referenced in AASHTO M 194, except the following physical requirements shall be met:

- (1) For initial and final set times, the allowable deviation of the test concrete from the reference concrete shall not be more than 1.0 hour earlier or 1.5 hours later.
- (2) For compressive and flexural strengths, the test concrete shall be a minimum of 90 percent of the reference concrete at 3, 7 and 28 days.
- (3) The length change of the test concrete shall be a maximum 135 percent of the reference concrete. However, if the length change of the reference concrete is less than 0.030 percent, the length change of the test concrete shall be a maximum 0.010 percentage units greater than the reference concrete.
- (4) The relative durability factor of the test concrete shall be a minimum 80 percent.
- (b) <u>Fine Aggregate</u>. A fine aggregate used alone in the mix design shall not have an expansion greater than 0.30 percent per ASTM C 1260. For a blend of two or more fine aggregates, the resulting blend shall not have an expansion greater than 0.30 percent.

The aggregate blend expansion will be calculated as follows:

Aggregate Blend Expansion =  $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$ etc.

Where: a, b, c, ... = percent of aggregate blend A, B, C, ... = aggregate expansion according to ASTM C 1260

Mix Design Criteria. The slump requirements of Article 1020.04 of the Standard Specifications shall not apply. In addition, the allowable coarse aggregate gradations shall be CA 11, CA 13, CA 14, CA 16, or a blend of these gradations. The fine aggregate proportion shall be a maximum 50 percent by mass (weight) of the total aggregate used.

<u>Trail Batch</u>. A minimum 1 cu m (1 cu yd) trial batch shall be produced. The mixture will be evaluated for air content, slump flow, visual stability index, compressive strength, passing ability, and static/dynamic segregation resistance.

The trial batch shall be scheduled and performed in the presence of the Engineer. Testing shall be performed per the Department's test method or as approved by the Engineer.

For the trial batch, the air content shall be within the top half of the allowable specification range. The slump flow range shall be 510 mm (20 in.) minimum to 710 mm (28 in.) maximum. The visual stability index shall be a maximum of 1. Strength shall be determined at 28 days. At the Contractor's option, strength may be determined for additional days.

Passing ability and static/dynamic segregation resistance shall be determined by tests selected by the Contractor and approved by the Engineer. The visual stability index shall not be used as the sole criteria for evaluating static segregation resistance.

After an acceptable mixture has been batched and tested, the mixture shall also be evaluated for robustness. Robustness shall be evaluated by varying the dosage of the self-consolidating admixture system and water separately. Additional trial batches may be necessary to accomplish this.

When necessary, the trial batches shall be disposed of according to Article 202.03 of the Standard Specifications.

<u>Quality Control</u>. Once testing is completed and acceptable results have been attained, production test frequencies and allowable test ranges for slump flow, visual stability index, passing ability, and static/dynamic segregation resistance shall be proposed. The production test frequencies and allowable test ranges will be approved by the Engineer.

The slump flow range shall be  $\pm$  50 mm ( $\pm$  2 in.) of the target value, and within the overall range of 510 mm (20 in.) minimum to 710 mm (28 in.) maximum. The visual stability index shall be a maximum of 1. The approved test ranges for passing ability and static/dynamic segregation resistance will be based on recommended guidelines determined by the Engineer.

80132

# SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

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

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

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

80143

## SUPERPAVE BITUMINOUS CONCRETE MIXTURES (BDE)

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

<u>Description</u>. This work shall consist of designing, producing and constructing Superpave bituminous concrete mixtures using Illinois Modified Strategic Highway Research Program (SHRP) Superpave criteria. This work shall be according to Sections 406 and 407 of the Standard Specifications and the special provision, "Quality Control/Quality Assurance of Bituminous Concrete Mixtures", except as follows.

#### Materials.

- (a) Fine Aggregate Blend Requirement. The Contractor may be required to provide FA 20 manufactured sand to meet the design requirements. For mixtures with Ndesign ≥ 90, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation.
- (b) Reclaimed Asphalt Pavement (RAP). If the Contractor is allowed to use more than 15 percent RAP, as specified in the plans, a softer performance-graded binder may be required as determined by the Engineer.

RAP shall meet the requirements of the special provision, "RAP for Use in Bituminous Concrete Mixtures".

RAP will not be permitted in mixtures containing polymer modifiers.

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

(c) Bituminous Material. The asphalt cement (AC) shall be performance-graded (PG) or polymer modified performance-graded (SBS-PG or SBR-PG) meeting the requirements of Article 1009.05 of the Standard Specifications for the grade specified on the plans.

The following additional guidelines shall be used if a polymer modified asphalt is specified:

- (1) The polymer modified asphalt cement shall be shipped, maintained, and stored at the mix plant according to the manufacturer's requirements. Polymer modified asphalt cement shall be placed in an empty tank and shall not be blended with other asphalt cements.
- (2) The mixture shall be designed using a mixing temperature of  $163 \pm 3$  °C ( $325 \pm 5$  °F) and a gyratory compaction temperature of  $152 \pm 3$  °C ( $305 \pm 5$  °F).
- (3) Pneumatic-tired rollers will not be allowed unless otherwise specified by the Engineer. A vibratory roller meeting the requirements of Article 406.16 of the Standard Specifications shall be required in the absence of the pneumatic-tired roller.

# Laboratory Equipment.

- (a) Superpave Gyratory Compactor. The superpave gyratory compactor (SGC) shall be used for all QC/QA testing.
- (b) Ignition Oven. The ignition oven shall be used to determine the AC content. The ignition oven shall also be used to recover aggregates for all required washed gradations.

The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the AC content.

<u>Mixture Design</u>. The Contractor shall submit mix designs, for approval, for each required mixture. Mix designs shall be developed by Level III personnel who have successfully completed the course, "Superpave Mix Design Upgrade". Articles 406.10 and 406.13 of the Standard Specifications shall not apply. The mixtures shall be designed according to the respective Illinois Modified AASHTO references listed below.

AASHTO MP 2	Standard Specification for Superpave Volumetric Mix Design
AASHTO R 30	Standard Practice for Mixture Conditioning of Hot-Mix Asphalt (HMA)
AASHTO PP 28	Standard Practice for Designing Superpave HMA
AASHTO T 209	Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
AASHTO T 312	Preparing and Determining the Density of Hot Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
AASHTO T 308	Determining the Asphalt Content of Hot Mix Asphalt (HMA) by the Ignition Method

(a) Mixture Composition. The ingredients of the bituminous mixture shall be combined in such proportions as to produce a mixture conforming to the composition limits by weight. The gradation mixture specified on the plans shall produce a mixture falling within the limits specified in Table 1.

TABLE 1. MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>									
Sieve	i	0 mm		0 mm		5 mm <sup>4/</sup>	IL-9.5 mm <sup>4/</sup>		
Size	min	max	min	max	Min	max	min	max	
37.5 mm (1 1/2 in.)		100							
25 mm (1 in.)	90	100		100					
19 mm (3/4 in.)		90	82	100		100			
12.5 mm (1/2 in.)	45	75	50	85	90	100		100	
9.5 mm (3/8 in.)						89	90	100	
4.75 mm (#4)	24	42 <sup>2/</sup>	24	50 <sup>2/</sup>	28	65	28	65	
2.36 mm (#8)	16	31	20	36	28	48 <sup>3/</sup>	28	48 <sup>3/</sup>	
1.18 mm (#16)	10	22	10	25	10	32	10	32	
600 μm (#30)									
300 μm (#50)	4	12	4	12	4	15	4	15	
150 μm (#100)	3	9	3	9	3	10	3	10	
75 μm (#200)	3	6	3	6	4	6	4	6	

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 40 percent passing the 4.75 mm (#4) sieve for binder courses with Ndesign ≥ 90.
- 3/ The mixture composition shall not exceed 40 percent passing the 2.36 mm (#8) sieve for surface courses with Ndesign  $\geq$  90.
- 4/ The mixture composition for surface courses shall be according to IL-12.5 mm or IL-9.5 mm, unless otherwise specified by the Engineer.

One of the above gradations shall be used for leveling binder as specified in the plans and according to Article 406.04 of the Standard Specifications.

It is recommended that the selected combined aggregate gradation not pass through the restricted zones specified in Illinois Modified AASHTO MP 2.

- (b) Dust/AC Ratio for Superpave. The ratio of material passing the 75  $\mu$ m (#200) sieve to total asphalt cement shall not exceed 1.0 for mixture design (based on total weight of mixture).
- (c) Volumetric Requirements. The target value for the air voids of the hot mix asphalt (HMA) shall be 4.0 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix and shall conform to the requirements listed in Table 2.

TABLE 2. VOLUMETRIC REQUIREMENTS								
	V	oids in the M (V % m	Voids Filled with Asphalt (VFA),					
Ndesign	IL-25.0	IL-19.0	%					
50					65 - 78			
70	12.0	13.0	14.0	15				
90	12.0	13.0	14.0	15	65 - 75			
105								

(d) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified T 283 using 4 in. Marshall bricks. To be considered acceptable by the Department as a mixture not susceptible to stripping, the ratio of conditioned to unconditioned split tensile strengths (TSRs) shall be equal to or greater than 0.75. Mixtures, either with or without an additive, with TSRs less than 0.75 will be considered unacceptable.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option. The liquid additive shall be selected from the Department's list of approved additives and may be limited to those which have exhibited satisfactory performance in similar mixes.

Dry hydrated lime shall be added at a rate of 1.0 to 1.5 percent by weight of total dry aggregate. Slurry shall be added in such quantity as to provide the required amount of hydrated lime solids by weight of total dry aggregate. The exact rate of application for all anti-stripping additives will be determined by the Department. The method of application shall be according to Article 406.12 of the Standard Specifications.

<u>Personnel</u>. The QC Manager and Level I Technician shall have successfully completed the Department's "Superpave Field Control Course".

Required Plant Tests. Testing shall be conducted to control the production of the bituminous mixture. The Contractor shall use the test methods identified to perform the following mixture tests at a frequency not less than that indicated in Table 3.

	TABLE 3. REQUIRED PLANT TESTS for SUPERPAVE							
P	arameter	Frequency of Tests	Test Method					
Hot	ate Gradation bins for batch and tinuous plants	dry gradation per day of production (either morning or afternoon sample).  And	Illinois Procedure (See Manual of Test Procedures for Materials).					
con	vidual cold-feeds or nbined belt-feed for r drum plants.	1 washed ignition oven test on the mix per day of production (conduct in afternoon if dry gradation is conducted in the morning or vice versa).						
12.5 mr 4.75 mr 2.36 mr 600 µm	sing sieves: n (1/2 in.), n (No. 4), n (No. 8), (No. 30), No. 200))	NOTE. The order in which the above tests are conducted shall alternate from the previous production day (example: a dry gradation conducted in the morning will be conducted in the afternoon on the next production day and so forth).						
		The dry gradation and washed ignition oven test results shall be plotted on the same control chart.						
	Content by Ignition Note 1.)	1 per half day of production	Illinois Modified AASHTO T 308					
Air Voids	Bulk Specific Gravity of Gyratory Sample	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	Illinois Modified AASHTO T 312					
	Maximum Specific Gravity of Mixture	, , , , , , , , , , , , , , , , , , , ,	Illinois Modified AASHTO T 209					

Note 1. The Engineer may waive the ignition oven requirement for AC content if the aggregates to be used are known to have ignition AC content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the AC content.

During production, the ratio of minus 75  $\mu$ m (#200) sieve material to total asphalt cement shall be not less than 0.6 nor more than 1.2 and the moisture content of the mixture at discharge from the mixer shall not exceed 0.5 percent. If at any time the ratio of minus 75  $\mu$ m (#200) material to asphalt or moisture content of the mixture falls outside the stated limits, production of the mix shall cease. The cause shall be determined and corrective action satisfactory to the Engineer shall be initiated prior to resuming production.

During production, mixtures containing an anti-stripping additive will be tested by the Department for stripping according to Illinois Modified T 283. If the mixture fails to meet the TSR criteria for acceptance, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria.

#### Construction Requirements

# Lift Thickness.

(a) Binder and Surface Courses. The minimum compacted lift thickness for constructing bituminous concrete binder and surface courses shall be according to Table 4:

TABLE 4 – MINIMUM COMPACTED LIFT THICKNESS						
Mixture	Thickness, mm (in.)					
IL-9.5	32 (1 1/4)					
IL-12.5	38 (1 1/2)					
IL-19.0	57 (2 1/4)					
IL-25.0	76 (3)					

(b) Leveling Binder. Mixtures used for leveling binder shall be as follows:

TABLE 5 – LEVELING BINDER								
Nominal, Compacted, Leveling	Mixture							
Binder Thickness, mm (in.)								
≤ 32 (1 1/4)	IL-9.5							
32 (1 1/4) to 50 (2)	IL 9.5 or IL-12.5							

Density requirements shall apply for leveling binder when the nominal, compacted thickness is 32 mm (1 1/4 in.) or greater for IL-9.5 mixtures and 38 mm (1 1/2 in.) or greater for IL-12.5 mixtures.

(c) Full-Depth Pavement. The compacted thickness of the initial lift of binder course shall be 100 mm (4 in.). The compacted thickness of succeeding lifts shall meet the minimums specified in Table 4 but not exceed 100 mm (4 in.).

If a vibratory roller is used for breakdown, the compacted thickness of the binder lifts, excluding the top lift, may be increased to 150 mm (6 in.) provided the required density is obtained.

(d) Bituminous Patching. The minimum compacted lift thickness for constructing bituminous patches shall be according to Table 4.

<u>Control Charts/Limits</u>. Control charts/limits shall be according to QC/QA Class I requirements, except density shall be plotted on the control charts within the following control limits:

TABLE 6. DENSITY CONTROL LIMITS							
Mixture	Individual Test						
12.5 mm / 9.5 mm	Ndesign ≥ 90	92.0 – 96.0%					
12.5 mm / 9.5 mm	Ndesign < 90	92.5 – 97.4%					
19.0 mm / 25.0 mm	Ndesign ≥ 90	93.0 – 96.0%					
19.0 mm / 25.0 mm	Ndesign < 90	93.0 – 97.4%					

<u>Basis of Payment</u>. On resurfacing projects, this work will be paid for at the contract unit price per metric ton (ton) for BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, of the friction aggregate mixture and Ndesign specified, LEVELING BINDER (HAND METHOD), SUPERPAVE, of the Ndesign specified, LEVELING BINDER (MACHINE METHOD), SUPERPAVE, of the Ndesign specified, and BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition and Ndesign specified.

On resurfacing projects in which polymer modifiers are required, this work will be paid for at the contract unit price per metric ton (ton) for POLYMERIZED BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, of the friction aggregate mixture and Ndesign specified, POLYMERIZED LEVELING BINDER (HAND METHOD), SUPERPAVE, of the Ndesign specified, POLYMERIZED LEVELING BINDER (MACHINE METHOD), SUPERPAVE, of the Ndesign specified, and POLYMERIZED BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition and Ndesign specified.

On full-depth pavement projects, this work will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE PAVEMENT, (FULL-DEPTH), SUPERPAVE, of the thickness specified.

On projects where widening is constructed and the entire pavement is then resurfaced, the binder for the widening will be paid for at the contract unit price per square meter (square yard) for BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, of the mixture composition, Ndesign, and thickness specified. The surface and binder used to resurface the entire pavement will be paid for according to the paragraphs above for resurfacing projects.

80010

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

Effective: November 1, 2002

Revise the fifth sentence of the third paragraph of Article 280.04(a) of the Standard Specifications to read:

"This work may be constructed of hay or straw bales, extruded UV resistant high density polyethylene panels, erosion control blanket, mulch barrier, aggregate barriers, excavation, seeding, or mulch used separately or in combination, as approved, by the Engineer."

Add the following paragraphs after the fifth paragraph of Article 280.04(a) of the Standard Specifications.

"A ditch check constructed of extruded, UV resistant, high density polyethylene panels, "M" pins and erosion control blanket shall consist of the following materials:

Extruded, UV resistant, high density polyethylene panels shall have a minimum height of 250 mm (10 in.) and minimum length of 1.0 m (39.4 in.). The panels shall have a 51 mm (2 in.) lip along the bottom of the panel. Each panel shall have a single rib thickness of 4 mm (5/32 in.) with a 12 mm (1/2 in.) distance between the ribs. The panels shall have an average apparent opening size equal to 4.75 mm (No. 4) sieve, with an average of 30 percent open area. The tensile strength of each panel shall be 26.27 kN/m (1800 lb/ft) in the machine direction and 7.3 kN/m (500 lb/ft) in the transverse direction when tested according to ASTM D 4595.

"M" pins shall be at least 76 mm (3 in.) by 686 mm (27 in.), constructed out of deformed grade C1008 D3.5 rod (0.211 in. diameter). The rod shall have a minimum tensile strength of 55 MPa (8000 psi).

Erosion control blanket shall conform to Article 251.04.

A section of erosion control blanket shall be placed transverse to the flowline direction of the ditch prior to the construction of the polyethylene ditch check. The length of the section shall extend from the top of one side of the ditch to the top of the opposite side of the ditch, while the width of the section shall be one roll width of the blanket. The upstream edge of the erosion control blanket shall be secured in a 100 mm (4 in.) trench. The blanket shall be secured in the trench with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge before the trench is backfilled. Once the upstream edge of the blanket is secured, the downstream edge shall be secured with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge. The polyethylene ditch check shall be installed in the middle of the erosion control blanket, with the lip of each panel facing outward.

The ditch check shall consist of two panels placed back to back forming a single row. Placement of the first two panels shall be at the toe of the backslope or sideslope, with the panels extending across the bottom of the ditch. Subsequent panels shall extend both across the bottom of the ditch and up the opposite sideslope, as well as up the original backslope or sideslope at the distance determined by the Engineer.

The M pins shall be driven through the panel lips to secure the panels to the ground. M pins shall be installed in the center of the panels with adjacent panels overlapping the ends a minimum of 50 mm (2 in.). The pins shall be placed through both sets of panels at each overlap. They shall be installed at an interval of three M pins per one meter (39 in.) length of ditch check. The panels shall be wedged into the M pins at the top to ensure firm contact between the entire bottom of the panels and the soil."

80087

#### TRAFFIC CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 1992 Revised: January 1, 2005

To ensure a prompt response to incidents involving the integrity of work zone traffic control, the Contractor shall provide a telephone number where a responsible individual can be contacted 24 hours-a-day.

When the Engineer is notified, or determines a traffic control deficiency exists, he/she will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 12 hours based upon the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge.

A deficiency may be any lack of repair, maintenance, or non-compliance with the traffic control plan. A deficiency may also be applied to situations where corrective action is not an option such as the use of non-certified flaggers for short term operations; working with lane closures beyond the time allowed in the contract; or failure to perform required contract obligations such as traffic control surveillance.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The daily monetary deduction will be either \$1,000 or 0.05 percent of the awarded contract value, whichever is greater. For those deficiencies where corrective action was not an option this monetary deduction will be immediate.

In addition, if the Contractor fails to respond, the Engineer may correct the deficiency and the cost thereof will be deducted from monies due or which may become due the Contractor. This corrective action will in no way relieve the Contractor of his/her contractual requirements or responsibilities.

57291

#### TRUCK BED RELEASE AGENT (BDE)

Effective: April 1, 2004

Add the following sentence after the third sentence of the first paragraph of Article 406.14 of the Standard Specifications.

"In addition to the release agent, the Contractor may use a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle."

80123

#### WEIGHT CONTROL DEFICIENCY DEDUCTION

Effective: April 1, 2001 Revised: August 1, 2002

The Contractor shall provide accurate weights of materials delivered to the contract for incorporation into the work (whether temporary or permanent) and for which the basis of

payment is by weight. These weights shall be documented on delivery tickets which shall identify the source of the material, type of material, the date and time the material was loaded, the contract number, the net weight, the tare weight when applicable and the identification of the transporting vehicle. For aggregates, the Contractor shall have the driver of the vehicle furnish or establish an acceptable alternative to provide the contract number and a copy of the material order to the source for each load. The source is defined as that facility that produces the final material product that is to be incorporated into the contract pay items.

The Department will conduct random, independent vehicle weight checks for material sources according to the procedures outlined in the Documentation Section Policy Statement of the Department's Construction Manual and hereby incorporated by reference. The results of the independent weight checks shall be applicable to all contracts containing this Special Provision. Should the vehicle weight check for a source result in the net weight of material on the vehicle exceeding the net weight of material shown on the delivery ticket by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. No adjustment in pay quantity will be made. Should the vehicle weight check for a source result in the net weight of material shown on the delivery ticket exceeding the net weight of material on the vehicle by 0.50% (0.70% for aggregates) or more, the Engineer will document the independent vehicle weight check and immediately furnish a copy of the results to the Contractor. The Engineer will adjust the net weight shown on the delivery ticket to the checked delivered net weight as determined by the independent vehicle weight check.

The Engineer will also adjust the method of measurement for all contracts for subsequent deliveries of all materials from the source based on the independent weight check. The net weight of all materials delivered to all contracts containing this Special Provision from this source, for which the basis of payment is by weight, will be adjusted by applying a correction factor "A" as determined by the following formula:

$$A=1.0-\left(\frac{B-C}{B}\right); \mbox{ Where } \ A\leq 1.0 \ ; \ \left(\frac{B-C}{C}\right)>0.50\% \ \mbox{ (0.70\% for aggregates)}$$

Where A = Adjustment factor

B = Net weight shown on delivery ticket

C = Net weight determined from independent weight check

The adjustment factor will be applied as follows:

Adjusted Net Weight =  $A \times Delivery Ticket Net Weight$ 

The adjustment factor will be imposed until the cause of the deficient weight is identified and corrected by the Contractor to the satisfaction of the Engineer. If the cause of the deficient weight is not identified and corrected within seven (7) calendar days, the source shall cease delivery of all materials to all contracts containing this Special Provision for which the basis of payment is by weight.

Should the Contractor elect to challenge the results of the independent weight check, the Engineer will continue to document the weight of material for which the adjustment factor would

be applied. However, provided the Contractor furnishes the Engineer with written documentation that the source scale has been calibrated within seven (7) calendar days after the date of the independent weight check, adjustments in the weight of material paid for will not be applied unless the scale calibration demonstrates that the source scale was not within the specified Department of Agriculture tolerance.

At the Contractor's option, the vehicle may be weighed on a second independent Department of Agriculture certified scale to verify the accuracy of the scale used for the independent weight check.

80048

## **WORK ZONE TRAFFIC CONTROL DEVICES (BDE)**

Effective: January 1, 2003 Revised: November 1, 2004

Add the following to Article 702.01 of the Standard Specifications:

"All devices and combinations of devices shall meet the requirements of the National Cooperative Highway Research Program (NCHRP) Report 350 for their respective categories. The categories are as follows:

Category 1 includes small, lightweight, channelizing and delineating devices that have been in common use for many years and are known to be crashworthy by crash testing of similar devices or years of demonstrable safe performance. These include cones, tubular markers, flexible delineators and plastic drums with no attachments. Category 1 devices shall be crash tested and accepted or may be self-certified by the manufacturer.

Category 2 includes devices that are not expected to produce significant vehicular velocity change but may otherwise be hazardous. These include drums and vertical panels with lights, barricades and portable sign supports. Category 2 devices shall be crash tested and accepted for Test Level 3.

Category 3 includes devices that are expected to cause significant velocity changes or other potentially harmful reactions to impacting vehicles. These include crash cushions, truck mounted attenuators and other devices not meeting the definitions of Category 1 or 2. Category 3 devices shall be crash tested and accepted for either Test Level 3 or the test level specified.

Category 4 includes portable or trailer-mounted devices such as arrow boards, changeable message signs, temporary traffic signals and area lighting supports. Currently, there is no implementation date set for this category and it is exempt from the NCHRP 350 compliance requirement.

The Contractor shall provide a manufacturer's self-certification letter for each Category 1 device and an FHWA acceptance letter for each Category 2 and Category 3 device used on the contract. The letters shall state the device meets the NCHRP 350 requirements for its respective category and test level, and shall include a detail drawing of the device."

Delete the third, fourth and fifth paragraphs of Article 702.03(b) of the Standard Specifications.

Delete the third sentence of the first paragraph of Article 702.03(c) of the Standard Specifications.

Revise the first sentence of the first paragraph of Article 702.03(e) of the Standard Specifications to read:

"Drums shall be nonmetallic and have alternating reflectorized Type AA or Type AP fluorescent orange and reflectorized white horizontal, circumferential stripes."

Add the following to Article 702.03 of the Standard Specifications:

"(h) Vertical Barricades. Vertical barricades may be used in lieu of cones, drums or Type II barricades to channelize traffic."

Delete the fourth paragraph of Article 702.05(a) of the Standard Specifications.

Revise the sixth paragraph of Article 702.05(a) of the Standard Specifications to read:

"When the work operations exceed four days, all signs shall be post mounted unless the signs are located on the pavement or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at 1.2 m (5 ft) minimum where posts are impractical. Longitudinal dimensions shown on the plans for the placement of signs may be increased up to 30 m (100 ft) to avoid obstacles, hazards or to improve sight distance, when approved by the Engineer. "ROAD CONSTRUCTION AHEAD" signs will also be required on side roads located within the limits of the mainline "ROAD CONSTRUCTION AHEAD" signs."

Delete all references to "Type 1A barricades" and "wing barricades" throughout Section 702 of the Standard Specifications.

80097

## ILLINOIS DEPARTMENT OF LABOR

# PREVAILING WAGES FOR MASON COUNTY EFFECTIVE JULY 2005

The Prevailing rates of wages are included in the Contract proposals which are subject to Check Sheet #5 of the Supplemental Specifications and Recurring Special Provisions. The rates have been ascertained and certified by the Illinois Department of Labor for the locality in which the work is to be performed and for each craft or type of work or mechanic needed to execute the work of the Contract. As required by Prevailing Wage Act (820 ILCS 130/0.01, et seq.) and Check Sheet #5 of the Contract, not less than the rates of wages ascertained by the Illinois Department of Labor and as revised during the performance of a Contract shall be paid to all laborers, workers and mechanics performing work under the Contract. Post the scale of wages in a prominent and easily accessible place at the site of work.

If the Illinois Department of Labor revises the prevailing rates of wages to be paid as listed in the specification of rates, the contractor shall post the revised rates of wages and shall pay not less than the revised rates of wages. Current wage rate information shall be obtained by visiting the Illinois Department of Labor web site at <a href="http://www.state.il.us/agency/idol/">http://www.state.il.us/agency/idol/</a> or by calling 312-793-2814. It is the responsibility of the contractor to review the rates applicable to the work of the contract at regular intervals in order to insure the timely payment of current rates. Provision of this information to the contractor by means of the Illinois Department of Labor web site satisfies the notification of revisions by the Department to the contractor pursuant to the Act, and the contractor agrees that no additional notice is required. The contractor shall notify each of its subcontractors of the revised rates of wages.

# **Mason County Prevailing Wage for July 2005**

Trade Name		TYP C		FRMAN *				•	Pensn	Vac	Trng
ASBESTOS ABT-GEN		BLD		22.960					5.530		
ASBESTOS ABT-MEC		BLD	24.010	25.010	1.5				4.320		
BOILERMAKER		BLD	28.970	31.970	2.0	2.0	2.0	7.020	6.600	0.000	0.210
BRICK MASON		BLD	23.670	24.420	2.0	2.0	2.0	5.750	6.500	0.000	0.475
CARPENTER		BLD		26.720					6.420		
CARPENTER		HWY		26.100					6.420		
CEMENT MASON		BLD		23.430					8.650		
CEMENT MASON CERAMIC TILE FNSHER		HWY BLD	22.480	22.980		1.5 1.5			8.650 6.500		
ELECTRIC PWR EOMT OP		ALL		34.100		1.5			7.790		
ELECTRIC PWR GRNDMAN		ALL		34.100		1.5			5.340		
ELECTRIC PWR LINEMAN		ALL		34.100		1.5			8.650		
ELECTRIC PWR TRK DRV		ALL	20.760	34.100	1.5	1.5	2.0	4.500	5.600	0.000	0.000
ELECTRICIAN	N	BLD	28.030	29.530	1.5	1.5	2.0	5.150	7.385	0.000	0.250
ELECTRICIAN	S	BLD		32.270					4.560		
ELECTRONIC SYS TECH		BLD		23.250					4.905		
ELEVATOR CONSTRUCTOR		BLD		35.030					3.420		
GLAZIER HT/FROST INSULATOR		BLD	25.430	0.000					3.230 7.360		
IRON WORKER	N	BLD BLD		25.830					6.910		
IRON WORKER	N	HWY		26.230					6.910		
IRON WORKER	S	BLD		26.100					8.110		
IRON WORKER	S	HWY		25.850		1.5	2.0	5.200	8.110	0.000	0.300
LABORER		BLD	20.460	21.460	1.5	1.5	2.0	4.800	5.530	0.000	0.600
LABORER		HWY		21.760					5.050		
LATHER		BLD		26.720					6.420		
MACHINERY MOVER	N	HWY		26.230		1.5			6.910		
MACHINIST MARBLE FINISHERS		BLD BLD	22.320	37.630		2.0			4.750 6.500		
MARBLE MASON		BLD		24.560					6.500		
MILLWRIGHT		BLD		27.610					5.850		
MILLWRIGHT		HWY		20.540					3.000		
OPERATING ENGINEER		BLD 1	27.310	29.060	1.5	1.5	2.0	4.650	7.750	0.000	0.800
OPERATING ENGINEER		BLD 2	25.490	29.060	1.5				7.750		
OPERATING ENGINEER				29.060					7.750		
OPERATING ENGINEER				29.920					7.750		
OPERATING ENGINEER				29.920					7.750 7.750		
OPERATING ENGINEER PAINTER		ALL		29.920 27.150					5.000		
PILEDRIVER		BLD		27.130					6.420		
PILEDRIVER		HWY		26.600					6.420		
PIPEFITTER	N	BLD		34.430					6.460		
PIPEFITTER	S	BLD	31.850	33.850	1.5				4.000		
PLASTERER		BLD		23.590					9.500		
PLUMBER	N	BLD		30.490					7.910		
PLUMBER	S	BLD		33.850					4.000		
ROOFER SHEETMETAL WORKER		BLD BLD		25.000 28.950					5.000 7.050		
SIGN HANGER	N	HWY		26.230					6.910		
SPRINKLER FITTER	-1	BLD		30.890					4.950		
STEEL ERECTOR	N	HWY		26.230					6.910		
STONE MASON		BLD		24.420					6.500		
TERRAZZO FINISHER		BLD	22.320	0.000					6.500		
TERRAZZO MASON		BLD		24.560					6.500		
TILE MASON		BLD		24.560					6.500		
TRUCK DRIVER TRUCK DRIVER			24.755	0.000					3.100 3.100		
TRUCK DRIVER TRUCK DRIVER			25.155						3.100		
TIOOT DILIVER		)	,	0.000	±••	±•9	0	, • 0 0 0	J. 100	0.000	J. J. J. J

TRUCK DRIVER	ALL 4	25.605	0.000	1.5	1.5 2.0	7.000	3.100	0.000	0.000
TRUCK DRIVER	ALL 5	26.355	0.000	1.5	1.5 2.0	7.000	3.100	0.000	0.000
TRUCK DRIVER	0&C 1	19.804	0.000	1.5	1.5 2.0	7.000	3.100	0.000	0.000
TRUCK DRIVER	0&C 2	20.124	0.000	1.5	1.5 2.0	7.000	3.100	0.000	0.000
TRUCK DRIVER	0&C 3	20.284	0.000	1.5	1.5 2.0	7.000	3.100	0.000	0.000
TRUCK DRIVER	O&C 4	20.484	0.000	1.5	1.5 2.0	7.000	3.100	0.000	0.000
TRUCK DRIVER	0&C 5	21.084	0.000	1.5	1.5 2.0	7.000	3.100	0.000	0.000
TUCKPOINTER	BLD :	23.670	24.420	2.0	2.0 2.0	5.750	6.500	0.000	0.475

Legend:

M-F>8 (Overtime is required for any hour greater than 8 worked each day, Monday through Friday.

OSA (Overtime is required for every hour worked on Saturday)

OSH (Overtime is required for every hour worked on Sunday and Holidays)

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

# **Explanations**

MASON COUNTY

ELECTRICIAN (SOUTH) - Townships of Lynchburg, Bath, Kilbourne, Crane Creek, Salt Creek and Mason.

IRONWORKERS (NORTH) - That part of the county North including the towns of Easton and Teheran.

PLUMBERS & PIPEFITTERS (SOUTH) - That part of the county South of Rt. 136 including the City of Havana.

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial/Decoration Day, Fourth of July, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration such as the day after Thanksgiving for Veterans Day. If in doubt, please check with IDOL.

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

#### EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from

ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

#### CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

#### ELECTRONIC SYSTEMS TECHNICIAN

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

- Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vactor trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.
- Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.
- Class 4. Low Boy and Oil Distributors.
- Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

#### TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump, service, or oil distributor trucks. The work includes transporting materials and equipment (including but not limited to, oils, aggregate supplies, parts, machinery and tools) to or from the job site;

distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

#### OPERATING ENGINEERS - BUILDING

- Class 1. Cranes; Overhead Cranes; Gradall; All Cherry Pickers; Mechanics; Central Concrete Mixing Plant Operator; Road Pavers (27E -Dual Drum - Tri Batchers); Blacktop Plant Operators and Plant Engineers; 3 Drum Hoist; Derricks; Hydro Cranes; Shovels; Skimmer Scoops; Koehring Scooper; Drag Lines; Backhoe; Derrick Boats; Pile Drivers and Skid Rigs; Clamshells; Locomotive Cranes; Dredge (all types) Motor Patrol; Power Blades - Dumore - Elevating and similar types; Tower Cranes (Crawler-Mobile) and Stationary; Crane-type Backfiller; Drott Yumbo and similar types considered as Cranes; Caisson Rigs; Dozer; Tournadozer; Work Boats; Ross Carrier; Helicopter; Tournapulls - all and similar types; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Heavy Equipment Greaser; CMI, CMI Belt Placer, Auto Grade & 3 Track and similar types; Side Booms; Multiple Unit Earth Movers; Creter Crane; Trench Machine; Pump-crete-Belt Crete-Squeeze Cretes-Screw-type Pumps and Gypsum; Bulker & Pump -Operator will clean; Formless Finishing Machine; Flaherty Spreader or similar types; Screed Man on Laydown Machine; Wheel Tractors (industrial or Farm-type w/Dozer-Hoe-Endloader or other attachments); F.W.D. & Similar Types; Vermeer Concrete Saw.
- Class 2. Dinkeys; Power Launches; PH One-pass Soil Cement Machine (and similar types); Pugmill with Pump; Backfillers; Euclid Loader; Forklifts; Jeeps w/Ditching Machine or other attachments; Tuneluger; Automatic Cement and Gravel Batching Plants; Mobile Drills (Soil Testing) and similar types; Gurries and Similar Types; (1) and (2) Drum Hoists (Buck Hoist and Similar Types); Chicago Boom; Boring Machine & Pipe Jacking Machine; Hydro Boom; Dewatering System; Straw Blower; Hydro Seeder; Assistant Heavy Equipment Greaser on Spread; Tractors (Track type) without Power Unit pulling Rollers; Rollers on Asphalt -- Brick Macadem; Concrete Breakers; Concrete Spreaders; Mule Pulling Rollers; Center Stripper; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Cement Finishing Machine; Barber Green or similar loaders; Vibro Tamper (All similar types) Self-propelled; Winch or Boom Truck; Mechanical Bull Floats; Mixers over 3 Bag to 27E; Tractor pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Truck Type Hoptoe Oilers; Fireman; Spray Machine on Paving; Curb Machines; Truck Crane Oilers; Oil Distributor; Truck-Mounted Saws.
- Class 3. Air Compressor; Power Subgrader; Straight Tractor; Trac Air without attachments; Herman Nelson Heater, Dravo, Warner, Silent Glo, and similar types; Roller: Five (5) Ton and under on Earth or Gravel; Form Grader; Crawler Crane & Skid Rig Oilers; Freight Elevators permanently installed; Pump; Light Plant; Generator; Conveyor (1) or (2) Operator will clean; Welding Machine; Mixer (3) Bag and Under (Standard Capacity with skip); Bulk Cement Plant; Oiler on Central Concrete Mixing Plant.

#### OPERATING ENGINEERS - HEAVY AND HIGHWAY CONSTRUCTION

Class 1. Cranes; Hydro Crane; Shovels; Crane Type Backfiller; Tower Cranes - Mobile & Crawler & Stationary; Derricks & Hoists (3 Drum); Draglines; Drott Yumbo & similar types considered as Cranes; Back Hoe; Derrick Boats; Pile Driver and Skid Rigs; Clam Shell; Locomotive - Cranes; Road Pavers - Single Drum - Dual Drum - Tri Batcher; Motor

Patrols & Power Blades - Dumore - Elevating & Similar Types; Mechanics; Central Concrete Mixing Plant Operator; Asphalt Batch Plant Operators and Plant Engineers; Gradall; Caisson Rigs; Skimmer Scoop -Koering Scooper; Dredges (all types); Hoptoe; All Cherry Pickers; Work Boat; Ross Carrier; Helicopter; Dozer; Tournadozer; Tournapulls - all and similar types; Multiple Unit Earth Movers; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Heavy Equipment Greaser (top greaser on spread); CMI, Auto Grade, CMI Belt Placer & 3 Track and similar types; Side Booms; Starting Engineer on Pipeline; Asphalt Heater & Planer Combination (used to plane streets); Wheel Tractors (with dozer, hoe or endloader attachments); F.W.D. and Similar types; Blaw Knox Spreader and Similar types; Trench Machines; Pump Crete - Belt Crete - Squeeze Crete - screw type pumps and gypsum (operator will clean); Formless Finishing Machines; Flaherty Spreader or similar types; Screed Man on Laydown Machine; Vermeer Concrete Saw.

Class 2. Bulker & Pump; Power Launches; Boring Machine & Pipe Jacking Machine; Dinkeys; P-H One Pass Soil Cement Machines and similar types; Wheel Tractors (Industry or farm type - other); Back Fillers; Euclid Loader; Fork Lifts; Jeep w/Ditching Machine or other attachments; Tunneluger; Automatic Cement & Gravel Batching Plants; Mobile Drills - Soil Testing and similar types; Pugmill with pump; All (1) and (2) Drum Hoists; Dewatering System; Straw Blower; Hydro-Seeder; Boring Machine; Hydro-Boom; Bump Grinders (self-propelled); Assistant Heavy Equipment Greaser; Apsco Spreader; Tractors (track-type) without Power Units Pulling Rollers on Asphalt - Brick or Macadam; Concrete Breakers; Concrete Spreaders; Cement Strippers; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Vibro-Tampers (all similar types self-propelled); Mechanical Bull Floats; Self-propelled Concrete Saws; Mixers-over three (3) bags to 27E; Winch and Boom Trucks; Tractor Pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Mule Pulling Rollers; Pugmill without Pump; Barber Greene or similar Loaders; Track Type Tractor w/Power Unit attached (minimum); Fireman; Spray Machine on Paving; Curb Machines; Paved Ditch Machine; Power Broom; Self-Propelled Conveyors; Power Subgrader; Oil Distributor; Straight Tractor; Truck Crane Oiler; Truck Type Oilers; Directional boring machine; Horizontal directional drill.

Class 3. Straight framed articulating end dump vehicles and Truck mounted vac unit (separately powered); Trac Air Machine (without attachments); Herman Nelson Heater, Dravo Warner, Silent Glo & similar types; Rollers - five ton and under on earth and gravel; Form Graders; Pumps; Light Plant; Generator; Air Compressor (1) or (2); Conveyor; Welding Machine; Mixer - 3 bags and under; Bulk Cement Plant; Oilers.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 618/993-7271 for wage rates or clarifications.

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.