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 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 "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 an Authorization to Bid or Not for Bid Report, approved by the Central Bureau of Construction that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial.

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

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

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

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

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

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

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

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

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

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

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

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

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

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

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

68

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

BIDDERS

112131111111111111111111111111111111111
Proposal Submitted By
Name
Address
City

Letting November 5, 2010

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. 63457 LAKE County Section 02-00076-13-CH Route FAU 2661 (Hunt Club Road) Project CMM-8003(473) District 1 Construction Funds

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

Prepared	by
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INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond required for Prime Contractors to submit a bid after written **Authorization to Bid** has been issued by IDOT's Central Bureau of Construction. In addition, this proposal contains new statutory requirements applicable to the use of subcontractors and, in particular, includes the <u>State Required Ethical Standards Governing Subcontractors</u> to be signed and incorporated into all subcontracts.

WHO CAN BID?: Bids will be accepted from only those companies that request and receive written Authorization to Bid from IDOT's Central Bureau of Construction. To request authorization, a potential bidder <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 "Authorization to Bid or Not for Bid" form, he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a Authorization to Bid or Not for Bid Report, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial. If a contractor has requested to bid but has not received a Authorization to Bid or Not for Bid Report, they should contact the Central Bureau of Construction in advance of the letting date.

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

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

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

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
Preparation and submittal of bids
217/782-3413
217/782-7806



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

Route FAU 2661 (Hunt Club Road)
District 1 Construction Funds

1.	Proposal of
Та	xpayer Identification Number (Mandatory) for the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 63457 LAKE County Section 02-00076-13-CH Project CMM-8003(473)

Project consists of the construction of two-single-lane roundabouts, roadway reconstruction, curb and gutter, ditches, storm sewer, sidewalk, driveways, structure adjustments, landscaping and all other incidental items to complete the work on FAU Route 2661 (Hunt Club Road) from Milburn Road to Wadsworth Road in the village of Old Mill Creek.

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

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

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

The amount of the proposal guaranty check is ________\$(). If this proposal is accepted and the undersigned shall fail to execute a contract bond as required herein, it 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 Certif	ied Check Here
In the event that one proposal guaranty check is intended to cover to of the proposal guaranties which would be required for each individustate below where it may be found.		
The proposal guaranty check will be found in the proposal for:	Item	
	Section No.	
	County	

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

com com prop	nbination, he/she nbination bid sp portion to the bid	OS. The undersigned further agrees that if awarded the e will perform the work in accordance with the require ecified in the schedule below, and that the combination is submitted for the same. If an error is found to exist in a combination, the combination bid shall be corrected a	ments of each individual proposal comprising on bid shall be prorated against each section the gross sum bid for one or more of the individ
	comprisi If alterna	combination bid is submitted, the schedule below mung the combination. Ite bids are submitted for one or more of the sections tion bid must be submitted for each alternate.	
		Schedule of Combination Bids	
Combin			Combination Bid
No	•	Sections Included in Combination	Dollars Cents
sche all e sche is a will The	edule of prices fextensions and edule are appro- n error in the exite made only for	RICES. The undersigned bidder submits herewith, in a or the items of work for which bids are sought. The unit summations have been made. The bidder understate ximate and are provided for the purpose of obtaining a grension of the unit prices, the unit prices shall govern. Por actual quantities of work performed and accepted or ntities of work to be done and materials to be furnished in the contract.	it prices bid are in U.S. dollars and cents, and nds that the quantities appearing in the bid gross sum for the comparison of bids. If there ayment to the contractor awarded the contract materials furnished according to the contract.
prov	ides that a per	O BUSINESS IN ILLINOIS. Section 20-43 of the Illingson (other than an individual acting as a sole proprie of Illinois prior to submitting the bid.	
The	services of a s	subcontractor will or may be used.	
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STATE JOB #- C-91-114-05 PPS NBR - 1-11011-0000

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- 1	COUNTY N	ITEM	0065	2006716	2007120	2007816	2010016	924	000610	007	4878	05940	X006652	X006655	X006898	X007393	X007394	

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FAU 2661 02-00076-13-CH LAKE

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110161	TOPSOIL F & P 4		32,964.000 X		
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00021	SEEDING CL 2A		1,000 X	1	
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8200200	FILTER FABRIC	 S0	176.000 x	
400105	GABION REMOVAL		I I	
5100300	AGG BASE CSE A 4	SQ	53	
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FAU 2661 02-00076-13-CH LAKE

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FAU 2661 02-00076-13-CH LAKE	ITEM	0208	09200	0213300	214714	0216614	225124	25924	226200	0226256	236200	0237470	55500	0500	090090	060500

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 08/05/10 RUN TIME - 183043 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 63457 FAU 2661 02-00076-13-CH LAKE

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8001110	PAINT PVT MK LINE 4	LL 	,064.00		1
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FAU 2661 02-00076-13-CH LAKE

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 63457

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QUANTITY	156.000	2.000)	1.000)	132.000	590.000	640.000	5,689.000	200.000	5,080.000	2.000 >	470.000 >
UNIT OF MEASURE	EACH	EACH	WNS T	FOOT	FOOT	F00T		FOOT	FOOT	EACH	F00T
PAY ITEM DESCRIPTION	RAISED REFL PAVT MKR	ECT SERV INS	ELECT UTIL SER	CON T 3	2 GALVS	2#10#10GXLPUSE 3/4	3#8	C EPR USE 3-1C 2	TR & BKFIL F ELECT WK	LT CONT BASEM 480V100	LIGHT POLE FDN 30D
ITEM	78100100	80400105	400200	000200	81000600	81603010	16	5	1900200	82500360	3600300

NOTE:

TOTAL

*** PLEASE TURN PAGE FOR IMPORTANT NOTES ***

FAU 2661 02-00076-13-CH LAKE

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 63457

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 08/05/10 RUN TIME - 183043

NOTE:

EACH PAY ITEM SHOULD HAVE A UNIT PRICE AND A TOTAL PRICE.

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

3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.

A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN. 4.

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

I. GENERAL

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

II. ASSURANCES

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

A. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

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

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

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

B. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

C. Inducements

1. The Illinois Procurement Code provides:

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

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

D. Revolving Door Prohibition

1. The Illinois Procurement Code provides:

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

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

E. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

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

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

F. Confidentiality

1. The Illinois Procurement Code provides:

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

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

G. Insider Information

1. The Illinois Procurement Act provides:

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

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

III. CERTIFICATIONS

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

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
 - (1) the business has been finally adjudicated not guilty; or
 - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. Felons

1. The Illinois Procurement Code provides:

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

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

C. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

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

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

E. Section 42 of the Environmental Protection Act

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

F. Educational Loan

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

G. Bid-Rigging/Bid Rotating

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

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

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

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

H. International Anti-Boycott

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

I. Drug Free Workplace

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

J. <u>Disclosure of Business Operations in Iran</u>

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

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

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

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

Check the appropriate statement:
// Company has no business operations in Iran to disclose.
// Company has business operations in Iran as disclosed the attached document.

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

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

NA-FEDERAL		

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

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

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

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

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

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

M. Lobbyist Disclosure

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

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

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

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

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

	Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection contract.	with this
Or		
	Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection contract:	with the
	address of person:ees, compensation, reimbursements and other remuneration paid to said person:	

IV. DISCLOSURES

A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The bidder further certifies that the Department has received the disclosure forms for each bid.

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

2. <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.**

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

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

	5 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 · 1 ·
1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YESNO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? YES NO
4.	Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per bid</u> even if a specific individual would require a yes answer to more than one question.)
	answer to any of these questions requires the completion of Form A. The bidder must determine each individual in the bidding entity or

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

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

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

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

- **2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.
 - (a) State employment, currently or in the previous 3 years, including contractual employment of services.

 Yes ___No __

 If your answer is yes, please answer each of the following questions.
 - 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority?

 Yes ___No __
 - Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary.

3.	If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are you (i) more than 7 1/2% of the total distributable income of your fit corporation, or (ii) an amount in excess of 100% of the annual salar	entitled to receive rm, partnership, association or
4.	If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are you or minor children entitled to receive (i) more than 15% in aggregate of your firm, partnership, association or corporation, or (ii) an amous alary of the Governor?	and your spouse e of the total distributable income
	employment of spouse, father, mother, son, or daughter, including coprevious 2 years.	ontractual employment for services
If your	answer is yes, please answer each of the following questions.	YesNo
1.	Is your spouse or any minor children currently an officer or employe Board or the Illinois State Toll Highway Authority?	e of the Capitol Development YesNo
	Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appointed agency of the State of Illinois, and his/her annual salary exceeds annual salary of the Governor, provide the name of the spouse and of the State agency for which he/she is employed and his/her annual	ed to or employed by any 60% of the or minor children, the name
	If your spouse or any minor children is/are currently appointed to or State of Illinois, and his/her annual salary exceeds 60% of the annuare you entitled to receive (i) more than 71/2% of the total distributation, partnership, association or corporation, or (ii) an amount in exannual salary of the Governor?	al salary of the Governor, ble income of your
	If your spouse or any minor children are currently appointed to or estate of Illinois, and his/her annual salary exceeds 60% of the annual and your spouse or any minor children entitled to receive (i) more than aggregate of the total distributable income from your firm, partnershi (ii) an amount in excess of two times the salary of the Governor?	al salary of the Governor, are you nan 15% in the
unit of I	e status; the holding of elective office of the State of Illinois, the gove ocal government authorized by the Constitution of the State of Illinocurrently or in the previous 3 years.	
` '	nship to anyone holding elective office currently or in the previous 2 daughter.	years; spouse, father, mother, YesNo
America of the S	tive office; the holding of any appointive government office of the State, 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 statues
	nship to anyone holding appointive office currently or in the previous adaughter.	2 years; spouse, father, mother, YesNo
(g) Employ	ment, currently or in the previous 3 years, as or by any registered lo	bbyist of the State government. YesNo

son, or daughter.	yist in the previous 2 years; spouse, rather, mother, YesNo
(i) Compensated employment, currently or in the previous committee registered with the Secretary of State or any action committee registered with either the Secretary of	county clerk of the State of Illinois, or any political
(j) Relationship to anyone; spouse, father, mother, son, or last 2 years by any registered election or re-election cor county clerk of the State of Illinois, or any political actio State or the Federal Board of Elections.	nmittee registered with the Secretary of State or any n committee registered with either the Secretary of
	Yes No
3. Communication Disclosure.	
Disclose the name and address of each lobbyist and other Section 2 of this form, who is has communicated, is commemployee concerning the bid or offer. This disclosure is a for accuracy throughout the process and throughout the teon the line below:	unicating, or may communicate with any State officer or continuing obligation and must be promptly supplemented
Name and address of person(s):	

Name of person(3):	
Nature of disclos	ure:	
	ADDI ICARI E STATEMENT	
	APPLICABLE STATEMENT is submitted on behalf of the INDIVIDUAL named on previty the contents of this disclosure to be true and accurate	
nalty of perjury, I cert	is submitted on behalf of the INDIVIDUAL named on previty the contents of this disclosure to be true and accurate	
nalty of perjury, I cert owledge. 	is submitted on behalf of the INDIVIDUAL named on prev	
nalty of perjury, I cert owledge. 	is submitted on behalf of the INDIVIDUAL named on previty the contents of this disclosure to be true and accurate	e to the best of my
nalty of perjury, I cert owledge. mpleted by: der penalty of perjury	is submitted on behalf of the INDIVIDUAL named on previity the contents of this disclosure to be true and accurate Signature of Individual or Authorized Representative NOT APPLICABLE STATEMENT 7, I have determined that no individuals associated with the state of the submitted state of the submit	Date
nalty of perjury, I certowledge. mpleted by: der penalty of perjury	is submitted on behalf of the INDIVIDUAL named on previting the contents of this disclosure to be true and accurate Signature of Individual or Authorized Representative NOT APPLICABLE STATEMENT	Date
nalty of perjury, I cert owledge. mpleted by: der penalty of perjury e criteria that would re	is submitted on behalf of the INDIVIDUAL named on previity the contents of this disclosure to be true and accurate Signature of Individual or Authorized Representative NOT APPLICABLE STATEMENT 7, I have determined that no individuals associated with the state of the submitted state of the submit	Date
nalty of perjury, I cert owledge. mpleted by: der penalty of perjury e criteria that would re	is submitted on behalf of the INDIVIDUAL named on previity the contents of this disclosure to be true and accurate Signature of Individual or Authorized Representative NOT APPLICABLE STATEMENT V, I have determined that no individuals associated with the equire the completion of this Form A.	Date

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for

accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name			
egal Address			
City, State, Zip		-	
elephone Number	Email Address	Fax Number (if ava	ilable)
sclosure of the information contained in that (30 ILCS 500). This information shall be completed for bids in excess of \$25,000.	ecome part of the publicly	available contract file. This	
DISCLOSURE OF OTHER	CONTRACTS AND PRO	CUREMENT RELATED INI	FORMATION .
. Identifying Other Contracts & Procusas any pending contracts (including lease any other State of Illinois agency: Yes f "No" is checked, the bidder only needs	es), bids, proposals, or oth No	ner ongoing procurement rel	ationship with
If "Yes" is checked. Identify each such formation such as bid or project number NSTRUCTIONS:			
THE FO	LLOWING STATEMENT	MUST BE CHECKED	
THE FO	LLOWING STATEMENT	MUST BE CHECKED	

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.



TRAINEES

Contract No. 63457 LAKE County Section 02-00076-13-CH Project CMM-8003(473) Route FAU 2661 (Hunt Club Road) District 1 Construction Funds

PART I. IDENTIFIC	CATION																	
Dept. Human Right	s#						_ Du	ration	of Proj	ect: _								
Name of Bidder: _																		
PART II. WORKFO A. The undersigned which this contract wo projection including a	d bidder h ork is to b	as analyz e perform	ed mir ed, an	d for th d fema	ne locat	ions fro	m which	ch the b	idder re	ecruits	employ	ees, and he	reby subr	nits the foll	owir con	ng workfo	n orce	
		TOTA	AL Wo	rkforce	Projec	tion for	Contra	act						CURRENT			S	
					MINORITY EMPLOYEES					TRAINEES				TO BE ASSIGNED TO CONTRACT				
JOB CATEGORIES	_	TAL OYEES	BL	ACK	HISP		*OT	HER IOR.	APPI TIC		ON T	HE JOB AINEES	_			MINORITY EMPLOYEE		
OFFICIALS (MANAGERS)	М	F	M	F	M	F	M	F	M	F	M	F	M	F		M	F	
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
-		BLE C	-!									FOR	DEPARTI	MENT USE	01	ILY		
EMPLOYEES IN	TC	raining Pro TAL .OYEES		n for C		PANIC	_	THER NOR.										
TRAINING	M	F	M	F	М	F	M	F	1									
APPRENTICES	1		<u> </u>	<u> </u>	1	·			7									
ON THE JOB						1	+	-	+									

Note: See instructions on page 2

BC 1256 (Rev. 12/11/08)

Other minorities are defined as Asians (A) or Native Americans (N).
Please specify race of each employee shown in Other Minorities column.

Contract No. 63457 LAKE County Section 02-00076-13-CH Project CMM-8003(473) Route FAU 2661 (Hunt Club Road) District 1 Construction Funds

PART II. WORKFORCE PROJECTION - continued

B.	B. Included in "Total Employees" under Table A is the total number of new hire event the undersigned bidder is awarded this contract.	s that would be employed in the
	The undersigned bidder projects that: (number)	new hires would be
	recruited from the area in which the contract project is located; and/or (numb	er)
	new hires would be recruited from the	e area in which the bidder's principal
	office or base of operation is located.	
C.	C. Included in "Total Employees" under Table A is a projection of numbers of perundersigned bidder as well as a projection of numbers of persons to be employed.	
	The undersigned bidder estimates that (number)	persons will
	be directly employed by the prime contractor and that (number)	persons will be
	employed by subcontractors.	
PART I	RT III. AFFIRMATIVE ACTION PLAN	
A.	A. The undersigned bidder understands and agrees that in the event the forego utilization projection included under PART II is determined to be an underutilinary job category, and in the event that the undersigned bidder is awarded commencement of work, develop and submit a written Affirmative Action Plan (geared to the completion stages of the contract) whereby deficiencies in minutilization are corrected. Such Affirmative Action Plan will be subject to approach the Department of Human Rights .	zation of minority persons or women this contract, he/she will, prior to n including a specific timetable sority and/or female employee
B.	B. The undersigned bidder understands and agrees that the minority and female submitted herein, and the goals and timetable included under an Affirmative to be part of the contract specifications.	
Compa	ompany Telephone Nu	ımber
		
Addres	ddress	
	NOTICE DECARDING SIGNATURE	
	NOTICE REGARDING SIGNATURE	
	ne Bidder's signature on the Proposal Signature Sheet will constitute the signing of this fo be completed only if revisions are required.	rm. The following signature block needs
Signati	gnature: Title:	Date:
Instruction	structions: All tables must include subcontractor personnel in addition to prime contractor personn	el.
Table A	ble A - Include both the number of employees that would be hired to perform the contract v (Table B) that will be allocated to contract work, and include all apprentices and on-th should include all employees including all minorities, apprentices and on-the-job trained	e-job trainees. The "Total Employees" column
Table B	ble B - Include all employees currently employed that will be allocated to the contract work inc currently employed.	luding any apprentices and on-the-job trainees
Table C	ble C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in	Table A.

ADDITIONAL FEDERAL REQUIREMENTS

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

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. <u>CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:</u>

1.	Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES NO
2.	If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES NO

RETURN WITH BID

Contract No. 63457 LAKE County Section 02-00076-13-CH Project CMM-8003(473) Route FAU 2661 (Hunt Club Road) District 1 Construction Funds

PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)	Signature of Owner	
	Business Address	
	Firm Name	
	Ву	
(IF A CO-PARTNERSHIP)		
		Name and Address of All Members of the Firm:
	Corporate Name	
	Ву	
(IF A CORPORATION)		Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
		,
	Attest	Signature
(IF A JOINT VENTURE, USE THIS SECTION	Durainana Addinana	
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
	Corporate Name	
(IF A JOINT VENTURE)	,	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
		Typed of printed name and the of Admonded Nepresentative
	Attest	
		Signature
	Business Address	
If more than two parties are in the joint venture,	olease attach an addit	ional signature sheet.

Illinois Department of Transportation

Return with Bid

Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

			Item No.
			Letting Date
KNOW ALL MEN BY THESE PRESE	ENTS, That We		
as PRINCIPAL, and			
as i Kilvoli AL, aliu			
specified in Article 102.09 of the "Sta	andard Specifications for Robe paid unto said STATE	oad and Bridge Constru	as SURETY, are sum of 5 percent of the total bid price, or for the amount uction" in effect on the date of invitation for bids, whichever payment of which we bind ourselves, our heirs, executors,
	h the Department of Tran		the PRINCIPAL has submitted a bid proposal to the provement designated by the Transportation Bulletin Item
and as specified in the bidding and of after award by the Department, the including evidence of the required in performance of such contract and for failure of the PRINCIPAL to make the to the Department the difference not	contract documents, submit PRINCIPAL shall enter into nsurance coverages and por the prompt payment of e required DBE submission to exceed the penalty her with another party to perform	t a DBE Utilization Plan o a contract in accorda providing such bond as labor and material furn or to enter into such co eof between the amour	NCIPAL; and if the PRINCIPAL shall, within the time in that is accepted and approved by the Department; and if, since with the terms of the bidding and contract documents is specified with good and sufficient surety for the faithful hished in the prosecution thereof; or if, in the event of the contract and to give the specified bond, the PRINCIPAL pays int specified in the bid proposal and such larger amount for by said bid proposal, then this obligation shall be null and
paragraph, then Surety shall pay the	penal sum to the Department between the Department may bring	ent within fifteen (15) da an action to collect the	with any requirement as set forth in the preceding ays of written demand therefor. If Surety does not make full amount owed. Surety is liable to the Department for all its n whole or in part.
In TESTIMONY WHEREOF, th	ne said PRINCIPAL and the	said SURETY have ca	aused this instrument to be signed by
their respective officers this	day of		A.D., .
PRINCIPAL		SURET	<u></u>
(Company No			(Company Nama)
(Company Na	me)	D	(Company Name)
By (Signatur	e & Title)	By:	(Signature of Attorney-in-Fact)
_	Notary Certi	fication for Principal an	d Surety
STATE OF ILLINOIS, County of	noury ceru	reacton for 1 timespar and	a barety
I,		a Notary P	Public in and for said County, do hereby certify that
			ublic in and for said county, do hereby certify that
-	(Insert names of individuals	and and signing on behalf of Pl	RINCIPAL & SURETY)
who are each personally known to m	ne to be the same persons his day in person and ackn	whose names are subs	scribed to the foregoing instrument on behalf of PRINCIPAL that they signed and delivered said instrument as their free
Given under my hand and nota	arial seal this	day of	A.D
My commission expires			
, <u> </u>			Notary Public
marking the check box next to the S	signature and Title line belo	ow, the Principal is ens	file an Electronic Bid Bond. By signing the proposal and uring the identified electronic bid bond has been executed ons of the bid bond as shown above.
Electronic Bid Bond ID#	Company / Bidder	Name	□ Signature and Title
LICONOTIIC DIA DONA ID#	Company / Diddel	IVALLIC	Signature and Title



DBE Utilization Plan

(1) Policy

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

(2) Obligation

Date

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

(3) Pro	ject and Bid Identification			
Comple	te the following information concerning the project and bid:			
Route		Total Bid		<u> </u>
Section		Contract DBE Goal		
Project			(Percent)	(Dollar Amount)
County				
Letting [Date			
Contrac	t No.			
Letting I	Item No.			
(4) Ass	surance			
	in my capacity as an officer of the undersigned bidder (or bidder my company: (check one) Meets or exceeds contract award goals and has provided document of the bigness of each business participation percent award goals and has provided document of the contract. Failed to meet contract award goals and has included good fait provided participation as follows: Disadvantaged Business Participation percent of this request including good faith effort. Also attacher required by the Special Provision evidencing availability and us business will perform a commercially useful function in the world assertion and the support of the commercially useful function in the world support of the commercially useful function in the world support of the commercially useful function in the world support of the commercially useful function in the world support of the commercially useful function in the world support of the commercially useful function in the world support of the commercial support of the commer	umented participation as for 025, required by the Spect each business will perform the effort documentation to reach business participate of each business participate of each business participate.	ollows: ial Provision evi m a commercia meet the goals a required by the tion statements,	idencing availability and lly useful function in the and that my company has Special Provision in forms SBE 2025,
	Company	The "as read" Low Bidder is re		•
Ву		Submit only one utilization pla submitted in accordance with		
Title		Bureau of Small Business Ent 2300 South Dirksen Parkway	erprises	Local Let Projects Submit forms to the

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

Springfield, Illinois 62764

Local Agency

	of Transportation	D	BE Participatio	n Statement
Subcontrac	tor Registration	L	etting	
Participation	on Statement	It	em No.	
(1) Instruct		C	Contract	
be submitte	nust be completed for each disadvantaged business part in accordance with the special provision and will be pace is needed complete an additional form for the firm	attached to the U		
Pay Item No.	Description	Quantity	Unit Price	Total
			Total	
(4) Committee The undershas agreed execute a constant in that comple	Payment Items he above items which are partial pay items, specificall ment igned certify that the information included herein is tru- to perform a commercially useful function in the work contract with the prime contractor. The undersigned funay be made without prior approval from the Departmenter and accurate information regarding actual work per evided to the Department. Signature for Prime Contractor	e and correct, and of the contract ite rther understand t ent's Bureau of Sr formed on this pro	d that the DBE firm m(s) listed above that no changes to mall Business Ento	n listed below and to o this erprises and
T '41	-	_		
Contact				
City/State/Z	Zip Ci	ty/State/Zi		
			Е	

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

WC

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. 63457 LAKE County Section 02-00076-13-CH Project CMM-8003(473) Route FAU 2661 (Hunt Club Road) District 1 Construction Funds



SUBCONTRACTOR DOCUMENTATION

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

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

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

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

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

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

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

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
 - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
 - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
 - (1) the business has been finally adjudicated not guilty; or
 - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.
- 2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. Felons

1. The Illinois Procurement Code provides:

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

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

C. <u>Debt Delinquency</u>

1. The Illinois Procurement Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

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

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

E. Section 42 of the Environmental Protection Act

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

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

Name of Subcontracting Company Authorized Officer	Date

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

2. <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.

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

1.	Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES NO
2.	Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES NO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES NO
	(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)
4.	Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per person per subcontract</u> even if a specific individual would require a yes answer to more than one question.)
ES"	answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in the

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

Yes ___No ___

Subcontractor Name		
Substitution Hame		
Legal Address		
20ga: / taa: 000		
Oi: O: : 7		
City, State, Zip		
** '		
Telephone Number	Email Address	Fax Number (if available)
relephone Number	Elliali Addiess	rax Number (ii avallable)

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR INDIVIDU	JAL (type or print information)		
NAME:			
ADDRES	SS		
Type of c	ownership/distributable income share	:	
stock	sole proprietorship	Partnership	other: (explain on separate sheet):
% or \$ va	lue of ownership/distributable income sh	are:	
2. Disclosure	of Potential Conflicts of Interest.	Check "Yes" or "No" to	indicate which, if any, of the following

- **2. Disclosure of Potential Conflicts of Interest.** Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.
- (a) State employment, currently or in the previous 3 years, including contractual employment of services.

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

- Are you currently an officer or employee of either the Capitol Development Board or the Illinois State
 Toll Highway Authority?
 Yes ____No ___
- 2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, provide the name the State agency for which you are employed and your annual salary. ______

4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annusalary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? (b) State employment of spouse, father, mother, son, or daughter, including contractual employment service in the previous 2 years. If your answer is yes, please answer each of the following questions. 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of of 100% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of the other annual salary of the Governor, are you and your spouse or minor chil	 If you are currently appointed to or employed by any agency of the salary exceeds 60% of the annual salary of the Governor, are you e (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of 100% of the annual salary 	entitled to receive n, partnership, association or
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unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State Illinois currently or in the previous 3 years. (d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. YesNo (e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States America, or any unit of local government authorized by the Constitution of the State of Illinois or the statu of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred the discharge of that office currently or in the previous 3 years. YesNo (f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother son, or daughter.		YesNo
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America, or any unit of local government authorized by the Constitution of the State of Illinois or the statu of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred the discharge of that office currently or in the previous 3 years. YesNo (f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother son, or daughter. YesNo		
son, or daughter. YesNo	America, or any unit of local government authorized by the Constitution of of the State of Illinois, which office entitles the holder to compensation in ex	the State of Illinois or the statutes xcess of the expenses incurred in
(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government	• • • • • • • • • • • • • • • • • • • •	•
YesNo	(g) Employment, currently or in the previous 3 years, as or by any registered lo	•

	Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. YesNo
` ,	Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. YesNo
•	Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
	Yes No
3.	Communication Disclosure.
Sec em sup	sclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in ction 2 of this form, who is has communicated, is communicating, or may communicate with any State officer of ployee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly oplemented for accuracy throughout the process and throughout the term of the contract. If no person is ntified, enter "None" on the line below:
	Name and address of person(s):

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly

supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below: Name of person(s): Nature of disclosure: APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge. Completed by: Signature of Individual or Authorized Officer Date **NOT APPLICABLE STATEMENT** Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A. This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page. Signature of Authorized Officer Date

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Procurement Related Information Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
ILCS 500). This information shall become	part of the publicly available contra 00 or more, from subcontractors i	on 50-35 of the Illinois Procurement Act (30 act file. This Form B must be completed for identified in Section 20-120 of the Illinois
DISCLOSURE OF OTHER CONTRA	CTS, SUBCONTRACTS, AND PRO	OCUREMENT RELATED INFORMATION
1. Identifying Other Contracts & Procure any pending contracts, subcontracts, includ any other State of Illinois agency: Ye If "No" is checked, the subcontractor only	ing leases, bids, proposals, or othe s No	r ongoing procurement relationship with
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:		
THE FOLLO	WING STATEMENT MUST BE CH	ECKED
	Cianatura of Authorizad Office	Data
,	Signature of Authorized Officer	Date

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., November 5, 2010. 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. 63457
LAKE County
Section 02-00076-13-CH
Project CMM-8003(473)
Route FAU 2661 (Hunt Club Road)
District 1 Construction Funds

Project consists of the construction of two-single-lane roundabouts, roadway reconstruction, curb and gutter, ditches, storm sewer, sidewalk, driveways, structure adjustments, landscaping and all other incidental items to complete the work on FAU Route 2661 (Hunt Club Road) from Milburn Road to Wadsworth Road in the village of Old Mill Creek.

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

By Order of the Illinois Department of Transportation

Gary Hannig, Secretary

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2010

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

ERRATA

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24		Work Zone Public Information Signs (Eff. 9-1-02) (Rev. 1-1-07)	
25		Night Time Inspection of Roadway Lighting (Eff. 5-1-96)	
26		English Substitution of Metric Bolts (Eff. 7-1-96)	
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LR SD 12	Ū		Slab Movement Detection Device	Nov. 11, 1984	Jan. 1, 2007
LR SD 13			Required Cold Milled Surface Texture	Nov. 1, 1987	Jan. 1, 2007
LR 102			Protests on Local Lettings	Jan. 1, 2006	
LR 105	160	$\overline{\boxtimes}$	Cooperation with Utilities	Jan. 1, 1999	Jan. 1, 2007
LR 107-2			Railroad Protective Liability Insurance for Local Lettings	Mar. 1, 2005	Jan. 1, 2006
LR 107-3		一	Disadvantaged Business Enterprise Participation	Jan. 1, 2007	Nov. 1, 2008
LR 107-4	163	$\overline{\boxtimes}$	Insurance	Feb. 1, 2007	Aug. 1, 2007
LR 107-5		一	Substance Abuse Prevention Program	Jan. 1, 2008	Jan. 8, 2008
LR 108		Ħ	Combination Bids	Jan. 1, 1994	Mar. 1, 2005
LR 212		Ħ	Shaping Roadway	Aug. 1, 1969	Jan. 1, 2002
LR 355-1		\sqcap	Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix	Oct. 1, 1973	Jan. 1, 2007
LR 355-2		Ħ	Asphalt Stabilized Base Course, Plant Mix	Feb. 20, 1963	Jan. 1, 2007
LR 400-1		П	Bituminous Treated Earth Surface	Jan. 1, 2007	Jan. 1, 2008
LR 400-2			Bituminous Surface Mixture (Class B)	Jan. 1, 2008	•
LR 402			Salt Stabilized Surface Course	Feb. 20, 1963	Jan. 1, 2007
LR 403-2			Bituminous Hot Mix Sand Seal Coat	Aug. 1, 1969	Jan. 1, 2007
LR 406	164	\boxtimes	Filling HMA Core Holes with Non-shrink Grout	Jan. 1, 2008	
LR 420			PCC Pavement (Special)	May 12, 1964	Jan. 2, 2007
LR 442			Bituminous Patching Mixtures for Maintenance Use	Jan. 1, 2004	Jun. 1, 2007
LR 451			Crack Filling Bituminous Pavement with Fiber-Asphalt	Oct. 1, 1991	Jan. 1, 2007
LR 503-1			Furnishing Class SI Concrete	Oct. 1, 1973	Jan. 1, 2002
LR 503-2			Furnishing Class SI Concrete (Short Load)	Jan. 1, 1989	Jan. 1, 2002
LR 542			Pipe Culverts, Type (Furnished)	Sep. 1, 1964	Jan. 1, 2007
LR 663			Calcium Chloride Applied	Jun. 1, 1958	Jan. 1, 2007
LR 702			Construction and Maintenance Signs	Jan. 1, 2004	Jun. 1, 2007
LR 1004			Coarse Aggregate for Bituminous Surface Treatment	Jan. 1, 2002	Jan. 1, 2007
LR 1013			Rock Salt (Sodium Chloride)	Aug. 1, 1969	Jan. 1, 2002
LR 1030			Growth Curve	Mar. 1, 2008	
LR 1032-1			Emulsified Asphalts	Jan. 1, 2007	Feb. 7, 2008
LR 1032-2			Multigrade Cold Mix Asphalt	Jan. 1, 2007	Feb. 1, 2007
LR 1102			Road Mix or Traveling Plan Mix Equipment	Jan. 1, 2007	

BDE SPECIAL PROVISIONS For the November 5, 2010 Lettings

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

File Name	<u>Pg #</u>		Special Provision Title	<u>Effective</u>	Revised
80240			Above Grade Inlet Protection	July 1, 2009	
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2007
80243			American Recovery and Reinvestment Act Provisions	April 1, 2009	
80236			American Recovery and Reinvestment Act Signing	April 1, 2009	April 15, 2009
80186	165	X	Alkali-Silica Reaction for Cast-in-Place Concrete	Aug. 1, 2007	Jan. 1, 2009
80213	168	X	Alkali-Silica Reaction for Precast and Precast Prestressed Concrete	Jan. 1, 2009	
* 80207	171	X	Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas	Nov. 1, 2008	Nov. 1, 2010
		100	(NOTE: This special provision was previously named "Approval of Proposed		
			Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders".)		
80192		ļ	Automated Flagger Assistance Device	Jan. 1, 2008	4 14 0000
80173			Bituminous Materials Cost Adjustments	Nov. 2, 2006	April 1, 2009
80241			Bridge Demolition Debris	July 1, 2009	A == #1.4 0040
5026I			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5048I			Building Removal-Case II (Non-Friable Asbestos) Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990 Sept. 1, 1990	April 1, 2010 April 1, 2010
5049l 5053l			Building Removal-Case IV (No Asbestos)	Sept. 1, 1990 Sept. 1, 1990	April 1, 2010 April 1, 2010
80166	172	X	Cement	Jan. 1, 2007	April 1, 2009
80260	172	 ^	Certification of Metal Fabricator	July 1, 2010	April 1, 2009
80198			Completion Date (via calendar days)	April 1, 2008	
80199		_	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80094	175	X	Concrete Admixtures	Jan. 1, 2003	April 1, 2009
80214		<u> </u>	Concrete Gutter, Type A	Jan. 1, 2009	, .p,
80215			Concrete Joint Sealer	Jan. 1, 2009	
80226	179	Х	Concrete Mix Designs	April 1, 2009	
80261	181	X	Construction Air Quality – Diesel Retrofit	June 1, 2010	
80237	184	Х	Construction Air Quality – Diesel Vehicle Emissions Control	April 1, 2009	July 1, 2009
80239	186	Х	Construction Air Quality – Idling Restrictions	April 1, 2009	-
80227	188	Х	Determination of Thickness	April 1, 2009	
80177			Digital Terrain Modeling for Earthwork Calculations	April 1, 2007	
80029	200	X	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 1, 2010
80178	209	X	Dowel Bars	April 1, 2007	Jan. 1, 2008
80179	210	X	Engineer's Field Office Type A	April 1, 2007	Aug. 1, 2008
80205			Engineer's Field Office Type B	Aug. 1, 2008	
80189	213	X	Equipment Rental Rates	Aug. 2, 2007	Jan. 2, 2008
80228	215	X	Flagger at Side Roads and Entrances	April 1, 2009	
80249			Frames and Grates	Jan. 1, 2010	I.J. 4 0000
80229			Fuel Cost Adjustment	April 1, 2009	July 1, 2009
80169	246	X	High Tension Cable Median Barrier	Jan. 1, 2007 Jan. 1, 2008	April 1, 2009
80194 80245	216 218	X	HMA – Hauling on Partially Completed Full-Depth Pavement	Nov. 1, 2009	
80246	219	x	Hot-Mix Asphalt – Anti-Stripping Additive Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	
80250	220	x	Hot-Mix Asphalt	Jan. 1, 2010	
80259	220	^-	Hot-Mix Asphalt	April 1, 2010	
80201	221	X	Hot-Mix Asphalt – Plant Test Frequency	April 1, 2008	Jan. 1, 2010
80251	223	X	Hot-Mix Asphalt – QC/QA Acceptance Criteria	Jan. 1, 2010	· · · · · · · · · · · · · · · · · · ·
80202	224	X	Hot-Mix Asphalt – Transportation	April 1, 2008	
80109	•		Impact Attenuators	Nov. 1, 2003	Nov. 1, 2008
80110			Impact Attenuators, Temporary	Nov. 1, 2003	Jan. 1, 2007
80252			Improved Subgrade	Jan. 1, 2010	•
80230	225	Х	Liquidated Damages	April 1, 2009	
80196		,	Mast Arm Assembly and Pole	Jan. 1, 2008	Jan. 1, 2009
80045	: '-		Material Transfer Device	June 15, 1999	Jan. 1, 2009

				•	
			•		
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80203	226	X	Metal Hardware Cast into Concrete	April 1, 2008	April 1, 2009
80165			Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80238			Monthly Employment Report	April 1, 2009	Jan. 1, 2010
80253			Movable Traffic Barrier System	Jan. 1, 2010	
* 80262			Mulch First 4 Oct 15	Nov. 1, 2010	
80180	228	X	National Pollutant Discharge Elimination System / Erosion and Sediment	April 1, 2007	Nov. 1, 2009
00000			Control Deficiency Deduction	Nov. 4, 2000	
80208			Nighttime Work Zone Lighting	Nov. 1, 2008	
80182	,		Notification of Reduced Width	April 1, 2007 Nov. 1, 2001	Jan. 1, 2010
80069			Organic Zinc-Rich Paint System Partial Exit Ramp Closure for Freeway/Expressway	Jan. 1, 2009	Jan. 1, 2010
80216 80231			Payement Marking Removal	April 1, 2009	•
80254	230	X	Pavement Patching	Jan. 1, 2010	
80022	231	X	Payments to Subcontractors	June 1, 2000	Jan. 1, 2006
80209	233	X	Personal Protective Equipment	Nov. 1, 2008	0an. 1, 2000
80232	200	-^-	Pipe Culverts	April 1, 2009	April 1, 2010
80119			Polyurea Pavement Marking	April 1, 2004	Jan. 1, 2009
80210			Portland Cement Concrete Inlay or Overlay	Nov. 1, 2008	.,
80170	234	Х	Portland Cement Concrete Plants	Jan. 1, 2007	
80217			Post Clips for Extruded Aluminum Signs	Jan. 1, 2009	
80171	236	Х	Precast Handling Holes	Jan. 1, 2007	
80218			Preventive Maintenance – Bituminous Surface Treatment	Jan. 1, 2009	April 1, 2009
80219			Preventive Maintenance – Cape Seal	Jan. 1, 2009	April 1, 2009
80220			Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	•
80221			Preventive Maintenance – Slurry Seal	Jan. 1, 2009	
80211			Prismatic Curb Reflectors	Nov. 1, 2008	1
80015			Public Convenience and Safety	Jan. 1, 2000	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80247	238	Х	Raised Reflective Pavement Markers	Nov. 1, 2009	April 1, 2010
80223			Ramp Closure for Freeway/Expressway	Jan. 1, 2009	
80172			Reclaimed Asphalt Pavement (RAP)	Jan. 1, 2007	Jan. 1, 2010
80183	239	X	Reflective Sheeting on Channelizing Devices	April 1, 2007	Nov. 1, 2008
80206	ĺ		Reinforcement Bars – Storage and Protection	Aug. 1, 2008	April 1, 2009
80224			Restoring Bridge Approach Pavements Using High-Density Foam	Jan. 1, 2009	
80131	240	Χ	Seeding	July 1, 2004	July 1, 2010
\$5.34.37704.39C705.5100744.40.54000.40000.40000.			Selection of Labor Associated by	July 2, 2010	
80152	0.40	~	Self-Consolidating Concrete for Cast-In-Place Construction	Nov. 1, 2005	July 1, 2010 July 1, 2010
80132 80127	243	X	Self-Consolidating Concrete for Precast Products Steel Cost Adjustment	July 1, 2004 April 2, 2004	April 1, 2009
80255			Stone Matrix Asphalt	Jan. 1, 2010	April 1, 2009
80234			Storm Sewers	April 1, 2009	April 1, 2010
8023 4 80143	245	Х	Subcontractor Mobilization Payments	April 2, 2005	April 1, 2010
80075	240		Surface Testing of Pavements	April 1, 2002	Jan. 1, 2007
80073	246	Х	Temporary Erosion Control	Nov. 1, 2002	July 1, 2010
80256	<u>-</u> 70		Temporary Logitudinal Traffic Barrier System	Jan. 1, 2010	odiy 1, 2010
80225	*		Temporary Raised Pavement Marker	Jan. 1, 2009	
80176			Thermoplastic Pavement Markings	Jan. 1, 2007	
80257			Traffic Barrier Terminal, Type 6	Jan. 1, 2010	
20338	248	Х	Training Special Provisions	Oct. 15, 1975	
20000			1		

File NamePg #Special Provision TitleEffectiveRevised80258251XTruck Mounted/Trailer Mounted AttenuatorsJan. 1, 201080071252XWorking DaysJan. 1, 2002

The following special provisions have been deleted from use:

80244 Filter Fabric 80082 Multilane Pavement Patching

The following special provisions are in the 2010 Supplemental Specifications and Recurring Special Provisions:

File Name 80193	Special Provision Title Concrete Barrier	New Location Section 637	Effective Jan. 1, 2008	<u>Revised</u>
80175	Epoxy Pavement Markings	Section 1095	Jan. 1, 2007	
80181	Hot-Mix Asphalt – Field Voids in the Mineral Aggregate	Section 1030	April 1, 2007	April 1, 2008
80136	Hot-Mix Asphalt Mixture IL-4.75	Sections 406, 1003, 1030, 1032 and 1102	Nov. 1, 2004	Jan. 1, 2008
80195	Hot-Mix Asphalt Mixture IL-9.5L	Sections 1004 and 1030	Jan. 1, 2008	
80129	Notched Wedge Longitudinal Joint	Section 406	July 1, 2004	Jan. 1, 2007
80235	Payrolls and Payroll Records	Check Sheets #1 and #5	Mar. 1, 2009	July 1, 2009
80134	Plastic Blockouts for Guardrail	Section 630	Nov. 1, 2004	Jan. 1, 2007
80151	Reinforcement Bars	Section 1006	Nov. 1, 2005	April 1, 2009
80184	Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	Sections 1090, 1091, 1092 and 1093	April 1, 2007	
80212	Sign Panels and Sign Panel Overlays	Supplemental	Nov. 1, 2008	
80197	Silt Filter Fence	Sections 1080 and 1081	Jan. 1, 2008	
80153	Steel Plate Beam Guardrail	Section 1006	Nov. 1, 2005	Aug. 1, 2007
80191	Stone Gradation Testing	Section 1005	Nov. 1, 2007	_
80185	Type ZZ Retroreflective Sheeting, Nonreflective Sheeting, and Translucent Overlay Film for Highway Signs	Sections 1090, 1091, 1092 and 1093	April 1, 2007	
80149	Variable Spaced Tining	Section 420	Aug. 1, 2005	Jan. 1, 2007
80204	Woven Wire Fence	Section 1006	April 1, 2008	

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

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation

- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days

STATE OF ILLINOIS SPECIAL PROVISIONS

The following Special Provisions supplement the specifications listed in the table below, which apply to and govern the proposed improvement designated as Lake County Section <u>02-00076-13-CH</u>, and in case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and govern.

SPECIFICATION	ADOPTED/DATED
Standard Specifications for Road and Bridge Construction	January 1, 2007
Manual on Uniform Traffic Control Devices for Streets and Highways	2003 Edition
Illinois Supplement	November 2004
Supplemental Specifications and Recurring Special Provisions (indicated on the Check Sheet included herein)	January 1, 2010
Standard Specifications for Water & Sewer Main Construction in Illinois	Current edition

CONTRACT NO. 63457

LOCATION OF IMPROVEMENT

The project is located in the Village of Old Mill Creek, Lake County, Illinois. The project begins at a point on the reference centerline of FAU 2661 (Hunt Club Road) at Station 79+64.77 (south of Millburn Road) and extends in a northerly direction to Station 118+25.00 (north of Wadsworth Road). The total length of improvements on FAU 2661 (Hunt Club Road) is 3,860.23 feet.

The project limits also include improvements to Millburn Road and Wadsworth Road. The project limits on Millburn Road begin at Station 4+42.00 M and extend easterly to Station 12+25.00 M at the Simpson Driveway. The project limits on Wadsworth Road begin at the intersection with Hunt Club Road at Station 10+00.00 W and extend in an easterly direction to Station 15+50.00 W. The total length of improvements on Millburn Road and Wadsworth Road are 783 feet and 550 feet, respectively.

The total distance for this project is 5,193.23 feet.

DESCRIPTION OF IMPROVEMENT

The project will consist of the construction of two single-lane roundabouts on Hunt Club Road at the intersections with Millburn Road and Wadsworth Road. Construction of the roundabouts will require all three roadways to be reconstructed. Between the roundabouts, work on Hunt Club Road will include shoulder widening and resurfacing.

The project will include the construction of curb and gutter; open ditches; closed storm sewer systems; sidewalk and driveway construction; utility structure adjustments and reconstruction; landscaping; and permanent pavement markings

PROJECT SPECIFIC SPECIAL PROVISIONS

DIVISION 100. GENERAL REQUIREMENTS AND COVENANTS

CONCRETE WASHOUT FACILITY

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

General: To prevent pollution by residual concrete and/or the by product of washing out the concrete trucks, concrete washout facilities shall be constructed and maintained on any project which includes cast-in-place concrete items. The concrete washout shall be constructed, maintained, and removed according to this special provision and LCDOT standard LC4202 included in these plans. Concrete washout facilities shall be required on all projects regardless of the need for NPDES permitting. On projects requiring NPDES permitting, concrete washout facilities shall also be addressed in the Storm Water Pollution Prevention Plan.

The concrete washout facility shall be constructed on the job site according to LC4202. The Contractor may elect to use a pre-fabricated portable concrete washout structure. The Contractor shall submit a plan for the concrete washout facility, to the Engineer for approval, a minimum of 10 calendar days before the first concrete pour. The working concrete washout facility shall be in place before any delivery of concrete to the site. The Contractor shall ensure that all concrete washout activities are limited to the designated area.

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

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

Basis of Payment: This work <u>will not</u> be paid for separately, but shall be included in the cost of the concrete work items included in the contract.

PROTECTION AND RESTORATION OF TRAFFIC SIGNS

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

- 1. All signs removed shall be reinstalled 16 feet to 18 feet off the edge of pavement where possible. In curb sections this will vary and will be determined by the Lake County Division of Transportation.
- 2. All single sign installations shall be installed with the bottom of the sign 5 feet above edge of pavement in rural districts, and 7 feet above the edge of pavement in business, commercial or residential districts. On installations having two or more signs, the bottom of the lowest sign shall be 4 feet above edge of pavement.
- 3. All signs replaced will be erected using new "Telespar" system metal bases cut 42" long from 2¼" square material. They are to be driven into solid ground using a pneumatic driver. This work will not be paid for separately but shall be considered included in the cost of MOBILIZATION.

ARTICLE 107.27 INSURANCE

The Contractor shall obtain and thereafter keep in force insurance according to Article 107.27 of the Standard Specifications and the following:

1.0 Hold Harmless Clause

The Provider agrees to indemnify, save harmless and defend the County of Lake, its agents, servants, employees, Strand Associates, Inc., and each of them against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorney's fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of or in connection with the work covered by this contract. The foregoing indemnity shall apply except if such injury, death or damage is caused directly by the willful and wanton conduct of the County of Lake, its agents, servants, or employees or any other person indemnified hereunder.

The Provider shall also include Strand Associates, Inc. among those indemnified, as defined above for this project.

2.0 Liability Insurance

The Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in the state of Illinois such insurance as will protect the Contractor from claims set forth below which may arise out of or result from the Contractor's operations under the contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

2.1 Commercial General Liability

Commercial General Liability in a broad form on an occurrence basis, to include but not be limited to, coverage for the following where exposure exists; Premises/Operations, Contractual Liability, Products/Completed Operations, Independent Contractor's coverage to respond to claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees as well as claims for damages insured by usual personal injury liability coverage which are sustained (1) by a person as a result of an offense directly or indirectly related to employment of such person by the contractor, or (2) by another person and claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use therefrom.

2.2 Worker's Compensation

Worker's Compensation Insurance shall be maintained covering all liability of the contractor arising under the Worker's Compensation Act and Worker's Occupational Disease Act at limits in accordance with the laws of the State of Illinois.

2.3 Employer's Liability

Employer's Liability shall be maintained to respond to claims for damages because of bodily injury, occupational sickness or disease or death of the Contractor's employees.

2.4 Automobile Liability

Automobile Liability Insurance shall be maintained to respond to claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle. This policy shall be written to cover any auto whether owned, leased, hired or borrowed.

2.5 Minimum Limits of Liability

The Contractor's liability insurance as required by paragraphs 2.1, 2.3 and 2.4 shall be written with limits of insurance not less than the following:

2.5.1 Commercial General Liability Insurance

*General Aggregate Limit (Other Than Products	
Completed Operations)	\$4,000,000
Products Completed Operations Aggregate Limit	\$4,000,000
Personal and Advertising Injury Limit	\$1,000,000
Each occurrence Limit	\$2,000,000

^{*}The policy shall be endorsed for the general aggregate to apply on a "per project" basis.

2.5.2 Employers Liability Insurance

Bodily Injury by Accident (Each Accident)	\$1,000,000
Bodily Injury by Disease (Each Employee)	\$1,000,000
Bodily Injury by Disease (Policy Limit)	\$1,000,000

2.5.3 Automobile Liability

Bodily Injury, Property Damage and Covered
Pollution Cost or Expense (Each Occurrence Limit) \$1,000,000

2.6 Insurance Conditions

Lake County, its agents, officers, employees, and Strand Associates, Inc. shall be named as additional insured under ISO (Insurance Services Office) additional insured endorsement CG 20 26, edition date 10/93 or its equivalent. The Contractor's insurance shall be primary and non-contributory. The contractual liability insurance coverage shall be broad enough to respond to the liability assumed by the Contractor in the Hold Harmless Clause contained herein.

Coverage shall be provided for Lake County, its officers, agents and employees, all members of Boards, Commissions, Committees, Trustees and Organizations of the County, all volunteers and members of volunteer organizations and other non-paid personnel, including college and high school interns, while acting on behalf of the County.

2.7 Certificates of Insurance

Certificates of Insurance with required endorsements acceptable to the County of Lake shall be filed with the County of Lake prior to commencement of the work, containing the following:

- <u>2.7.1</u> Be provided with a 30 day prior notice, in writing, of Notice of Cancellation, Non-Renewal, or material change specified within an endorsement by the insurance company.
- <u>2.7.2</u> Be provided with certificates of insurance evidencing the endorsement <u>and</u> endorsement as specified above and required insurance, prior to commencement of this contract and thereafter with certificates evidencing renewals, replacements and endorsements of said policies of insurance at least 15 days prior to expiration, cancellation or non-renewal of such policies.
- <u>2.7.3</u> Endorsements or General Liability policy shall not exclude supervisory or inspection services. Contractor shall also provide an Additional Insured Endorsement for the automobile policy.

2.8 Duration of Coverage

The insurance described herein shall be maintained for the duration of the contract, including warranty period.

2.9 Failure to Comply

In the event the Contractor fails to obtain or maintain any insurance coverages required under this agreement, Lake County may purchase such insurance coverages and charge the expense thereof to the Contractor.

3.0 Payment

All costs for insurance as specified herein will be considered as included in the cost of the contract.

DIVISION 200. EARTHWORK, LANDSCAPING, AND EROSION CONTROL

CONSTRUCTION DEBRIS

Add the following to the third paragraph of Article 202.03 of the Standard Specifications:

"The Contractor shall not conduct any generation, transportation, or recycling of construction or demolition debris, clean or general or uncontaminated soil generated during construction, remodeling, repair, and demolition of utilities, structures, and roads that is not commingled with any waste, without the maintenance of documentation identifying the hauler, generator, place of origin of the debris or soil, the weight or volume of the debris or soil, and the location, owner, and operator of the facility where the debris or soil was transferred, disposed, recycled or treated. This documentation must be maintained by the Contractor for 3 years."

TRENCH BACKFILL, SPECIAL

Description: This work shall consist of furnishing and placing aggregate backfill in all trenches made in the subgrade of the proposed improvement, and all trenches where the inner edge of the trench is within 2 feet of the proposed edge of pavement, curb, gutter, curb and gutter stabilized shoulder, or sidewalk.

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

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

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

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

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for TRENCH BACKFILL, SPECIAL.

PLANTING PERENNIAL PLANTS

Description: This work shall consist of furnishing, transporting, and planting prairie type plants indentified on the plans and/or by the Engineer, for the locations on the project site.

General: The work shall be performed according to Section 254 of the Standard Specifications

Types and Mixtures: All perennial plants shall be prairie type plants consisting of the following species with the common name in parenthesis;

Aster Azureus (Sky Blue Aster)
Aster Novae-Angliae (New England Aster)
Baptisia Australis (Blue Wild Indigo)
Coreopsis Palmata (Prairie Coreopsis)
Echinacea Purpurea (Purple Coneflower)
Eryngium Yuccifolium (Rattle Snake Master)
Gentiana Andrewsii (Bottle Gentian)
Geum Triflorum (Prairie Smoke)
Liatris Aspera (Rough Blazing Star)
Rudbeckia Hirta (Black Eyed Susan)

All perennials shall be container grown in a 4-inch pot.

Layout of Planting: Perennial plant species shall be planted in beds. Small beds shall encompass an area of 100 square feet and shall contain 75 perennial plants. Large beds shall encompass 150 square feet and shall contain 110 perennial plants. Each bed shall contain a minimum of 5 plant species from the above list. Plant species shall be arranged in groups within the beds. All perennial plants shall be spaced and planted a minimum of fourteen inches from each other.

Method of Measurement: Perennial plants will be measured for payment per each perennial plant regardless of the species.

Basis of Payment: This work will be paid for at the contract unit price per each for PERENNIAL PLANTS regardless of the species.

TEMPORARY DITCH CHECKS

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

Hunt Club Road Roundabouts Section 02-00076-13-CH Lake County, Illinois Contract No. 63457

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

The temporary ditch checks shall be limited to Triangular Silt DikesTM, or an approved equal.

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

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

General: The work shall be performed according to Section 280 of the Standard Specifications, LCDOT Standard Drawing LC2050 and the following:

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

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

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

Method of Measurement: Temporary Ditch Checks, Urethane Foam/Geotextile will be measured for payment as 1 each for each 7 foot section actually installed.

Basis of Payment: This work will be paid for at the contract unit price per each for TEMPORARY DITCH CHECKS. The unit price shall include all labor, equipment and materials necessary for their installation and removal. The maintenance of this item shall be included with and paid for as part of the contract lump sum price for MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS.

PERIMETER EROSION BARRIER

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

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

The perimeter erosion barrier shall be limited to temporary silt filter fence meeting the requirements of AASHTO Standard M 288-00. This specification is applicable to the use of a geotextile as a vertical, permeable interceptor designed to remove suspended soil from overland water flow. The function of a temporary silt fence is to filter and allow settlement of soil

particles from sediment-laden water. The purpose is to prevent the eroded soil from being transported off the construction site by water runoff.

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

Materials:

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

Table 6 – Temporary Silt Fence Requirements

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

Notes:

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

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

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

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

The wire support fence shall:

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

Construction:

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

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

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

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

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

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

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

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

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

Maintenance:

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

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

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

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

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

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

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

Basis of Payment: This work will be paid for at the contract unit price per foot for PERIMETER EROSION BARRIER. The unit price shall include all work and materials necessary to properly install the barrier and to remove and dispose of the used materials at the completion of the project. *Maintenance requirements shall be included and paid for under the special provision for MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS*.

GABION REMOVAL

Description: This work shall consist of removing, transporting and disposing of existing gabions form locations shown on the plans.

General: The work shall be performed according to Section 284 of the Standard Specifications and the following:

The material removed shall be disposed of, outside the right-of-way, according to Article 202.03 of the Standard Specifications.

Method of Measurement: Gabion Removal will be measured in place, prior to removal, and the volume calculated in cubic yards.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard for GABION REMOVAL. The unit price shall include all labor, equipment and materials necessary remove the existing gabions, transport and dispose of the removed materials.

DIVISION 400. SURFACE COURSES, PAVEMENTS, REHABILITATION, AND SHOULDERS

AGGREGATE FOR TEMPORARY ACCESS

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

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

The material shall be limited to crushed gravel, crushed stone or crushed concrete. The plasticity index requirements and the requirements for adding water at the central mixing plant will be waived.

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

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

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

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

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

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

DIVISION 500. STRUCTURES

GRATING FOR CONCRETE FLARED END SECTION EQUIVALENT ROUND SIZE-30"

Description: This work shall consist of furnishing and installing grates on precast concrete flared end sections of the equivalent round size-30".

General: The work shall be performed according to Article 542.07 of the Standard Specifications and the following:

The Gratings shall be fabricated with the necessary dimensions for installation on precast reinforced concrete flared end sections, equivalent round size 30" as shown in the IDOT Standard Drawing 542306-02[precast reinforced concrete elliptical flared end section].

Basis of Payment: This work will be paid for at the contract unit price per each for GRATING FOR CONCRETE FLARED END SECTION EQUIVALENT ROUND SIZE-30".

DIVISION 600. INCIDENTAL CONSTRUCTION

PIPE DRAINS

Description: This work shall consist of constructing pipe drains of the required inside diameter.

Materials: The pipe drain materials shall be according to Article 601.02 of the Standard Specifications except that:

They shall be limited to the following items:

- (l) Polyvinyl Chloride (PVC) pipe [1040.03(a)]
- (o) Corrugated Polyvinyl Chloride (PVC) pipe with a smooth interior [1040.03(d)]
- (s) Corrugated Polyethylene (PE) Pipe with a Smooth Interior [1040.04(a)]

General: The work shall be performed according to Section 601 of the Standard Specifications and the following:

The work shall include constructing pipe drains to replace and/or relocate existing tile lines encountered during construction.

Pipe drains emptying into a drainage ditch shall be fitted with a concrete collar as shown on Lake County Division of Transportation standard LC6020 (section A-A). The rodent shields shown on LC6020 shall also be included.

Pipe drain connections to handholes and/or drainage structures shall be made as on Lake County Division of Transportation standard LC6020 (Detail C).

Method of Measurement: Pipe drains shall be measured in place, in feet, of actual pipe installed.

Basis of Payment: This work will be paid for at the contract unit price per foot for PIPE DRAINS of the diameter specified. *Payment will be based on the actual length of pipe installed without a change in unit price because of adjustment in plan quantities, and no extra compensation will be allowed for any delays, inconveniences or damage sustained by the Contractor in performing the work.*

The unit price shall include all materials, equipment and labor required to install the pipe drains, including rodent shields for ditch/side slope outlets; and drilling and grouting for connections to culverts, drainage structures and/or handholes.

STORM SEWERS, SPECIAL 30"

Description: This work shall consist of constructing elliptical storm sewer with the equivalent round diameter of 30 inches.

Materials: The storm sewer shall be reinforced concrete meeting the specifications for Class A, Type 1 rigid pipes according to Sections 550.02 and 550.03 of the Standard Specifications.

General: The work shall be performed according to Section 550 of the Standard Specifications:

The storm sewer shall be elliptical with an inside height of 24" and width of 38". The dimensions of the pipe shall be compatible with accepting a precast reinforced concrete elliptical flared end section of the dimensions specified in IDOT Standard Drawing 542306-02[precast reinforced concrete elliptical flared end section].

Basis of Payment: This work will be paid for at the contract unit price per foot for STORM SEWERS, SPECIAL 30".

CATCH BASINS, SPECIAL

Description: This work shall consist of supplying and installing an STC 900 Precast Concrete Stormceptor stormwater pollutant separation unit (unit) or approved equal for the reduction without resuspension of total suspended solids and free floating oils along with a special frame and lid.

General: The work shall be performed according to Section 602 of the Standard Specifications and the following:

The unit shall be a STC 900 Precast Concrete Stormceptor, or equal, with a top flat slab according to the manufacturer's details. The unit shall be able to convey a peak flow of 22.0 cubic feet per second. The unit shall be able to treat a tributary area of 1.93 acres with 50% being impervious and shall meet or exceed Lake County Stormwater Management Commission's standards including, but not limited to, standards for total suspended solids removal, oil removal, and floatable hydrocarbons.

- A. The structure shall be designed for H-20 loading traffic and applicable earth loads. The materials and structural design of the devices shall be per ASTM C478.
 - 1. The minimum compressive strength of the concrete in the catch basin base, riser, and top sections shall be 4,000 psi.
 - 2. The minimum wall thickness shall be one-twelfth the internal diameter of the riser or largest cone diameter.

- 3. Cement shall conform to the requirements of Specification C150 for Portland cement.
- 4. Aggregates shall conform to Specification C33, except that the requirement for gradation shall not apply.
- 5. Reinforcement shall consist of wire conforming to Specification A82 or Specification A496, of wire fabric conforming to Specification A185 or Specification A497, or of bars of Grade 40 steel conforming to Specification A615/A615M.
- 6. The access cover shall be designed for HS20-44 traffic loading and shall provide a minimum 30-inch clear opening.
- 7. All joints below the Stormceptor insert shall be watertight per ASTM C-443 by use of oil resistant rubber gaskets. Joints above the Stormceptor insert may comply to ASTM C-990.
- 8. Any grout used within the system shall meet the ASTM C-1107 "Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Non-Shrink)". Grades A, B, and C at a pourable and plastic consistency at 70°F. CRD C 621 "Corps of Engineers Specification For Non-Shrink Grout."
- B. The interior Stormceptor insert shall be pre-assembled by the manufacturer with stainless steel anchor systems and sealed watertight with PL-Premium or other approved oil resistant caulk.
- C. Drop pipes and orifice plate shall be press-fit in place with only the 6-inch riser/oil inspection pipe solvent weld glued in place.
- D. Flexible rubber boots may be attached to the influent and effluent pipes to facilitate the installation of these pipes to the Stormceptor.
- E. Concrete, clay, or other rigid influent/effluent pipes can be grouted into the concrete Stormceptor if desired. Pipes up to 610 mm (24") in diameter can be grouted without any special preparation. Larger pipe diameters will need to be modified to fit the curvature of the Stormceptor. It should be noted at the time of ordering whether flexible boots are required.
- F. The separator should be equipped with an internal high flow bypass that regulates the flow rate into the treatment chamber and conveys high flows directly to the outlet so the scour and/or resuspension of material previously collected in the separator does not occur. External bypasses are not acceptable.
- G. The separator should be maintained from the surface via one access point.
- H. The unit shall be clearly identified for ease of maintenance.
- I. The owner shall be provided with maintenance instructions.
- J. Simple substitution by dimensional equivalents shall not be considered equivalent as requests for substitution shall include full independent site specific modeling for review by the owner.

K. Due to the permit requirements for stormwater remediation any substitution from the specified product may require a new submittal.

Basis of Payment: This work will be paid for at the contract unit price per each for CATCH BASINS, SPECIAL with special frame and lid. The unit price shall be payment in full for all materials, labor, and any other items required to complete the work.

RESTRICTED DEPTH MANHOLES AND RESTRICTED DEPTH CATCH BASINS

Description: This work shall consist of constructing restricted depth manholes and restricted depth catch basins with frames and grates/lids.

Materials: The materials shall be according to Article 602.02 of the Standard Specifications.

General: The work shall be performed according to Section 602 of the Standard Specifications, IDOT Standard Drawing 602001 [catch basin type A], IDOT Standard Drawing 602401 [manhole type A], and IDOT Standard Drawing 602601 [flat slab top] and the following:

The reinforced concrete slab will be used in lieu of the cone section.

A 24" sump will be provided in the Catch Basin.

For structures having Type 8 grates, a 24" inside diameter by 4" (minimum) high riser shall be installed on the flat slab to provide earth cover over the slab for vegetation.

Basis of Payment: This work will be paid for at the contract unit price per each for RESTRICTED DEPTH CATCH BASINS, 4'-DIAMETER, TYPE 24 FRAME AND GRATE

RESTRICTED DEPTH CATCH BASINS, 5'-DIAMETER, TYPE 24 FRAME AND GRATE

RESTRICTED DEPTH CATCH BASINS, 6'-DIAMETER, TYPE 24 FRAME AND GRATE

RESTRICTED DEPTH MANHOLES, 4'-DIAMETER, TYPE 24 FRAME AND GRATE RESTRICTED DEPTH MANHOLES, 5'-DIAMETER, TYPE 24 FRAME AND GRATE RESTRICTED DEPTH MANHOLES, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID RESTRICTED DEPTH MANHOLES, 6'-DIAMETER, TYPE 24 FRAME AND GRATE

CATCH BASIN, TYPE C, WITH SALVAGED GRATE

Description: This work shall consist of constructing a new Type C catch basin with an existing grate salvaged from an existing structure that is scheduled to be removed.

General: The work shall be performed according to Section 602 of the Standard Specifications and IDOT Standard Drawing 604036 and the following:

The existing grate shall be salvaged from the existing drainage structure that designated to be removed on the plans. The salvaged grate shall be installed on the new Type C catch basin.

Basis of Payment: This work shall be paid for at the contract unit price per each for CATCH BASIN, TYPE C, WITH SALVAGED GRATE. *Removal of the existing drainage structure, less the salvaged grate, will be paid for separately.*

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (MODIFIED)

Description: This work shall consist of constructing type B-6.24 curb and gutter with the gutter flag sloped towards the roadway.

Materials: The materials shall be according to Article 606.02 of the Standard Specifications.

General: The work shall be performed according to Section 606 of the Standard Specifications and IDOT Standard Drawing 606001 and the following:

One inch expansion joints shall be constructed at maximum intervals of 150 feet.

The 24 inch wide gutter flag shall be sloped at six (6) percent towards the roadway and away from the face of the curb.

Where the plans show depressed curb and gutter adjacent to curb ramps the gutter flag shall be sloped towards the roadway at a maximum five (5) percent.

Method of Measurement: Combination Concrete Curb and Gutter, Type B-6.24 (Modified) will be measured for payment in feet. The measurement will be made along the face of curb according to Article 606.14 of the Standard Specifications. *Transitions between Type B-6.24 (MODIFIED) and Type M-2.24 (MODIFIED) Curb and Gutter will be paid for at the contract unit price per foot for as Combination Concrete Curb and Gutter, Type B-6.24 (MODIFIED). The transition length will be 6 feet unless otherwise specified in the plans.*

Basis of Payment: This work will be paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (MODIFIED).

COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24 (MODIFIED)

Description: This work shall consist of constructing type M-2.24 curb and gutter with the gutter flag sloped towards the roadway.

Materials: The materials shall be according to Article 606.02 of the Standard Specifications.

General: The work shall be performed according to Section 606 of the Standard Specifications and IDOT Standard Drawing 606001 and the following:

One inch expansion joints shall be constructed at maximum intervals of 150 feet.

The gutter flag shall be sloped at six (6) percent towards the roadway and away from the face of the curb.

The gutter flag shall be at least 24 inches wide and be constructed according to the details shown on the plans for ramped nose medians.

Method of Measurement: Combination Concrete Curb and Gutter, Type M-2.24 (Modified) will be measured for payment in feet. The measurement will be made along the face of curb according to Article 606.14 of the Standard Specifications. *Transitions between Type B-6.24 (MODIFIED) and Type M-2.24 (MODIFIED) Curb and Gutter will be paid for at the contract unit price per foot for as Combination Concrete Curb and Gutter, Type B-6.24 (MODIFIED). The transition length will be 6 feet unless otherwise specified in the plans.*

Basis of Payment: This work will be paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE M-2.24 (MODIFIED **Description:** This work shall consist of the removal and disposal of an existing woven wire fence from the project site.

WOVEN WIRE FENCE REMOVAL

General: The Contractor shall remove all components of the existing fence including concrete used to anchor fence posts, bracing, guy wires, posts, and/or gates. All removed materials shall be disposed of outside the limits of the right-of-way according to Article 202.03 of the Standard Specifications and/or as directed by the Engineer.

Method of Measurement: This work will be measured for payment in feet, along the top of the existing fence, from center to center of end posts, excluding the length occupied by gates.

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

DIVISION 700. WORK ZONE TRAFFIC CONTROL AND PROTECTION, SIGNING, AND PAVEMENT MARKING

TRAFFIC CONTROL PLAN

Traffic Control shall be according to the applicable sections of the "Standard Specifications", the "Supplemental Specifications", the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, Millennium Edition", the "Quality Standard for Work Zone Traffic Control Devices", any special details and Highway Standards contained in the plans and the special provisions contained herein.

Special attention is called to Articles 105.05, and 107.09, and to Sections 701, 704, and 782 of the "Standard Specifications", and to the following Highway Standards, Details, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the Engineer at least 72 hours in advance of beginning work.

The Contractor shall be responsible for maintaining access to all private driveways. All labor, equipment, transportation, and incidentals necessary to maintain access be included in the cost of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

Lane closures will not be allowed after detour signing has been removed.

Standards

701001-02

701006-03

701011-02

701901-01

Details

LC7200

LC7203

Recurring Special Provisions

LRS3 – WORK ZONE TRAFFIC CONTROL LRS4 – FLAGGERS IN WORK ZONES

Detours

Detours and Road Closures on County Maintained Roads within Lake County, Illinois shall be in accordance with the applicable sections of the "Standard Specifications", the "Supplemental Specifications", the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", the Lake County Division of Transportation's Detour Procedures and Guidelines, any special details and Highway Standards contained in

the Detour Plan and the Special Provisions contained herein. The LCDOT's Detour Procedures and Guidelines are available from the LCDOT, Traffic Engineering Section upon request.

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

The Traffic Control and Protection (Special) shall meet the requirements of Division 700. Work Zone Traffic Control and Protection, Signing and Pavement Marking of the "Standard Specifications" except as follows:

Article 701.01 Description shall be replaced with the following:

701.01 Description. This item of work shall include furnishing, installing, maintaining, replacing, relocating and removing all traffic control devices used for the purpose of regulating, warning or directing traffic during the construction or maintenance of this improvement.

Traffic Control and Protection (Special) shall be provided as called for in the plans, these special provisions, applicable Highway Standards, applicable sections of the "Standard Specifications", or as directed by the Engineer.

The governing factor in the execution and staging of work for this project is to provide the motoring public with the safest possible travel conditions along the roadway through the construction zone. The Contractor shall arrange his/her operations to keep the closing of any lane of the roadway to a minimum.

Traffic control devices include signs and their supports, signals, pavement markings, barricades and their approved weights, channeling devices, warning lights, arrow boards, flaggers, or any other device used for the purpose of regulating, detouring, warning or guiding traffic through or around the construction zone.

Article 701.04 General shall be modified by adding the following section.

The Contractor is required to conduct routine inspections of the work site at a frequency that will allow for the timely replacement of any traffic control device that has become displaced, worn or damaged to the extent that it no longer conforms to the shape, dimensions, color and operational requirements of the MUTCD, the Traffic Control Standards or will no longer present a neat appearance to motorists. A sufficient quantity of replacement devices, based on vulnerability to damage, shall be readily available to meet this requirement.

Contractor shall be responsible for the proper location, installation and arrangement of all traffic control devices. Special, attention shall be given to advance warning signs during construction operations, in order to keep lane assignments consistent with barricade placement at all times.

The Contractor shall immediately remove, cover or turn from the view of motorists all traffic control devices which are inconsistent with the detour, lane assignment patterns or conflicting conditions created during the transition from one construction stage to another. When the Contractor elects to cover conflicting or inappropriate signing, the materials used shall totally block out the reflectivity of the sign and shall cover the entire sign. The method used for covering the signing shall meet with the approval of the Engineer.

The Contractor shall coordinate all traffic control work on this project with any adjoining or overlapping projects. The coordination will include any barricade placements necessary to provide a uniform traffic detour pattern. When directed by the Engineer, the Contractor shall remove all traffic control devices that he/she furnished, installed and maintained under the contract. Such devices shall remain the property of the Contractor. All traffic control devices shall remain in place until the Engineer specifically authorizes their relocation or removal.

The Contractor shall ensure that all the traffic control devices he/she installs are operational, functional and effective 24 hours a day, 7 days a week, including holidays.

Article 701.04 General shall be further modified by adding the following sections:

Public Safety and Convenience:

The Contractor shall provide a telephone number for a responsible individual who can be contacted 24 hours a day, 7 days a week, to receive notification of any deficiencies in traffic control and protection. The Contractor shall dispatch men, materials, and equipment to correct any such deficiencies. The Contractor shall respond to any call from LCDOT concerning any request for improving or correcting traffic control devices and begin making the requested repairs within two (2) hours from the time of notification.

Personal vehicles shall not park within the right-of-way except in specific areas designated by the Engineer. All roads shall remain open to traffic. The Contractor may close one lane on two lane roads, because of

construction, between the hours of 9:00 AM and 3:00 PM only. The Contractor shall maintain one-way traffic during these restricted hours with the use of signs and flagmen as shown on the Traffic Control Standards. Two lanes of traffic will be maintained between the hours of 3:00 PM and 9:00 AM and when no construction activities are being carried out.

The restricted lane closure time may be adjusted by the Engineer. The Contractor shall provide a start and end time and a procedure plan 48 hours prior to the lane(s) to be closed. The Engineer shall notify the Contractor of his decision 24 hours in advance of the proposed lane closure. If the Contractor fails to provide notification or disregards the decision of the Engineer, the Traffic Control Deficiency Charge will be applied as stated in this special provision.

The Contractor shall maintain at least one lane in each direction on roads with four or more lanes. The Contractor shall also maintain entrances and side roads along the proposed improvement. Interference with traffic movements and inconvenience to owners of abutting property and the public shall be kept to a minimum. Any delays or inconveniences incurred by the Contractor while complying with these requirements shall be considered included in the contract unit price for TRAFFIC CONTROL AND PROTECTION (SPECIAL), and no additional compensation will be allowed.

On two lane roads, the Contractor will plan his/her work so that there will be no open holes or obstructions in the pavement and so that all barricades will be removed from the pavement during non-work hours.

On highways with four or more lanes, the Contractor will plan his/her work so that there shall be no open holes or obstructions in the pavement being used by the traveling public. Lane closures, if allowed, will be in accordance with the applicable standards, staging details shown in the plans and any other applicable contract documents.

The Contractor shall remove all equipment from the shoulders and medians after work hours.

The Contractor shall not institute any road closures or restrictions except those covered by the plans and specifications of this contract without written approval from the Engineer.

Traffic Control Deficiency Charge:

The primary concern of LCDOT is to maintain a safe travel way for the public and a safe environment for the worker in the construction zone.

The Contractor is expected to comply with the "Standard Specifications", contract plans, these special provisions, and directions from the Engineer concerning traffic control and protection. The Contractor shall provide a telephone number for a responsible individual who can be contacted 24 hours a day, 7 days a week, to receive notification of any deficiencies in the traffic control and protection.

When the Engineer is notified or determines a traffic control deficiency exists, the Engineer will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be ½ (one half) hour to 8 (eight) hours based upon the urgency of the situation and the nature of the deficiency. The Engineer will be the sole judge.

The deficiency may be any lack of repair, maintenance of, or non-compliance with the traffic control plan.

If the Contractor fails to correct the deficiency within the specified time, a traffic control deficiency shall be imposed for each calendar day or fraction thereof the deficiency exists. The calendar day(s) will begin with the notification and end with the Engineer's acceptance of the correction. The traffic control deficiency charge shall be for the full amount per day for each day the deficiency existed. The daily monetary deduction per deficiency shall be either \$1,000.00 or 0.05 of one percent of the awarded contract value, whichever is greater.

In addition, if the Contractor fails to respond, the Engineer may correct the deficiency and the cost thereof shall be deducted from the cost of the contract. The charge shall be separate and in addition to the traffic control deficiency deduction.

The Contractor shall not be relieved of any contractual responsibilities by LCDOT's action.

Article 701.14 Signs shall be modified by revising the first paragraph to read as follows:

When the work operations exceed four days, all signs shall be post mounted unless the signs are located on the pavement, paved median, other impervious surface, or define a moving or intermittent operation. When approved by the Engineer, a temporary sign stand may be used to support a sign at 5 feet minimum height where posts are impractical. Longitudinal dimensions shown on the plans for the placement of signs may be increased up to 100 feet to avoid obstacles, hazards or to improve sight distance, when approved by the Engineer. "ROAD WORK AHEAD"

signs shall also be required on all side streets within the limits of the mainline "ROAD WORK AHEAD" signs."

Construction signs referring to daytime lane closures during working hours shall be removed, covered, or turned away from the view of motorists during non-working hours. Upon request, prior to the beginning of construction operations the Contractor will be provided a sign log of all existing signs within the limits of the construction zone. The Contractor is responsible for verifying the accuracy of the sign log. The Contractor shall maintain all existing traffic signs throughout the duration of the project.

All provisions of Article 107.25 of the "Standard Specifications" shall apply except the third paragraph shall be revised to read:

The Contractor shall maintain, furnish and replace at his own expense, any traffic sign or post which has been damaged or lost by the Contractor or a third party. The Contractor will not be held liable for third party damage to large freeway guide signs.

Article 701.14 Signs (b) Work Zone Speed Limit Signs shall be revised to read:

(b) Work Zone Speed Limit Signs. The Lake County Division of Transportation's Engineering Department will specify whether a project meets the criteria for a Work Zone Speed Limit. When specified, the work zone speed limit signs shall be installed as shown on the LCDOT Typical Work Zone Speed Limit Installation guideline sheets, at a maximum of 20 feet lateral distance of the locations shown on the plans. Failure to install the required amount of signs at the proper sign spacing shall result in an immediate traffic control deficiency. These signs are required for the proper enforcement of the work zone speed limit.

All permanent "SPEED LIMIT" signs located within the work zone shall be removed or covered. If the speed limit sign is to be covered, it shall be done in a manner that no part of the legend shall be visible in any lighting condition. This work shall be completed by county forces only.

The work zone speed limit signs and the end work zone speed limit signs in advance of and at the end of the lane closure(s) shall be used for the duration of the closure(s).

The work zone speed limits signs within the lane closure(s) shall only be used when workers are present in the closed lane adjacent to traffic. The sign assemblies within the lane closure(s) will not be required when workers are located behind a concrete barrier wall.

Article 701.14 Signs shall be modified by adding the following section (c),

(c) Temporary Construction Information Signs. When indicated in the traffic control plan or as directed by the Engineer the Contractor shall furnish, install, maintain, relocate, and remove for various stages of construction Temporary Construction Information Signs. These signs shall include all Temporary Construction Information Signs needed by the road users to proceed safely through the work zone.

The following signs are considered Temporary Construction Information Signs:

Entrance White Legend on Green Background Warning-New Lanes Open Black Legend on Orange Background

The signs shall be installed in accordance with the traffic control plan and as directed by the Engineer.

Article 701.14 Signs shall be modified by adding the following section (d),

(d) Flagger Signs. The W20-7a Flagger Symbol sign or the W20-7 Flagger Ahead sign may be used in lieu of the Illinois Department of Transportation W20-I101 Flagger sign.

Article 701.15 Traffic Control Devices shall be modified by adding the following paragraphs:

All devices and combination 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 include small, lightweight, channelizing and delineation 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 Test Level 3.

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 this category and it is exempt from NCHRP 350 compliance requirement.

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

Article 701.15 Traffic Control Devices (b) Type I, II and III Barricades shall be modified by adding the following paragraphs.

Type II nonmetallic barricades shall be used at all locations that call for Type I, or Type II barricades. The reflective area of the top rail shall be at least 288 square inches.

Any drop off greater than 3 inches, but less than 6 inches, located within 8 feet of the pavement edge shall be protected by Type II barricades equipped with mono-directional steady burn lights. The barricades shall be placed at a spacing of 100 feet center to center. For any drop off within 8 feet of the pavement edge that exceeds 6 inches, the Type II barricades equipped with mono-directional steady burn lights shall be placed at a spacing of 50 feet center to center. Barricades that must be placed in excavated areas shall have leg extensions installed so that the top of the barricade is in compliance with the height requirements of IDOT Standard 702001.

All Type II barricades shall be equipped with a steady burn light when used during hours of darkness unless otherwise stated herein.

Extended Leg Type II Barricades. Extended leg type II barricades shall be required for any drop off within 8 feet of the pavement edge that exceeds 6 inches in depth. Extended Leg Type II barricades shall be in compliance with the height requirements of IDOT Standard 702001. Type II extended leg barricades may be of an "A" frame type with either wood or plastic panels and metal or non-metallic legs and have no rigid stay bracing. The method of weighting the Extended Leg Type II barricades shall be in accordance with the manufacturer's guidelines and

approved by the Engineer. Extended Leg Type II barricades shall be equipped with mono-directional steady burn lights and shall be placed at a spacing of 50 feet center to center.

Check barricades shall be placed in work areas perpendicular to traffic every 1,000 feet, at one per lane and one per shoulder, to prevent motorists from using work areas as a traveled way. Two additional check barricades shall be placed in advance of each patch excavation or any other hazard in the work area. The first will be placed at the edge of the open traffic lane and the second centered on the closed lane. Check barricades shall be Type II and equipped with flashing amber light.

All Type II Barricades shall be made of plastic, fiberglass or other non-metallic materials. The top panels will be 12 inches x 24 inches and the bottom panels will be 8 inches x 24 inches. The orange and white reflective sheeting will be Type A, meeting the initial minimum coefficient of reflection in Article 1084.02 of the "Standard Specifications". All other requirements for Type II barricades will be met.

Article 701.15 Traffic Control Devices (e) Direction Indicator Barricades shall be modified by adding the following paragraphs.

Direction Indicator Barricades shall be used exclusively in lane closure and lane shift tapers. They shall be used only when traffic is being merged with an adjacent through lane or flush median, shifted onto a median crossover or being diverted onto a construction run-around. The barricades shall be placed in series in a taper with the arrow panel directing traffic in the direction of the merge, crossover or run-around. The direction indicator barricades shall meet the requirements for Type II barricades as stated in this special provision. The top panel, which faces traffic, shall be 12 inches x 24 inches with fluorescent orange sheeting meeting the requirements of Article 1084.02(b) of the "Standard Specifications". The top panel indicator arrow shall be 21 inches long with a 9½ inch wide arrow barb and a 3½ inch wide arrow shaft. The top panel, facing away from traffic shall have a 12 inch x 24 inch orange and white diagonal panel. The bottom panels shall be 8 inches x 24 inches with orange and white diagonal sheeting, as shown in LCDOT's Special Detail LC7200. All sheeting shall meet the initial coefficient of retroreflection in Article 1084.02(a) of the "Standard Specifications", for Type A sheeting.

Article 701.15 Traffic Control Devices (f) Drums shall be replaced with the following:

(f) Drums. Type II barricades shall be used in lieu of drums.

Article 701.15 Traffic Control Devices (j) Portable Changeable Message Signs shall be replaced with the following:

(j) Portable Changeable Message Signs (PCMS). This work shall consist of furnishing, placing and maintaining a changeable message sign(s) at location(s) shown on the plans, in the standards or as directed by the Engineer.

The sign(s) shall be trailer mounted. The message panel shall be at least 7 feet above the pavement, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time. Character height shall be 18 inches.

The message panel shall be of either a LED matrix, bulb matrix or disc matrix design controlled by an onboard computer capable of storing a minimum of 99 programmed messages for instant recall. The computer shall be capable of being programmed to accept messages created by an operator via an alphanumeric keyboard and able to flash any six messages in sequence. The message panel shall also be capable of being controlled by a computer from a remote location via a cellular linkage. The Contractor shall supply the modem, cellular telephone, and the necessary software to run the sign from a remote computer at a location designated by the Engineer. The Contractor shall promptly program and/or reprogram the computer to provide the messages as directed by the Engineer.

The message panel shall be visible from 1,320 feet under both day and night conditions. The letters shall be legible from 750 feet.

The sign shall include automatic dimming for nighttime operation and a power supply capable of providing 24 hours of uninterrupted service.

The Contractor shall provide all preventive maintenance efforts he/she deems necessary to achieve uninterrupted service. If service is interrupted for any cause and not restored within the time allotted by the modifications Article 701.04 of the "Standard Specifications" contained in this special provision, a traffic control deficiency penalty can be imposed and the Engineer will cause such work to be performed as may be necessary to provide this service. The cost of such work shall be borne by the Contractor or deducted from current or future compensation due to the Contractor.

When the sign(s) are displaying messages, they shall be considered a traffic control device. At all times when no message is displayed, they

shall be considered equipment.

Basis of Payment. When portable message signs are shown on a Standard, this work shall be considered as included in the lump sum payment for Traffic Control AND PROTECTION (SPECIAL). For all other portable changeable message signs, this work will be paid for at the contract unit price per calendar month for each sign as CHANGEABLE MESSAGE SIGN, as stated in Article 701.08 of this special provision.

Article 701.17 Specific Construction Operations (c) Surface Courses and Pavement (1) Prime Coat shall be replaced by the following:

(1) Prime Coat. "FRESH OIL" signs (W21-1) shall be used when the prime coat is applied to pavement that is open to traffic. The signs are to remain in place until tracking of the prime ceases. These signs shall be erected a minimum of 500 feet preceding the start of the prime and on all side roads within the posted area. The signs on the side roads shall be posted a minimum of 200 feet from the mainline pavement. These signs are excluded from the time requirements of Article 701.04 of the "Standard Specifications" as modified by this special provision (above). Noncompliance with the provisions of this section, by the Contractor, shall result in an immediate traffic control deficiency charge. All signs shall have an amber flashing light attached.

Article 701.17 Specific Procedures (c) Surface Courses and Pavement (2) Cold Milling shall be replaced by the following:

(2) Cold Milling. "ROUGH GROOVED SURFACE" signs (W8-I107) shall be used when the road has been cold milled and is open to traffic. The signs shall remain in place until the milled surface condition no longer exists. These signs shall be erected a minimum of 500 feet preceding the start of the milled pavement and on all side roads within the posted area. The signs on the side roads shall be posted a minimum of 200 feet from the mainline pavement. All signs shall have an amber flashing light attached.

Article 701.17 Specific Procedures (c) Surface Course and Pavement shall be modified by adding the following paragraph:

(6) Area Reflective Crack Control Treatment Fabric. "SLIPPERY WHEN WET" signs (W8-5) shall be used when crack control fabric is applied to pavement that is open to traffic. These signs shall remain in place until the binder course is laid. The signs shall be erected a minimum of 500 feet preceding the start of the crack control treatment and on all side roads within the posted area. The signs on the side roads shall be posted a minimum of 200 feet from the mainline pavement. These signs are

excluded from the time requirements of Article 701.04 of the "Standard Specifications" as modified by this special provision (above). Non-compliance with the provisions of this section, by the Contractor, shall result in an immediate traffic control deficiency charge. All signs shall have an amber flashing light attached.

Article 701.18 Highway Standards Application (b) Standard 701316 and 701321 (2) g. Detector Loops, shall be replaced with the following:

g. Microwave Vehicle Sensors. Microwave Vehicle Sensors shall be installed as directed by the Engineer. The installation of the microwave vehicle sensors shall meet the applicable requirements of Section 850 of the "Standard Specifications". LCDOT shall approve the proposed microwave vehicle sensor before the Contractor may furnish or install it. The Contractor shall install, wire and adjust the alignment of the sensor in accordance to the manufacturer's recommendations and requirements. The Engineer shall approve the installation.

The microwave vehicle sensor shall meet the following requirements:

- Detection Range: Adjustable to 60 feet
- Detection Angle: Adjustable, horizontal and vertical
- Detection Pattern: 16 degree beam width minimum. [at 50 feet the pattern shall be approximately 15.5 feet wide]
- Mounting: Heavy-duty bracket, predrilled and slotted for pole mounting

Article 701.18 Highway Standards Application (f) Standard 701416, the second paragraph shall be replaced by the following:

Vertical panels may be attached to the concrete barriers where available space prohibits the use of Type II barricades.

Article 701.18 Highway Standards Application (j) Urban Traffic Control, Standards 701501, 701502, 701601, 701602, 701606, 701701, and 701801 (1) General, shall be modified by adding the following paragraphs:

Whenever a lane is closed to traffic using IDOT standard 701601, 701606, or 701701, the pavement width transition sign (W4-2R or W4-2L) shall be used in lieu of the "WORKERS" sign (W21-1 or W21-1a)

Whenever any vehicle, equipment, workers or their activities infringe on the shoulder or within 15 feet of the traveled way, and the traveled way remains unobstructed, then the applicable Traffic Control Standard shall be 701006, 701011, 701101, or 701701. The "SHOULDER WORK AHEAD" sign (W21-5(0)-48) shall be used in lieu of the "WORKERS" sign (W21-1 or W-21-1a).

All diamond shaped warning signs shall have a minimum dimension of 48 inches x 48 inches. The Engineer may approve diamond shape warning signs measuring 36 inches x 36 inches when the posted speed limit is 30 M.P.H. or less.

Article 701.18 Highway Standards Application shall be modified by adding the following section (k):

(k) IDOT standard 701331. When IDOT standard 701331 is specified on two-lane, two-way roadways, the "DETOUR AHEAD" sign shall be replaced with a "LANE SHIFT AHEAD" sign.

Article 701.19 Method of Measurement shall be replaced completely with the following:

701.19 Method of Measurement.

These items of work will be measured on a lump sum basis for furnishing installing, maintaining, replacing, relocating and removing the traffic control devices required in the plans and these special provisions.

Article 701.20 Basis of Payment shall be replaced completely with the following:

701.20 Basis of Payment

This work will be paid for at the contract unit price per lump sum for TRAFFIC CONTROL AND PROTECTION (SPECIAL). The payment will be in full for all labor, materials, transportation, and incidentals necessary to furnish, install, maintain, replace, relocate and remove all traffic control devices indicated in the plans and specifications, except for the following items, which will be paid for separately.

- 1) Temporary Bridge Traffic Signals
- 2) Temporary Rumble Strips [where each is defined as 25 feet].
- 3) Temporary Raised Pavement Markers.
- 4) Construction Speed Limit Trailer
- 5) Sand module impact attenuators
- 6) Temporary Bridge Rail
- 7) Traffic Control Supervisor
- 8) Portable Changeable Message Signs (when not shown on a standard)
- 9) Temporary Concrete Barrier
- 10) Monodirectional Prismatic Barrier Reflector

The salvage value of the materials removed shall be reflected in the bid price for this item.

Any delays or inconveniences incurred by the Contractor while complying with these requirements shall be considered included in the unit price for TRAFFIC CONTROL AND PROTECTION (SPECIAL), and no additional compensation will be allowed.

Any traffic control devices required by the Engineer to implement the Traffic Control Plan as shown in the plans and specifications of the contract shall be considered included in the unit price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

If the Engineer requires additional work involving a substantial change of location and/or work which differs in design and/or work requiring a change in the type of construction, as stated in Article 104.02(d) of the "Standard Specifications" the standards and/or the designs, other than those required in the plans, will be made available to the Contractor at least one week in advance of the change in traffic control. Payment for any additional traffic control required for the reasons listed above will be in accordance with Article 109.04 of the "Standard Specifications".

Revisions in the phasing of construction or maintenance operations, requested by the Contractor, may require traffic control to be installed in accordance with standards and/or designs other than those included in the plans. The Contractor shall submit revisions or modifications to the traffic control plan shown in the contract to the Engineer for approval. No additional payment will be made for a Contractor requested modification.

In the event the sum total of all work items for which TRAFFIC CONTROL AND PROTECTION (SPECIAL) is required is increased or decreased by more than ten percent (10%), the contract bid price for TRAFFIC CONTROL AND PROTECTION (SPECIAL) will be adjusted as follows:

Adjusted Contract Price = $0.25P + 0.75P [1\pm(X-0.1)]$

P = the contract price for TRAFFIC CONTROL AND PROTECTION (SPECIAL)

Difference between original and final sum total value of all work items for which TRAFFIC__CONTROL AND PROTECTION (SPECIAL) is required

Original sum total value of all work for which TRAFFIC CONTROL AND PROTECTION (SPECIAL) is required.

The value of the work items used in calculating the increase and decrease will include only items that have been added to or deducted from the

contract under Article 104.02 of the "Standard Specifications" and only items that require the use of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

In the event LCDOT cancels or alters any portion of the contract that result in the elimination or incompletion of any portion of the work, payment for partially completed work will be made in accordance with Article 104.02 of the Standard Specifications.

Section 704 Temporary Concrete Barrier shall be modified by adding the following:

Monodirectional, Prismatic Barrier Reflectors as described in Article 782 of the "Standard Specifications" and these special provisions shall be installed one per barrier unit or one per terminal section.

Section 782 Prismatic Reflectors shall be modified by adding the following,

The Prismatic Reflector shall be centered 9½ inches below the top of the temporary concrete barrier on the side of the barrier, which faces traffic, one per temporary concrete barrier section or temporary concrete barrier terminal section. The Prismatic Reflector shall be reflective in the direction of approaching traffic only and shall match the color of the centerline or edge line, either amber or crystal, where the temporary concrete barrier is placed.

Basis of Payment. The cost of the Monodirectional, Prismatic Barrier Reflector shall be considered included in the unit price per foot for TEMPORARY CONCRETE BARRIER or the contract unit price each for TEMPORARY CONCRETE BARRIER TERMINAL SECTION.

DIVISION 800. ELECTRICAL

ELECTRIC SERVICE INSTALLATION, SPECIAL

Description: This work shall consist of installing an electric service installation, including furnishing and installing metering, as identified herein and on the plans.

General: The work shall be performed according to Sections 804 and 1086 of the Standard Specifications, and the following:

The electric services to the Center Island receptacles shall be 120/240 VAC single phase and shall include a combination meter socket/distribution panel as manufactured by Milbank, or equal. The distribution panel within these metering pedestals shall include a 60A, two-pole main breaker and two 20A single-pole breakers. One of the 20A breakers shall be a spare. All work and materials for the electrical service installation for the center islands will be performed by others.

Basis of Payment: This work will be paid for at the contract unit price per each for **ELECTRICAL SERVICE INSTALLATION, SPECIAL.**

JUNCTION BOX (SPECIAL)

Provide cast iron junction box according to Articles 813 and 1088.04 of the Standard Specifications, except as follows:

Junction box shall be suitable for a double duplex GFCI receptacle. Provide receptacles, which shall be as specified in Article 1068.01(e)(7). Receptacle installation shall be complete with weatherproof clear lexan covers.

Junction box shall be mounted on a 1-inch stainless steel pipe embedded in a concrete foundation as shown on the drawings.

Basis of Payment: This work will be performed by others.

TREE, AMELANCHIER CANADENSIS (SHADOW BLOW SERVICEBERRY), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED

Description: This work shall consist of furnishing, transporting, and planting trees indentified on the plans and/or by Engineer to the locations on the project site.

General: The work shall be performed according to Section 253 of the Standard Specifications.

Tree Description: Trees shall be AMELANCHIER CANADENSIS 'PRINCE WILLIAM' with the common name being "PRINCE WILLIAM SERVICEBERRY." The caliper of the tree shall be at least 1.5 inches.

Tree Form: All Amelanchier Canadensis trees shall be multi-stem plant form.

Temporary Storage: Trees shall be balled and burlapped according to Article 253.06 (b) of the Standard Specifications.

Method of Measurement: Trees will be measured for payment in place as individual plants. Only acceptable plants will be measured for payment.

Basis of Payment: This work will be paid for at the contract unit price per each for TREE, AMELANCHIER CANADENSIS (SHADOW BLOW SERVICEBERRY), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED.

DUST CONTROL WATERING

Description: This work shall consist of controlling dust resulting from construction operations.

General: Dust shall be controlled by sweeping, watering and/or the application of Calcium Chloride in a manner meeting the Engineer's approval. All equipment used for this work shall meet the Engineer's approval.

Dust Control watering shall be required at the end of each work week and at other times as directed by the Engineer.

The Contractor shall respond to the Engineer's directive immediately. If the Contractor is unable to schedule dust control watering within four (4) hours or if conditions are determined by the Engineer to require immediate attention, the Contractor shall cease all construction operations and manually sweep and hose down the areas of concern. The Contractor may resume construction operations only after receiving approval from the Engineer to do so.

Method of Measurement: This work will be measured for payment in units with each unit equivalent to 30 minutes of sweeping or one full application of water or Calcium Chloride.

Basis of Payment: This work will be paid for at the contract unit price per unit for DUST CONTROL WATERING. The unit price shall include all labor, equipment and materials adequate for dust control as described herein.

PAINT CURB

Description: This work shall consist of furnishing and applying paint pavement markings on the top and face of the curb with the color specified on the plans.

Materials: The materials shall be according to the requirements for paint pavement markings in Article 1095.02 of the Standard Specifications.

General: This work shall be performed according to Section 780 of the Standard Specifications and the following:

The equipment used to apply thermoplastic pavement markings, under this contract, shall be limited to hand-operated equipment only. Truck-mounted equipment shall not be used.

LCDOT standard LC7800 shall be referenced.

Method of Measurement: This work will be measured for payment in place in feet regardless of the type of curb to be painted. The measurement will be made along the face of curb according to Article 606.14 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per foot for PAINT CURB. *The unit price shall include all labor, equipment and materials required to paint the designated section of curb.*

PIPE UNDERDRAIN REMOVAL

Description: This work shall consist of removal and disposal of existing pipe drains.

General: This work shall be performed according to Section 551 of the Standard Specifications.

Method of Measurement: This work will be measured for payment in place in feet for the removal and offsite disposal of the existing pipe underdrain.

Basis of Payment: This work will be paid for at the contract unit price per foot for PIPE UNDERDRAIN REMOVAL.

SURVEY MONUMENTS

Description: This work shall consist of installing survey monuments at the locations shown on the plans.

Materials: LCDOT will supply the survey monuments. The Contractors shall supply all the materials necessary to install the monument.

General: After the final surface course has been placed the Engineer will install four MagTM nails for each point to be monumented. The Contractor shall use the following procedure to install the survey monuments:

- 1. At each location there are four Mag^{TM} nails in the surface. Each nail is one foot from the center and in direct line with an opposite nail to be used for setting the new monument.
- 2. By the use of a hammer drill mounted with a $1\frac{1}{4}$ " diameter masonry bit, center the bit within the four MagTM nails and drill a hole $4\frac{1}{2}$ " deep.
- 3. By the use of a drilling machine mounted with a 4 inch diamond core bit, center the core bit and cut a hole, 34" deep. Chisel out the hole for a level depth of 34".
- 4. Fill the hole with Poly-Carb, Inc. Mark-29.9 two-component epoxy adhesive or equivalent meeting all requirements of the ASTM Specification C881, Type IV, Grade 3 if temperature is at or above 50°F or AASHTO Specification M237-90, Table 2 Type III for the two component, epoxy adhesive if the temperature is between 31°F and 50°F with the approval by the Engineer before installation.
- 5. Place a new monument in the center of the hole. Set the monument so that the center of the legend top is %" below the pavement surface. Aggregate can be used to adjust the monument if it needs to be raised to obtain the correct depth.
- 6. By using the four MagTM nails and a string line or ½" chalk line, center the monument in the hole to the nearest 0.005 foot. This can be accomplished by drawing the string across two diagonally opposite MagTM nails.
- 7. Each monument shall be protected from traffic for a minimum of 90 minutes.

Basis of Payment: This work will be paid for at the contract unit price per each for SURVEY MONUMENTS. The unit price shall include all work and materials required to complete the installation.

RELOCATE EXISTING MAILBOX

Description: This work shall consist of relocating an existing mail box.

General: This work shall consist of relocating an existing mail box to a location shown on the plans. The new location of the mail box shall be subject to the approval of the Engineer.

The relocated mailbox shall be installed on a new 4" x 4" square or 4½" diameter round treated wood post. The new post shall be embedded no more than 24" into the ground. The resulting hole shall be backfilled with suitable excavated material as approved by the Engineer.

The old post shall be disposed of according to the requirements of Article 202.03 of the Standard Specifications.

Method of Measurement: This work will be measured for payment as individual items and the unit of measurement will be each. The removal and disposal of the old post and backfilling the hole shall be incidental to this item.

Basis of Payment: This work will be paid for at the contract unit price per each for RELOCATE EXISTING MAILBOX.

AGGREGATE BICYCLE PATH

Description: This work shall consist of furnishing and placing two courses of aggregate totaling 6", on a prepared subgrade for bicycle path construction.

Materials: The aggregate shall be according to Article 402.02 of the Standard Specifications and the following:

The material shall be limestone screenings, gradation FA 5, meeting the requirements of Article 1003.04 of the Standard Specifications". Additionally any material deemed incompatible according to Article 1003.01(d) of the Standard Specifications will be rejected.

General: The work shall be performed according to Section 402 of the Standard Specifications and the following:

The aggregate surface course shall be constructed according to Articles 351.05(a) and 351.05(b) except that the bearing ratio requirements and the use of a central mixing plant to add moisture will be waived.

The aggregate shall be placed in 2 lifts with a total depth of 6". Water may be added at the job site to obtain density. The aggregate shall be compacted to not less than 95% of the standard density. The equipment pushing the spreader shall be non-cleated.

Method of Measurement: Aggregate Bicycle Path will be measured for payment in square yards according to Article 311.08(b) of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per square yard for AGGREGATE BICYCLE PATH. The unit price shall include all material, equipment and labor to furnish, transport, place and finish the construction of the aggregate surface course to the satisfaction and approval of the Engineer.

MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS

Description: This work shall consist of maintaining the temporary erosion control systems installed by the Contractor, as directed by the Engineer, to control siltation at all times during the duration of the project.

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

Maintenance of Temporary Erosion Control Systems shall include the repair of the various systems, removal of entrapped sediment and cleaning of any silt filter fabric. The sediment shall be removed as directed by the Engineer and disposed of according to Article 202.03 of the "Standard Specifications".

Accumulated silt in sediment basins shall be removed at any time the basin becomes 75% filled. Any additional materials and work required by the Engineer will be measured and paid for as specified.

When a temporary erosion control system is in need of maintenance, the Engineer will give the Contractor written notice. If the Contractor fails to maintain the temporary erosion control systems, as directed by the written notice of the Engineer, the Engineer may, at the expiration of a period of 48 hours, proceed to maintain the systems as deemed necessary. The cost of the maintenance will be deducted from any compensation due, or which may become due the Contractor under this contract.

Basis of Payment: This work will be paid for at the lump sum contract unit price. *The unit price shall include the cost of all materials, equipment, and labor required to effectively maintain the temporary erosion control systems constructed and installed for this project.*

REMOTE CONTROLLED VIDEO SYSTEM

This pay item shall include providing and installing a remote-controlled video system at a location designated by Engineer. The remote-controlled video system shall be a Pelco Spectra IV SE Series Discreet Dome System or approved equal. This pay item shall include a color camera (minimum 35x optical zoom), dome assembly, all mounting hardware, connectors, cables, and related equipment necessary to complete the installation in accordance with the manufacturer's specifications.

The camera shall be installed as shown on the drawings on the luminaire arm near the luminaire and shall be angled toward the center of the intersection. When installed on the pole, the camera shall be mounted with a 14-inch pendant arm with integral transformer/power supply (Pelco IWM24-GY or approved equal). When installed on the luminaire arm, the camera shall be installed with a 30-degree tilt-adjustable bracket, and the external power supply (Pelco WCS1-4 or approved equal) shall be installed on the pole. Cameras and external power supplies shall be installed with stainless steel straps

Contractor shall contact Engineer prior to installing the Pelco camera and associated wiring to receive final approval on the camera location.

In order for Engineer to control the camera remotely and view the video signal over a high-speed connection, the REMOTE CONTROLLED VIDEO SYSTEM must be connected to the LCDOT Gigabit Ethernet network.

A VIDEO ENCODER and a LAYER II (DATA LINK) SWITCH will be required. Video encoders and Layer II switches shall be installed within the CLOSED CIRCUIT TELEVISION CABINET and shall be wired to the camera and the wireless transmission system as directed by Engineer. All wiring will be at the lighting pole. The VIDEO ENCODER and LAYER II (DATA LINK) SWITCH shall be paid for separately.

The REMOTE CONTROLLED VIDEO SYSTEM is being connected to a new wireless transmission system. Connection to the wireless transmission system shall be included in the cost of this item. The WIRELESS VIDEO DISTRIBUTION SYSTEM shall be installed according to the drawings and shall be paid for separately.

Basis of Payment: This item will be paid for at the contract unit price each for REMOTE CONTROLLED VIDEO SYSTEM, which price shall be payment in full for furnishing all associated equipment and cabling required, installing the system complete and in place, and placing the system in operation to the satisfaction of Engineer.

STAMPED COLORED PORTLAND CEMENT CONCRETE & MEDIAN SURFACE 4 INCH (SPECIAL)

Description: This work shall consist of constructing integrally colored Portland cement concrete medians pavement with imprinted pattern, surface hardener, and cure/sealer. The concrete median shall be four inches thick and pavement ten inches thick.

Submittals: Manufacturers' data sheets shall be submitted on each product to be used, including preparation instructions, storage and handling requirements, and installation methods.

Quality Assurance: The installer shall provide a qualified foreman or supervisor who has a minimum of three years experience with imprinted and textured concrete, and

who has successfully completed at least five imprinted concrete installations of high quality and similar in scope to that required. The concrete shall be cast-in-place on the job site by trained and experienced workers. Obtain materials from the same source for all the colored and imprinted work.

Mock-Up: Prior to beginning work, provide field samples of integrally colored Portland cement concrete with imprinted pattern, surface hardener, and cure/sealer. Samples to be 48 inches by 48 inches in size with surface colors and patterns specified. Do not proceed with work until the workmanship, pattern, color, and sheen are approved by Engineer. Refinish mock-ups or provide additional samples as required to obtain Engineer's approval.

Materials: Provide all materials in accordance with Section 606 of the Standard Specifications. Provide Canyon Stone pattern with Sienna integral color and Caramel color hardener. Final pattern and color selections to be approved by Engineer.

Manufacturer Information or approved equal:

Bomanite Corporation P.O. Box 599 Madera, CA 93639-0599 Phone: (559) 673-2411

Fax: (559) 673-8246

Integral coloring admixture shall be a non-fading synthetic oxide pigment meeting ASTM C979 at a 6% minimum percent loading and a maximum 8% loading by weight of the cementitious materials in the mix. Add integral color according to manufacturer's instructions.

Color hardener shall be applied to the surface of the concrete according to the manufacturer's instructions and recommended application techniques.

Form release agent shall be provided in clear liquid form and shall be applied to the surface of the concrete according to the manufacturer's instructions and recommended application techniques.

Curing agent shall be a liquid membrane-forming clear curing compound conforming to AASHTO M148, Type 1. Apply curing compound for integrally colored concrete according to the manufacturer's instructions and recommended application techniques. Apply the curing compound at a uniform interval after each pour to maintain consistency in finished coloration.

Use admixtures designed for use and compatibility with colored concrete pigments. Do not use calcium chloride or admixtures containing chlorides. Use the same admixtures for colored concrete pavement throughout the project.

Joint fillers shall be selected to match the integral colors selected for the project.

Equipment: Imprinting tools shall be used for texturing freshly placed concrete in a pattern/texture as approved by Engineer. Tools are to be used according to the manufacturer's instructions.

General: This work shall be according to Section 606 of the Standard Specifications and the following;

Colored concrete mixes for the entire project are to be consistent. If the contractor chooses to provide mixes with High Early Strength, then all colored concrete will be provided with the same mix.

If additional water is added to the colored concrete once a truck is on site, this concrete will be rejected.

If Engineer allows, minimal amounts of water may be applied to the surface of the colored concrete to complete the final surface finishing operations. If too much water is added to the surface of the colored concrete during final surface finishing operations such that the colored concrete no longer conforms to the approved color, the colored concrete may be rejected and replaced at the direction of Engineer.

Cover and protect adjacent construction and concrete from discoloration and spillage during placement and curing of colored concrete. Remove and replace discolored concrete as Engineer directs.

Uniformly apply liquid release agent onto the colored, still plastic state concrete to provide clean release of imprinting tools from the concrete surface without lifting imprint or rearing concrete.

Contractor shall monitor the setting up of the concrete. Once the concrete is ready for imprinting, contractor shall accurately align and place the imprinting stamps uniformly pressing or pounding the imprint tools to produce the required pattern and depth of imprint on the concrete surface. Remove platform tools immediately. Hand texture and stamp edges and surfaces unable to be imprinted with the stamping mats. Touch up imperfections such as broken corners, double imprints, and surface cracks.

Do not cure colored concrete using plastic sheeting unless necessary due to weather conditions. Plastic sheeting shall not be laid directly on top of the concrete, as discoloration will occur. Plastic shall be suspended above the concrete.

All completed areas of colored concrete shall be of consistent color and appearance and must meet the approval of Engineer. Any finished areas that are rejected by Engineer shall be removed and replaced by Contractor at no additional cost to Owner.

Method of Measurement: STAMPED COLORED PORTLAND CEMENT CONCRETE and STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL) will be measured for payment in place and the area computed per square feet. Concrete curb and gutter around the median and pavement will be measured separately for payment.

Basis of Payment: Construction of COLORED PORTLAND CEMENT CONCRETE and STAMPED COLORED PORTLAND CEMENT CONCRETE MEDIAN SURFACE 4 INCH (SPECIAL) will be paid for at the contract unit price per square foot.

LAYER II (DATALINK) SWITCH

This specification sets forth the minimum requirements for a Layer II Ethernet switch that will transmit encoded video data from a closed circuit television cabinet to the wireless transmission system. The Layer II switch shall be a Cisco Catalyst 2955 Series Intelligent Ethernet Switch, or approved equal.

The Layer II (Data Link) Switch shall be procured from Delcan, Lake County's Passage engineering consultant. Delcan shall program this equipment for the appropriate location in the County's communication network.

The Layer II switch and its power supply shall be mounted to either a standard DIN rail or an equipment mounting channel in the CLOSED CIRCUIT TELEVISION CABINET. The power supply shall be hard-wired to the cabinet power, not plugged into one of the cabinet power outlets.

Basis of Payment: This item will be paid for at the contract unit price each for LAYER II (DATALINK) SWITCH, which price shall be payment in full for furnishing and installing the switch and all necessary connectors, cables, fiber optic jumpers, hardware, software, other peripheral equipment, and placing it in operation to the satisfaction of Engineer. The VIDEO ENCODER, media converters, and terminal servers shall be paid for separately.

DECORATIVE LIGHT TYPE A & B

Description: This work shall consist of furnishing, transporting, and installing luminaires as identified on the plans.

General: The work shall be performed according to Sections 821 and 1067 of the Standard Specifications, IDOT District One Luminaire special provision, and the following;

Type A shall be 250 watt.

Type B shall be 150 watt.

Revise Article 1067.02 of the Standard Specifications to include:

- (d) Decorative style Drop Mount.
 - (1) "The luminaire shall be a Sternberg Model Omega 1527FG, or equal approved by the Engineer, with options as specified herein and in the Standard Specifications, and shall be suitable for drop mounting from the mast arm. The luminaire shall be according to paragraphs of Article 1067.02 that are applicable to a dropmounted luminaire."

Basis of Payment: This work will be paid for at the contract unit price per each for DECORATIVE LIGHT of the type specified.

VIDEO ENCODER

This specification sets forth the minimum requirements for a video encoder that will encode video data from a video camera for transmission on the wireless transmission network.

The video encoder shall be an Optelecom Model C-40 MPEG-4 video encoder/decoder, or an Optelecom Model C-44 E-MC 4-channel MPEG-4 encoder, as shown on the drawings, or approved equivalent. Other video encoder/decoders submitted for approval must be compatible with the Lake County Passage Advanced Traffic Management System (ATMS) software and VideoLAN VLC Media Player Release 0.8.6D or later.

The video encoder and its power supply shall be mounted to either a standard DIN rail or an equipment mounting channel in the CLOSED CIRCUIT TELEVISION CABINET. The power supply shall be hard-wired to the cabinet power, not plugged into one of the cabinet power outlets.

Basis of Payment: This item will be paid for at the contract unit price each for VIDEO ENCODER, which price shall be payment in full for furnishing and installing the encoder and all necessary connectors, cables, hardware, software, and other peripheral equipment, and placing it in operation to the satisfaction of Engineer.

<u>LIGHTING CONTROLLER</u>, BASE MountED, 480 UOLT, 100AMP

Description: This work shall consist of furnishing and installing an electrical controller as identified herein and on the plans.

General: The work shall be performed according to Sections 825 and 1068 of the Standard Specifications and the following:

Provide a 20A, 120 VAC, single-pole circuit breaker wired to a control power transformer connected to the line side of the lighting contactor. The circuit shall provide 120 VAC power to the Closed Circuit Television Cabinet. Provide a separate 1.5 kVA control power transformer or increase the standard control power transformer size by 1.5 kVA. Provide identification on the controller drawings and in the panel as "Closed Circuit Television Cabinet Power". This circuit breaker shall be in addition to the circuit breakers specified herein or identified on the IDOT standard drawing for lighting controllers.

Basis of Payment: This work will be paid for at the contract unit price per each for LIGHTING CONTROLLER, BASEY ON TED, 480 Up 1+, 100 AMP

LIGHT POLE, SPECIAL (DECORATIVE ORNAMENTAL)

Description: This work shall consist of furnishing, transporting, and installing light poles and mast arms as identified herein and on the plans.

General: The work shall be performed according to Sections 830 and 1069 of the Standard Specifications and the following:

The poles shall be manufactured with a 14-inch bolt circle at the foundation base plate.

Ornamental bases shall be either cast iron or cast aluminum. All mast arms, cast iron bases, and any exposed steel hardware shall be hot-dipped galvanized and then painted to match the pole color by the supplier/manufacturer. Cast aluminum bases shall also be painted to match the pole color by the supplier/manufacturer.

All ornamental bases shall fit tightly around the poles with little or no gap at the top of the ornamental base. Two-piece ornamental bases shall fit together tightly with little or no gap between the two pieces. All bases shall fit securely on top of the foundation via breakaway couplings of the appropriate size and shall not easily move or wobble. Poles shall be of the proper height to accommodate a luminaire mounting height of 30 feet.

Luminaire arms shall be steel, Sternberg Model CAS, or approved equal, with eight foot length. Arms shall be appropriate for mounting of the luminaires.

Luminaires shall be Sternberg Model Omega 1527FG drop-style, or approved equal, painted to match the pole and mast arm by the supplier/manufacturer with mounting height as shown on the plans, and shall be paid for separately.

All (Special) steel mast arm assemblies and pole shall be manufactured and/or supplied by Sternberg Vintage Lighting, or approved equal, according to the following:

- Sternberg Model RTFP roadway pole, round, tapered,16-sharp fluted pole with ball center cap.
- Sternberg Model CAS decorative mast arm.
- Sternberg Hamilton Series 6400 ornamental base.
- Breakaway couplings.
- Color shall be park green, Sternberg designation PG.

Basis of Payment: This work will be paid for at the contract unit price per each for LIGHT POLE, SPECIAL (DECORATIVE ORNAMENTAL). The work shall include all materials, labor, and equipment necessary.

CAMERA MOUNTING ASSEMBLY

This work shall consist of modifying an existing light pole to accommodate mounting of a REMOTE CONTROLLED VIDEO SYSTEM camera. The exposed wires shall be trained into a drip loop and protected with black plastic spiral cable wrap.

Basis of Payment: This work shall be paid for at the contract unit price each for CAMERA MOUNTING ASSEMBLY, which shall include all necessary mounting hardware, labor, and incidentals necessary to securely fasten the assembly to a light pole and placing the camera into operation to the satisfaction of Engineer. The camera, cables, connectors, and related equipment shall be paid for separately as part of REMOTE CONTROLLED VIDEO SYSTEM.

CLOSED CIRCUIT TELEVISION CABINET

Description: This work shall consist of providing new pole mounted cabinet(s) at the location(s) indicated on the plans.

Materials: Contractor shall furnish the following items as specified:

<u>Closed Circuit Television Cabinet:</u> The Contractor shall provide a single door, NEMA 4X aluminum cabinet, complete with mounting panel, patch panel, terminal

block, and hardware for pole mounting as indicated on the plans or as directed by Engineer.

The walls, sides, top, and bottom shall be a minimum of 0.08 inches thick. The door shall be a minimum of 0.1-inch thick. The nominal dimensions of the cabinet shall be 24 inches high by 20 inches wide, and 8 inches deep.

All seams shall be continuously welded and ground smooth with no holes or knockouts. The cabinet shall be fabricated with a rolled lip around three sides of the door and on all sides of the enclosure openings to exclude liquids and contaminants. The door clamp assembly shall assure a watertight seal. A seamless gasket shall be included to assure a watertight and dust tight seal.

The cabinet shall be powder coated of the color of Engineer's choosing.

All fasteners shall be stainless steel.

The Closed Circuit Television Cabinet shall include a grounding system. Connection to ground shall be a bare, solid AWG # 6, copper wire or an equivalent bonding strap. The cabinet shall be wired for single-phase 120 volt AC service. Contractor shall provide a lightning arrestor designed to protect 120 VAC single-phase breaker panels. The lightning arrestor shall use metal oxide varistors as the protective elements. The response time shall be under five nanoseconds and the maximum surge current shall be at least 40,000 amps. The clamping voltage shall not exceed 400 volts. The device shall protect line-to-line and line-to-neutral.

Contractor shall provide an additional surge protector just for the circuits powering the communication and traffic management equipment. This surge protector shall be a filtering two-stage surge protector. Contractor shall install it on the load side of the appropriate breaker. The protector shall provide radio frequency noise filtering and be capable of protecting equipment drawing a total of at least 10 amps. If the load on the circuit exceeds 10 amps, Contractor shall split the load among multiple circuits, each with its own surge protector. The protector shall clamp both the main line and the main neutral at 250 volts, both relative to each other and relative to the cabinet ground. The response time shall be such that the voltage never exceeds 250 volts. The surge protector shall suppress surges of up to 20,000 amps.

All circuit breakers shall be molded case units with a quick-make, quick-break, trip-free mechanism, and with a minimum interrupting capacity of 10,000A (RMS Symmetrical). The circuit breakers shall be of fixed trip type and UL listed. Circuit breakers shall be listed on the latest Qualified Products List QPL-W-C-375 maintained by the Defense Supply Center, unless no suitable breakers are listed.

Each cabinet shall be equipped with one fluorescent lighting fixture mounted to the inside top front portion of the cabinet. The fixture shall have an F-15-T-8 cool white

lamp; operated from a normal power factor, UL listed cold weather ballast. A door-activated switch shall be installed to turn the cabinet light on when the door is opened.

General: Contractor shall install the Closed Circuit Television Cabinet as indicated in the plans. Contractor shall verify the mounting criteria and dimensions based upon the pole being provided. Any adjustments in the dimensions for the mounting brackets shall be approved by Engineer.

Documentation: One copy of all operations and maintenance manuals and four copies of the cabinet wiring diagram for each Closed Circuit Television Cabinet shall be delivered for each assembly installed.

Basis of Payment: This work will be paid for at the contract unit price for each CLOSED CIRCUIT TELEVISION CABINET. The unit price shall include all labor, equipment, materials, and testing required to furnish and install the Closed Circuit Television Cabinet. The unit price shall also include the documentation detailed above.

REMOVE RIGHT-OF-WAY MARKERS

Description: This work shall consist of the removal and disposal of existing right-of-way markers.

General: The work shall be performed according to the following:

All components of the right-of-way marker including the concrete, reinforcement bars, and appurtenances shall be removed to the full depth of the marker.

The hole shall be backfilled with a suitable material approved by the Engineer. The surface of the hole shall be treated to match the surrounding existing surface.

All components and debris resulting from this operation shall be disposed of outside the limits of the right-of-way according to Article 202.03 of the Standard Specifications and/or as directed by the Engineer.

Method of Measurement: This work will be measured for payment in place per each marker removed.

Basis of Payment: This work will be paid for at the contract unit price per each for REMOVE RIGHT-OF-WAY MARKERS.

WIRELESS VIDEO DISTRIBUTION SYSTEM

Description: This work shall consist of the installation of a wireless video distribution system that connects to the Lake County PASSAGE wireless network. This item includes the radio transceiver(s), directional antenna(s), power injector(s), associated cables / wiring, and all mounting hardware.

Materials: The following equipment may be included in the WIRELESS VIDEO DISTRIBUTION SYSTEM. The equipment quantities and installation locations shall be as shown on the plans. The installation shall be according to the included detail(s).

- Cisco Aironet 1520 Series Lightweight Outdoor Access Point (Model AIR-LAP1522AG-A-K9) radio transceiver, or approved equivalent. This radio transmits and receives using one antenna at a time.
- Cisco Aironet 1520 Series Lightweight Outdoor Access Point (Model AIR-LAP1524SB-A-K9) radio transceiver, or approved equivalent. This radio transmits and receives using two antennas at a time.
- Huber + Suhner Planar Antenna SPA 5600/9/23/0/V, 5150-5875 MHz, 23dBi, or approved equivalent.
- Cisco Aironet Model AIR-PWRINJ1500-2 power injector, or approved equivalent. RF cable between the radio transceiver(s) and the antenna(s) (N type connectors).
- Power wiring from the power injector(s) to the circuit breaker.
- All mounting hardware.

General: All components of this item shall be installed as shown on the plans. The radio transceiver(s) and antenna(s) shall be installed as high as possible on the pole, and as close to each other as possible to minimize signal loss. The antenna(s) shall be directed / aimed at another new antenna, or at an existing antenna on the County's wireless system, (e.g. a sector antenna on a water tower). The aiming of the new antenna(s) shall be as shown on the plans and/or as directed by the Engineer. The power injector shall be installed inside the cabinet.

Basis of Payment: This item will be paid for at the contract lump sum price for WIRELESS VIDEO DISTRIBUTION SYSTEM. The unit price shall be payment in full for furnishing and installing the radio transceiver(s), power injector(s), antenna(s), and all associated connectors, cables, hardware, and other peripheral equipment, and placing it in operation to the satisfaction of the Engineer. The cabinet, PTZ camera, layer II switch, video encoder, remote controlled video system, and CAT 5 Ethernet cable from the radio to the cabinet shall be paid for separately.

CAT 5 ETHERNET CABLE

Description: This work shall consist of furnishing and installing a network cable from the closed circuit television cabinet to the associated field device(s) as shown in the plans and specified herein.

Materials: The CAT 5 Ethernet cable shall be black Category 5 cable meeting the TIA/EIA 568-B.2 telecommunication standards. The cable shall be composed of 4 pairs of 23 AWG solid copper or thicker, and shall be flooded with a gel or grease compound to prevent moisture in the cable. The outer jacket shall be made of polyethylene (PE) that is ultraviolet (UV) resistant and abrasion resistant. The cable shall be capable of performing between -40 °C to 70 °C.

Each end of the cable shall have an RJ-45 connector terminated onto it according to the TIA/EIA 568B standard.

General: The work shall be performed according to the applicable portions of Section 873 of the Standard Specifications and details as shown on the plans.

Basis of Payment: This work will be paid for at the contract unit price per foot for CAT 5 ETHERNET CABLE. The unit price shall include furnishing, installing, and making all connections necessary for proper operation. Furnishing and installing the RJ-45 connector to the CAT 5 ETHERNET CABLE shall be included in the cost of this pay item.

INLET PROTECTION, SPECIAL

Description: This work shall consist of constructing, maintaining, removing, and disposing of inlet protection as part of the projects temporary erosion control system.

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

The inlet protection shall consist of silt filter fence placed around the perimeter of the inlet. The silt filter fence shall be supported by 1" $\times 2$ " wooden stakes with a minimum length of 3 feet. The stakes shall be spaced no more than 3 feet apart, and shall be driven into the ground a minimum of 8".

The filter fabric shall be installed in a backfilled trench 6" deep and securely attached to the posts by a method approved by the Engineer. The rim elevation of the casting shall be temporarily set a minimum of 6" above the adjacent grade. This elevation may vary to avoid flooding conditions as determined by the Engineer.

Method of Measurement: This work will be measured for payment as individual items and the unit of measurement will be each regardless of the size or type of inlet being protected.

Basis of Payment: This work will be paid for at the contract unit price per each for INLET PROTECTION, SPECIAL.

PIPE UNDERDRAINS 4" (MODIFIED)

Description: This work shall consist of constructing pipe underdrains of the required inside diameter.

Materials: The pipe underdrain materials shall be according to Article 601.02 of the Standard Specifications except that:

They shall be limited to the following items:

- (m) Perforated Polyvinyl Chloride (PVC) Pipe [1040.03(b)]
- (n) Perforated Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior [1040.03(c)]
- (r) Perforated Corrugated Polyethylene (PE) Pipe with a Smooth Interior [1040.04(a)]

General: The work shall be performed according to Section 601 of the Standard Specifications and the following:

Rodent shields (where required) as shown on LCDOT standard drawing LC6020 in the plans, shall be included in the cost of PIPE UNDERDRAINS 4" (MODIFIED).

Method of Measurement: Pipe underdrains shall be measured in place, in feet, of actual pipe installed.

Basis of Payment: This work will be paid for at the contract unit price per foot for PIPE UNDERDRAINS 4" (MODIFIED). *The unit price shall include furnishing and placing all pipe, fittings, connecting pipes, rodent shields, and concrete collars.*

IDOT DISTRICT ONE ROADWAY SPECIAL PROVISIONS

STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987

Revised: July 1, 1994

Utility companies involved in this project have provided the following estimated dates:

Name of Utility	<u>Type</u>	<u>Location</u>	Estimated Dates for Start and Completion of Relocation or Adjustments
ComEd	Power poles to be relocated and braced.	Corridor, see plans	Start = 6/28/10 Completion = 8/11/10
North Shore Gas Company	Gas line relocations. Gas valve and Buffalo Box adjustment	Corridor, see plans	Start = 6/1/10 $Completion = 8/10/10$
AT&T Illinois	Aerial and underground conduit to be relocated	Corridor, see plans	Start = 8/11/10 Completion = 9/1/10

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

POROUS GRANULAR EMBANKMENT, SUBGRADE

Effective: September 30, 1985 Revised: August 1, 2008

This work consists of furnishing, placing, and compacting porous granular material to the lines and grades shown on the plans or as directed by the Engineer in accordance with applicable portions of Section 207 of the Standard Specifications. The material shall be used as a bridging layer over soft, pumpy, loose soil and for placing under

water and shall conform with Article 1004.05 of the Standard Specifications except the gradation shall be as follows:

1. Crushed Stone, Crushed Blast Furnace Slag, and Crushed Concrete

<u>Sieve Size</u>	Percent Passing
*6 in. (150 mm)	97 ± 3
*4 in. (100 mm)	90 ± 10
2 in. (50 mm)	45 ± 25
No. 200 (75 μm)	5 ± 5

2. Gravel** and Crushed Gravel

<u>Sieve Size</u>	Percent Passing
*6 in. (150 mm)	97 ± 3
*4 in. (100 mm)	90 ± 10
2 in. (50 mm)	55 ± 25
No. 4 (4.75 mm)	30 ± 20
No. 200 (75 μm)	5 ± 5

^{*} For undercut greater than 18 inches (450 mm) the percent passing the 6 inch (150 mm) sieve may be 90 \pm 10 and the 4 inch (100 mm) sieve requirements eliminated.

The porous granular material shall be placed in one lift when the total thickness to be placed is 2 feet (600 mm) or less or as directed by the Engineer. Each lift of the porous granular material shall be rolled with a vibratory roller meeting the requirements of Article 1101.01(g) of the Standard Specifications to obtain the desired keying or interlock and compaction. The Engineer shall verify that adequate keying has been obtained.

A 3-inch (75 mm) nominal thickness top lift of capping aggregate having a gradation of CA 6 will be required when Aggregate Subgrade is not specified in the contract and Porous Granular Embankment, Subgrade will be used under the pavement and shoulders. Capping aggregate will not be required when embankment meeting the requirements of Section 207 of the Standard Specifications or granular subbase is placed on top of the porous granular material.

Construction equipment not necessary for the completion of the replacement material will not be allowed on the undercut areas until completion of the recommended thickness of the porous granular embankment subgrade.

^{**} Not to be used in 30 or 40 year extended life concrete pavement or extended life bituminous concrete pavement (full depth).

Full depth subgrade undercut should occur at limits determined by the Engineer. A transition slope to the full depth of undercut shall be made outside of the undercut limits at a taper of 1 foot (300 mm) longitudinal per 1 inch (25 mm) depth below the proposed subgrade or bottom of the proposed aggregate subgrade when included in the contract.

Method of Measurement. This work will be measured for payment in accordance with Article 207.04 of the Standard Specifications. When specified on the contract, the theoretical elevation of the bottom of the aggregate subgrade shall be used to determine the upper limit of Porous Granular Embankment, Subgrade. The volume will be computed by the method of average end areas.

<u>Basis of Payment</u>. This work shall be paid for at the contract unit price per cubic yard (cubic meter) for POROUS GRANULAR EMBANKMENT, SUBGRADE.

The Porous Granular Embankment, Subgrade shall be used as field conditions warrant at the time of construction. No adjustment in unit price will be allowed for an increase or decrease in quantities from the estimated quantities shown on the plans.

AGGREGATE SUBGRADE, 12" (300 mm)

Effective: May 1, 1990 Revised: August 1, 2008

This work shall be done in accordance with the applicable portions of Section 207 of the Standard Specifications. The material shall conform to Article 1004.05 of the Standard Specifications except as follows:

1. Crushed Stone, Crushed Blast Furnace Slag, and Crushed Concrete will be permitted. Steel slag and other expansive materials as determined through testing by the Department will not be permitted.

<u>Sieve Size</u>	Percent Passing
6 in. (150 mm)	97 ± 3
4 in. (100 mm)	90 ± 10
2 in. (50 mm)	45 ± 25
No. 200 (75 μm)	5 ± 5

2. Gravel* and Crushed Gravel

Sieve Size	Percent Passing
6 in. (150 mm)	97 ± 3
4 in. (100 mm)	90 ± 10
2 in. (50 mm)	55 ± 25
No. 4 (4.75 mm)	30 ± 20
No. 200 (75 μm)	5 ± 5

3. Crushed Concrete with Bituminous Materials**

Sieve Size	Percent Passing
6 in. (150 mm)	97 ± 3
4 in. (100 mm)	90 ± 10
2 in. (50 mm)	45 ± 25
No. 4 (4.75 mm)	20 ± 20
No. 200 (75 μm)	5 ± 5

^{*} Not to be used in 30 or 40 year extended life concrete pavement or extended life bituminous concrete pavement (full depth).

The aggregate subgrade shall be placed in two lifts consisting of a 9 inch (225 mm) and variable nominal thickness lower lift and a 3 inch (75 mm) nominal thickness top lift of capping aggregate having a gradation of CA 6. The CA 6 may be blended as follows. The bituminous materials shall be separated and mechanically blended with interlocking feeders with crushed concrete or natural aggregate, in a manner that the bituminous material does not exceed 40% of the final product. This process shall be approved by the engineer prior to start of production. The top side of the bituminous material in the final products shall be less than 1 ½ inches (37.5 mm) and shall not contain any material considered expansive by the department. Reclaimed Asphalt Pavement (RAP) (having a maximum of 10% steel slag RAP) meeting the requirements of Section 1031 and having 100% passing the 1 ½ inches (37.5 mm) sieve and well graded down through fines may also be used as capping aggregate. IDOT testing of the RAP material will be used in determining the percent of steel slag RAP or Expansive Material. When the contract specifies that an aggregate subbase is to be placed on the Aggregate Subgrade, the 3 inches (75 mm) of capping aggregate will be eliminated. A vibratory roller meeting the requirements of Article 1101.01(g) of the Standard Specifications shall be used to roll each lift of material to obtain the desired keying or interlock and necessary compaction. The Engineer will verify that adequate keying has been obtained.

When a recommended remedial treatment for unstable subgrades is included in the contract, the lower lift of Aggregate Subgrade may be placed simultaneously with the material for Porous Granular Embankment, Subgrade when the total thickness to be placed is 2 feet (600 mm) or less.

^{**} The bituminous material shall be separated and mechanically blended with the crushed concrete so that the bituminous material does not exceed 40% of the final products. The top size of the bituminous material in the final product shall be less than 4 inches (100 mm) and shall not contain more than 10.0% steel slag RAP or any material that is considered expansive by the Department.

Method of Measurement.

Contract Quantities. Contract quantities shall be in accordance with Article 202.07 of the Standard Specifications.

Measured Quantities. Aggregate subgrade will be measured in place and the area computed in square yards (square meters).

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE, 12" (AGGREGATE SUBGRADE, 300 mm).

COARSE AGGREGATE FOR HOT-MIX ASPHALT (HMA) (D-1)

Effective: March 16, 2009

Revise Article 1004.03 of the Standard Specifications to read:

1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA). The aggregate shall be according to Article 1004.01 and the following.

(a) Description. The coarse aggregate for HMA shall be according to the following table.

Use	Mixture	Aggregates Allowed	
Class A	Seal or Cover	Gravel Crushed Gravel Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete	
HMA All Other	Stabilized Subbase or Shoulders	Gravel Crushed Gravel Crushed Stone Crushed Sandstone Crushed Slag Crushed Concrete The coarse aggregate for stabilized subbase, if approved by the Engineer, may be produced by blending aggregates according to Article 1004.04(a).	

Use	Mixture	Aggregates Allowed
HMA High ESAL Low ESAL	IL-25.0, IL-19.0, or IL-19.0L	Crushed Gravel Crushed Stone Crushed Sandstone Crushed Slag (ACBF)
HMA High ESAL Low ESAL	C Surface IL-12.5,IL-9.5, or IL-9.5L	Gravel (only when used in IL-9.5L) Crushed Gravel Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag (except when used as leveling binder)
HMA High ESAL	IL-12.5 or IL-9.5	Crushed Gravel Crushed Stone (other than Limestone) Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag (except when used as leveling binder) Limestone may be used in Mixture D if blended by volume in the following coarse aggregate percentages: Up to 25% Limestone with at least 75% Dolomite. Up to 50% Limestone with at least 50% any aggregate listed for Mixture D except Dolomite. Up to 75% Limestone with at least 25% Crushed Slag (ACBF) or Crushed Sandstone.

Use	Mixture	Aggregates Allowed
HMA	E Surface	Crushed Gravel
High ESAL		Crushed Stone (other than Limestone and Dolomite)
	IL-9.5	Crushed Sandstone
		No Limestone.
		Dolomite may be used in Mixture E if blended by volume in the following coarse aggregate percentages: Up to 75% Dolomite with at least 25% Crushed Sandstone, Crushed Slag (ACBF), or Crushed Steel Slag. When Crushed Slag (ACBF) or Crushed Steel Slag is used in the blend, the blend shall contain a minimum of 25% to a maximum of 75% of either Slag by volume. Up to 50% Dolomite with at least 50% of any aggregate listed for Mixture E.
		If required to meet design criteria, Crushed Gravel or Crushed Stone (other than Limestone or Dolomite) may be blended by volume in the following coarse aggregate percentages: Up to 75% Crushed Gravel or Crushed Stone (other than Limestone or Dolomite) with at least 25% Crushed Sandstone, Crushed Slag (ACBF), or Crushed Steel Slag. When Crushed Slag (ACBF) or Crushed Steel Slag is used in the blend, the blend shall contain a minimum of 25% to a maximum of 50% of either Slag by volume.
	F Surface	Crushed Sandstone
High ESAL		
	IL-9.5	No Limestone.
		Crushed Gravel, Crushed Concrete, or Crushed Dolomite may be used in Mixture F if blended by volume in the following coarse aggregate percentages: Up to 50% Crushed Gravel, Crushed Concrete or Crushed Dolomite with at least 50% Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or any Other Crushed Stone (to include Granite, Diabase, Rhyolite or Quartzite). When Crushed Slag (ACBF) or Crushed Steel Slag is used in the blend, the blend shall contain a minimum of 50% to a maximum of 75% of either Slag by volume.

(b) Quality. For surface courses and binder courses when used as surface course, the coarse aggregate shall be Class B quality or better. For Class A (seal or cover coat), other binder courses, and surface course IL-9.5L (Low ESAL), the coarse aggregate

shall be Class C quality or better. For All Other courses, the coarse aggregate shall be Class D quality or better.

(c) Gradation. The coarse aggregate gradations shall be as listed in the following table.

Use	Size/Application	Gradation No.	
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16	
Class A-1	1/2 in. (13 mm) Seal	CA 15	
Class A-2 & 3	Cover	CA 14	
HMA High ESAL	IL-25.0	CA 7 ^{1/} or CA 8 ^{1/}	
	IL-19.0	CA 11 ^{1/}	
	IL-12.5	CA 16 and/or CA 13	
	IL-9.5	CA 16	
HMA Low ESAL	IL-19.0L	CA 11 ¹⁷	
	IL-9.5L	CA 16	
HMA All Other	Stabilized Subbase or Shoulders	CA 6 ² /, CA 10, or CA 12	

- 1/ CA 16 or CA 13 may be blended with the gradations listed.
- 2/ CA 6 will not be permitted in the top lift of shoulders.

HOT MIX ASPHALT MIXTURES, EGA MODIFIED PERFORMANCE GRADED (PG) ASPHALT BINDER

Effective: March 16, 2009

<u>Description</u>. This work shall consist of constructing Hot Mix Asphalt (HMA) mixtures containing ethylene-glycidyl-acrylate (EGA) Modified Performance Graded (PG) Asphalt Binder. Work shall be according to Sections 406, 1030, and 1032 of the Standard Specifications, except as modified herein.

The asphalt binder shall meet the following requirements:

EGA Modified Performance Graded (PG) Asphalt Binder. The asphalt binder shall meet the requirements of AASHTO M 320, Table 1 "Standard Specification for Performance Graded Asphalt Binder" for the grade shown on the plans. An ethylene-glycidyl-acrylate (EGA) terpolymer with a maximum of 0.3 percent polyphosphoric acid by weight of asphalt binder shall be added to the base asphalt binder to achieve the specified performance grade. Asphalt modification at hot-mix asphalt plants will not be allowed. The modified asphalt binder shall be smooth, homogeneous, and be according to the requirements shown in the following table for the grade shown on the plans.

Ethylene-Glycidyl-Acrylate (EGA) Modified Asphalt Binders				
Test	Asphalt Grade EGA PG 70-22 EGA PG 70-28	Asphalt Grade EGA PG 76-22 EGA PG 76-28		
Separation of Polymer Illinois Test Procedure, "Separation of Polymer from Asphalt Binder" Difference in °F (°C) of the softening point between top and bottom portions.	4 (2) max.	4 (2) max.		
TEST ON RESIDUE FROM ROLLING THIN FILM OVEN TEST (AASHTO T 240)				
Elastic Recovery ASTM D 6084, Procedure A, 77 °F (25 °C), 100 mm elongation, %	60 min.	70 min.		

Fine Aggregate for Hot- Mix Asphalt (HMA) (D-1)

Effective: May 1, 2007 Revised: January 15, 2010

Trovided. January 10, 2010

Add the following to the gradation tables of Article 1003.01(c) of the Standard Specifications:

FINE AGGREGATE GRADATIONS					
Grad No.	Sieve Size and Percent Passing				
Grad No.	3/8	No. 4	No. 8	No. 16	No. 200
FA 22	100	6/	6/	8±8	2±2

FINE AGGREGATE GRADATIONS (metric)					
	Sieve Size and Percent Passing				
Grad No.	9.5 mm	4.75 mm	2.36 mm	1.16 mm	75 μm
FA 22	100	6/	6/	8±8	2±2

6/ For the fine aggregate gradations FA 22, the aggregate producer shall set the midpoint percent passing, and the Department will apply a range of ± ten percent. The midpoint shall not be changed without Department approval.

Revise Article 1003.03(a) of the Standard Specifications to read:

"(a) Description. Fine aggregate for HMA shall consist of sand, stone sand, chats, slag sand, or steel slag sand. For gradation FA 22, uncrushed material will not be permitted."

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

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA1, FA 2, FA 20, FA 21 or FA 22. When Reclaimed Asphalt Pavement (RAP) is incorporated in the HMA design, the use of FA 21 Gradation will not be permitted.

Gradation FA 1, FA 2, or FA 3 shall be used when required for prime coat aggregate application for HMA."

TEMPERATURE CONTROL FOR CONCRETE PLACEMENT (DISTRICT ONE)

Effective: May 1, 2007

Delete the second and third sentences of the second paragraph of Article 1020.14(a) of the Standard Specifications.

USE OF RAP (District 1)

Effective: January 1, 2007 Revised: July 1, 2009

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

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

- **1031.01 Description.** Reclaimed asphalt pavement (RAP) results from the cold milling or crushing of an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction. The contractor can also request that a processed pile be tested by the Department to determine the aggregate quality as described in Article 1031.04, herein.
- **1031.02 Stockpiles.** The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type and size as listed below (i.e. "Homogenous Surface").

Prior to milling or removal of an HMA pavement, the Contractor may request the District to provide verification of the existing mix composition to clarify appropriate stockpile.

- (a) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (b) Conglomerate 5/8. Conglomerate 5/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 5/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen.
- (c) Conglomerate 3/8. Conglomerate 3/8 RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least B quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate 3/8 RAP shall be processed prior to testing by crushing to where all RAP shall pass the 3/8 in (9.5 mm) or smaller screen.
- (d) Conglomerate Variable Size. Conglomerate variable size RAP shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least B quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate variable size RAP shall be processed prior to testing by crushing and screening to where all RAP is separated into various sizes. All the conglomerate variable size RAP shall pass the 3/4 in. (19 mm) screen and shall be a minimum of two sizes.
- (e) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low Esal), or equivalent mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an in consistent gradation and/or asphalt binder content.

(f) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

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

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

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

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

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

Parameter	Homogeneous/ Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %
3/4 in. (19mm)		

·		
1/2 in. (12.5mm)	± 8 %	± 15 %
No. 4 (4.75 mm)	±6%	± 13 %
No. 8 (2.36 mm)	±5 %)
No. 16 (1.18 mm)		± 15 %
No. 30 (600 μm)	± 5. %	
No. 200 (75 μm)	± 2.0 %	± 4.0 %
Asphalt Binder	± 0.4 % 1/	± 0.5 %
Gmm	±0.02 % ^{2/}	
Gmm	±0.03 % ^{3/}	

- 1/ The tolerance for conglomerate 3/8 shall be \pm 0.3 %.
- 2/ Applies only to conglomerate 3/8. When variation of the G_{mm} exceeds the \pm 0.02 % tolerance, a new conglomerate 3/8 stockpile shall be created which will also require an additional mix design.
- 3/ Applies only to conglomerate variable size. When variation of the G_{mm} exceeds the \pm 0.03 tolerance, a new conglomerate variable size stockpile shall be created which will also require an additional mix design.

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

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

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

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

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

Aggregate Quality Testing of RAP:

The processed pile shall have a maximum tonnage of 5,000 tons (4500 metric tons). The pile shall be crushed and screened with 100 percent of the material passing the 3/4 in. (19mm) sieve. The pile shall be tested for AC content and gradation and shall conform to all requirements of Article 1031.03 Testing, herein. Once the uniformity of the gradation and AC content has been established, the Contractor shall obtain a representative sample with district oversight of the sampling. This sample shall be no less than 50 lbs (25 kg) and this sample shall be delivered to a Consultant Lab, prequalified by the Department for extraction testing according to Illinois Modified AASHTO T 164. After the AC has been extracted, the Consultant Lab shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid directly by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

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

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

Maximum Mixture RAP Percentage

HMA	HMA Mixtures 1/3/		Maximum % Rap	
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified	
30	30/40 ^{2/}	30	10	
50	25/40 ^{2/4/}	15/25 ^{2/}	10 4/	
70	25/30 ^{2/}	10/20 ^{2/}	10	
90	10/15 ^{2/}	10/15 ^{2/}	10	
105	10/15 ^{2/}	10/15 ^{2/}	10	

- 1/ For HMA Shoulder and Stabilized Sub-Base (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.
- 2/ Value of Max % RAP If 3/8 Rap or conglomerate variable size RAP is utilized.
- When RAP exceeds 20% the AC shall be PG58 -22. However, when RAP exceeds 20% and is used in full depth HMA pavement the AC shall be PG58 -28.
- 4/ Polymerized Leveling Binder, IL-4.75 is 15 %

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

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

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

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

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

containing conglomerate 3/8 or conglomerate variable size RAP, a positive dust control system shall be utilized.

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

(a) Drier Drum Plants

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

(b) Batch Plants

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram)
- (4) Mineral filler weight to the nearest pound (kilogram).
- (5) Individual RAP Aggregate weight to the nearest pound (kilogram).

- (6) Virgin asphalt binder weight to the nearest pound (kilogram)
- (7) Residual asphalt binder of each RAP size material as a percent of the total mix to the nearest 0.1 percent.

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

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

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

IDOT DISTRICT ONE ELECTRICAL SPECIAL PROVISIONS

GENERAL ELECTRICAL REQUIREMENTS

Effective: January 1, 2007

Add the following to Article 801 of the Standard Specifications:

"Maintenance transfer and Preconstruction Inspection:

General. Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall request a maintenance transfer and preconstruction site inspection, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting and/or traffic control systems which may be affected by the work. The request for the maintenance transfer and preconstruction inspection shall be made no less than seven (7) calendar days prior to the desired inspection date. The maintenance transfer and preconstruction inspection shall:

Establish the procedures for formal transfer of maintenance responsibility required for the construction period.

Establish the approximate location and operating condition of lighting and/or traffic control systems which may be affected by the work

Marking of Existing Cable Systems. The party responsible for maintenance of any existing lighting and/or traffic control systems at the project site will, at the Contractor's request, mark and/or stake, once per location, all underground cable routes owned or maintained by the State. A project may involve multiple "locations" where separated electrical systems are involved (i.e. different controllers). The markings shall be taken to have a horizontal tolerance of at least 304.8 mm (one (1) foot) to either side.. The request for the cable locations and marking shall be made at the same time the request for the maintenance transfer and preconstruction inspection is made. The Contractor shall exercise extreme caution where existing buried cable runs are involved. markings of existing systems are made strictly for assistance to the Contractor and this does not relieve the Contractor of responsibility for the repair or replacement of any cable run damaged in the course of his work. as specified elsewhere herein. Note that the contractor shall be entitled to only one request for location marking of existing systems and that multiple requests may only be honored at the contractor's expense. No locates will be made after maintenance is transferred, unless it is at the contractor's expense.

Condition of Existing Systems. The Contractor shall conduct an inventory of all existing electrical system equipment within the project limits, which may be affected by the work, making note of any parts which are found broken or missing, defective or malfunctioning. Megger and load readings shall be taken for all existing circuits which will remain in place or be modified. If a circuit is to be taken out in its entirety, then readings do not have to be taken. The inventory and test data shall be reviewed with and approved by the Engineer and a record of the inventory shall be submitted to the Engineer for the record. Without such a record, all systems transferred to the Contractor for maintenance during construction shall be returned at the end of construction in complete, fully operating condition."

Revise the 6th paragraph of Article 801.05(a) of the Standard Specifications to read:

<u>"Resubmittals.</u> All submitted items reviewed and marked 'APPROVED AS NOTED', or 'DISAPPROVED' are to be resubmitted in their entirety with a disposition of previous comments to verify contract compliance at no additional cost to the state unless otherwise indicated within the submittal comments."

Revise Article 801.11(a) of the Standard Specifications to read:

"<u>Lighting Operation and Maintenance Responsibility</u>. The scope of work shall include the assumption of responsibility for the continuing operation and maintenance the of existing, proposed, temporary, sign and navigation lighting, or other lighting systems and all appurtenances affected by the work as specified elsewhere herein. Maintenance of lighting systems will be paid for separately"

Add the following to Section 801.11(a) of the Standard Specifications:

"Energy and Demand Charges. The payment of basic energy and demand charges by the electric utility for existing lighting which remains in service will continue as a responsibility of the Owner, unless otherwise indicated. Unless otherwise indicated or required by the Engineer duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously at the Owner's expense and lighting systems shall not be kept in operation during long daytime periods at the Owner's expense. Upon written authorization from the Engineer to place a proposed new lighting system in service, whether the system has passed final acceptance or not, (such as to allow temporary lighting to be removed), the Owner will accept responsibility for energy and demand charges for such lighting, effective the date of authorization. All other

energy and demand payments to the utility shall be the responsibility of the Contractor until final acceptance."

Add the following to Section 801 of the Standard Specifications:

"Lighting Cable Identification. Each wire installed shall be identified with its complete circuit number at each termination, splice, junction box or other location where the wire is accessible."

"Lighting Cable Fuse Installation. Standard fuse holders shall be used on light pole installations non-frangible (non-breakaway) quick-disconnect fuse holders shall be used on frangible (breakaway) light pole installations. Wires shall be carefully stripped only as far as needed for connection to the device. Over-stripping shall be avoided. An oxide inhibiting lubricant shall be applied to the wire for minimum connection resistance before the terminals are crimped-on. Crimping shall be performed in accordance with the fuse holder manufacturer's The exposed metal connecting portion of the recommendations. assembly shall be taped with two half-lapped wraps of electrical tape and then covered by the specified insulating boot. The fuse holder shall be installed such that the fuse side is connected to the pole wire (load side) and the receptacle side of the holder is connected to the line side."

Revise the 2nd and 3rd sentences of the second paragraph of Article 801.02 of the Standard Specifications to read:

"Unless otherwise indicated, materials and equipment shall bear the UL label, or an approved equivalent, whenever such labeling is available for the type of material or equipment being furnished."

ELECTRIC SERVICE INSTALLATION

Effective: January 1, 2007

<u>Description.</u> This item shall consist of all material and labor required to extend, connect or modify the electric services, as indicated or specified, which is over and above the work performed by the utility. Unless otherwise indicated, the cost for the utility work, if any, will be reimbursed to the Contractor separately under ELECTRIC UTILITY SERVICE CONNECTION. This item may apply to the work at more than one service location and each will be paid separately.

Materials. Materials shall be in accordance with the Standard Specifications.

CONSTRUCTION REQUIREMENTS

<u>General.</u> The Contractor shall ascertain the work being provided by the electric utility and shall provide all additional material and work not included by other contract pay items required to complete the electric service work in complete compliance with the requirements of the utility.

No additional compensation will be allowed for work required for the electric service, even though not explicitly shown on the Drawings or specified herein

Method Of Measurement. Electric Service Installation shall be counted, each.

<u>Basis Of Payment.</u> This work will be paid for at the contract unit price each for **ELECTRIC SERVICE INSTALLATION** which shall be payment in full for the work specified herein.

ELECTRIC UTILITY SERVICE CONNECTION (COMED)

Effective: January 1, 2002

Revised February 1, 2005

<u>Description.</u> This item shall consist of payment for work performed by ComEd in providing or modifying electric service as indicated. THIS MAY INVOLVE WORK AT MORE THAN ONE ELECTRIC SERVICE. For summary of the Electrical Service Drop Locations see the schedule contained elsewhere herein.

CONSTRUCTION REQUIREMENTS

<u>General.</u> It shall be the Contractor's responsibility to contact ComEd. The Contractor shall coordinate his work fully with the ComEd both as to the work required and the timing of the installation. No additional compensation will be granted under this or any other item for extra work caused by failure to meet this requirement. Please contact ComEd, New Business Center Call Center, at 866 NEW ELECTRIC (1-866-639-3532) to begin the service connection process. The Call Center Representatives will create a work order for the service connection. The representative will ask the request for information specific to the request. The representative will assign the request based upon the location of project.

The Contractor should make particular note of the need for the earliest attention to arrangements with ComEd for service. In the event of delay by ComEd, no extension of time will be considered applicable for the delay unless the Contractor can produce written evidence of a request for electric service within 30 days of execution.

<u>Method Of Payment.</u> The Contractor will be reimbursed to the exact amount of money as billed by ComEd for its services. Work provided by the Contractor for electric service will be paid separately as described under ELECTRIC SERVICE INSTALLATION. No

extra compensation shall be paid to the Contractor for any incidental materials and labor required to fulfill the requirements as shown on the plans and specified herein.

For bidding purposes, this item shall be estimated as \$4,000.00

<u>Basis Of Payment.</u> This work will be paid for at the contract lump sum price for ELECTRIC UTILITY SERVICE CONNECTION which shall be reimbursement in full for electric utility service charges.

<u>Designers Note</u>: The estimate of cost of service connections for bidding purposes shall be provided by Bureau of Electrical Operations.

GROUND ROD

Effective: January 1, 2007

<u>Description.</u> This item shall consist of furnishing, installing and connecting ground rods for the grounding of service neutral conductors and for supplementing the equipment grounding system via connection at poles or other equipment throughout the system. All materials and work shall be in accordance with Article 250 of the NEC.

<u>Materials.</u> Materials shall be according to the following Articles of Section 1000 - Materials

item	Article/Section
(a) Grounding Electrodes	1087.01(b)
(b) Grounding Electrode Conductors	1087.01(a)
(c) Access Well	1087.01(c)

CONSTRUCTION REQUIREMENTS

General. All connections to ground rods, structural steel or fencing shall be made with exothermic welds. Where such connections are made to insulated conductors, the connection shall be wrapped with at least 4 layers of electrical tape extended 152.4 mm (six inches) onto the conductor insulation.

Ground rods shall be driven so that the tops of the rod are 609.6 mm (24 inches) below finished grade. Where indicated, ground wells shall be included to permit access to the rod connections.

Where indicated, ground rods shall be installed through concrete foundations.

Where ground conditions, such as rock, preclude the installation of the ground rod, the ground rod may be deleted with the approval of the Engineer.

Where a ground field of "made" electrodes is provided, such as at control cabinets, the exact locations of the rods shall be documented by dimensioned drawings as part of the Record Drawings.

Ground rod connection shall be made by exothermic welds. Ground wire for connection to foundation steel or as otherwise indicated shall be stranded uncoated bare copper in accordance the applicable requirements of ASTM Designation B-3 and ASTM Designation B-8 and shall be included in this item. Unless otherwise indicated, the wire shall not be less than No. 2 AWG.

Where connections are made to epoxy coated reinforcing steel, the epoxy coating shall be sufficiently removed to facilitate the exothermic weld.

Ground rods shall be 5/8" diameter by 10 feet in length.

<u>Method Of Measurement.</u> Ground rods, wires, and connection of ground rods at poles shall be included in the cost of LIGHT POLE FOUNDATION, 30" DIAMETER.

<u>Basis Of Payment.</u> This item will not be paid for separately and shall be included in the cost of LIGHT POLE FOUNDATION, 30" DIAMETER.

MAINTENANCE OF LIGHTING SYSTEMS

Effective: January 1, 2007

Replace Article 801.11 and 801.12 of the Standard Specifications with the following:

Effective the date the Contractor's activities (electrical or otherwise) at the job site begin, the Contractor shall be responsible for the proper operation and maintenance of all existing and proposed lighting systems which are part of, or which may be affected by the work until final acceptance or as otherwise determined by the Engineer.

Before performing any excavation, removal, or installation work (electrical or otherwise) at the site, the Contractor shall initiate a request for a maintenance transfer and preconstruction inspection, as specified elsewhere herein, to be held in the presence of the Engineer and a representative of the party or parties responsible for maintenance of any lighting systems which may be affected by the work. The request for the maintenance preconstruction inspection shall be made no less than seven (7) calendar days prior to the desired inspection date.

Existing lighting systems, when depicted on the plans, are intended only to indicate the general equipment installation of the systems involved and shall not be construed as an exact representation of the field conditions. It remains the Contractor's responsibility to visit the site to confirm and ascertain the exact condition of the electrical equipment and systems to be maintained.

Maintenance of Existing Lighting Systems

Existing lighting systems. Existing lighting systems shall be defined as any lighting system or part of a lighting system in service prior to this contract. The contract drawings indicate the general extent of any existing lighting, but whether indicated or not, it remains the Contractor's responsibility to ascertain the extent of effort required for compliance with these specifications and failure to do so will not be justification for extra payment or reduced responsibilities.

Extent of Maintenance.

Partial Maintenance. Unless otherwise 'indicated, if the number of circuits affected by the contract is equal to or less than 40% of the total number of circuits in a given controller and the controller is not part of the contract work, the Contractor needs only to maintain the affected circuits. The affected circuits shall be isolated by means of in-line waterproof fuse holders as specified elsewhere and as approved by the Engineer.

Full Maintenance. If the number of circuits affected by the contract is greater than 40% of the total number of circuits in a given controller, or if the controller is modified in any way under the contract work, the Contractor shall maintain the entire controller and all associated circuits.

Maintenance of Proposed Lighting Systems

Proposed Lighting Systems. Proposed lighting systems shall be defined as any lighting system or part of a lighting system which is to be constructed under this contract.

The Contractor shall be fully responsible for maintenance of all items installed under this contract. Maintenance shall include, but not be limited to, any equipment failures or malfunctions as well as equipment damage either by the motoring public, Contractor operations, or other means. The potential cost of replacing or repairing any malfunctioning or damaged equipment shall be included in the bid price of this item and will not be paid for separately.

Lighting System Maintenance Operations

The Contractor's responsibility shall include all applicable responsibilities of the Electrical Maintenance Contract, State of Illinois, Department of Transportation, Division of Highways, District One. These responsibilities shall include the maintenance of lighting units (including sign lighting), cable runs and lighting controls. In the case of a pole knockdown or sign light damage caused by normal vehicular traffic, the Contractor shall promptly clear the lighting unit and circuit discontinuity and restore the system to service.

Responsibilities shall also include weekly night-time patrol of the lighting system, with patrol reports filed immediately with the Engineer and with deficiencies corrected within 24 hours of the patrol. Patrol reports shall be presented on standard forms as designated by the Engineer. Uncorrected deficiencies may be designated by the Engineer as necessitating emergency repairs as described elsewhere herein.

The following chart lists the maximum response, service restoration, and permanent repair time the Contractor will be allowed to perform corrective action on specific lighting system equipment.

INCIDENT OR PROBLEM	SERVICE RESPONSE TIME	SERVICE RESTORATION TIME	PERMANENT REPAIR TIME
Control cabinet out	1 hour	4 hours	7 Calendar days
Hanging mast arm	1 hour to clear	na	7 Calendar days
Radio problem	1 hour	4 hours	7 Calendar days
Motorist caused damage or leaning light pole 10 degrees or more	1 hour to clear	4 hours	7 Calendar days
Circuit out - Needs to reset breaker	1 hour	4 hours	na
Circuit out – Cable trouble	1 hour	24 hours	21 Calendar days
Outage of 3 or more successive lights	1 hour	4 hours	na
Outage of 75% of lights on one tower	1 hour	4 hours	na
Outage of light nearest RR crossing approach, Islands and gores	1 hour	4 hours	na
Outage (single or multiple) found on night outage survey or reported to EMC	na	na	7 Calendar days
Navigation light outage	na ·	na	24 hours

- Service Response Time -- amount of time from the initial notification to the Contractor until a patrolman physically arrives at the location.
- Service Restoration Time amount of time from the initial notification to the Contractor until the time the system is fully operational again (In cases of motorist caused damage the undamaged portions of the system are operational.)
- Permanent Repair Time amount of time from initial notification to the Contractor until the time permanent repairs are made if the Contractor was required to make temporary repairs to meet the service restoration requirement.

Failure to provide this service will result in liquidated damages of \$500 per day per occurrence. In addition, the Department reserves the right to assign any work not completed within this timeframe to the Electrical Maintenance Contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor. Failure to pay these costs to the Electrical Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. Repeated failures and/or a gross failure of maintenance shall result in the State's Electrical Maintenance Contractor being directed to correct all deficiencies and the resulting costs deducted from any monies owed the contractor.

Damage caused by the Contractor's operations shall be repaired at no additional cost to the Contract.

Operation of Lighting

The lighting shall be operational every night, dusk to dawn. Duplicate lighting systems (such as temporary lighting and proposed new lighting) shall not be operated simultaneously. Lighting systems shall not be kept in operation during long daytime periods. The contractor shall demonstrate to the satisfaction of the Engineer that the lighting system is fully operational prior to submitting a pay request in accordance with 801.11(a).

Basis of Payment. Maintenance of lighting systems shall be paid for at the contract unit price per calendar month or fraction thereof for MAINTENANCE OF LIGHTING SYSTEM, which shall include all work as described herein.

LUMINAIRE

Effective: January 1, 2007

Add the following to first paragraph of Article 1067(c) of the Standard Specifications:

"The reflector shall not be altered by paint or other opaque coatings which would cover or coat the reflecting surface. Control of the light distribution by any method other than the reflecting material and the aforementioned clear protective coating that will alter the reflective properties of the reflecting surface is unacceptable"

Add the following to Article 1067(e) of the Standard Specifications:

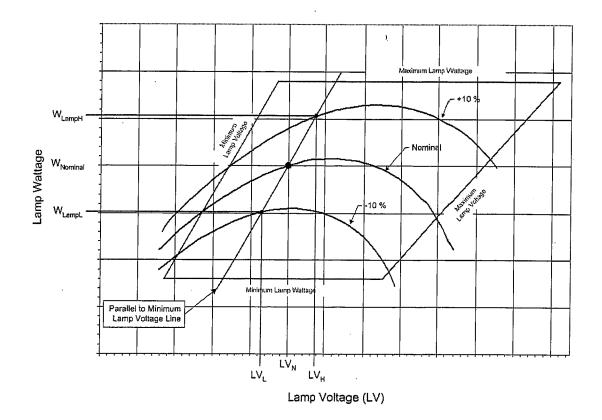
"The ballast shall be a High Pressure Sodium, high power factor, constant wattage auto-regulator, lead type (CWA) for operation on a nominal 240 volt system."

Revise Article 1067(e)(1) of the Standard Specifications to read:

"The high pressure sodium, auto-regulator, lead type (CWA) ballast shall be designed to ANSI Standards and shall be designed and rated for operation on a nominal 240 volt system. The ballast shall provide positive lamp ignition at the input voltage of 216 volts. It shall operate the lamp over a range of input voltages from 216 to 264 volts without damage to the ballast. It shall provide lamp operation within lamp specifications for rated lamp life at input design voltage range. Operating characteristics shall produce output regulation not exceeding the following values:

Nominal Ballast Wattage	Maximum Ballast Regulation
750	25%
400	26%
310	26%
250	26%
150	24%
70	18%

For this measure, regulation shall be defined as the ratio of the lamp watt difference between the upper and lower operating curves to the nominal lamp watts; with the lamp watt difference taken within the ANSI trapezoid at the nominal lamp operating voltage point parallel to the minimum lamp volt line:



Ballast Regulation =
$$\frac{W_{LampH} - W_{LampL}}{W_{LampN}} \times 100$$

where:

 W_{LampH} = lamp watts at +10% line voltage when Lamp voltage = LV_H W_{LampL} = lamp watts at - 10% line voltage when lamp voltage = LV_L W_{lampN} = lamp watts at nominal lamp operating voltage = LV_N

<u>Wattage</u>	<u>Nominal</u> Lamp Voltage, LV _N	<u>LV</u> _L	<u>LV</u> _H
750	120v	115v	125v
400	100v	95v	105v
310	100v	95v	105v
250	100v	95v	105v
150	55v	50v	60v
70	52v	47v	5 7 v

Ballast losses, based on cold bench tests, shall not exceed the following values:

Nominal Ballast Wattage	Maximum Ballast Losses
750	14.0%
400	17.0%
310	19.0%
250	19.0%
150	26.0%
70	34.0%

Ballast losses shall be calculated based on input watts and lamp watts at nominal system voltage as indicated in the following equation:

Ballast Losses =
$$\frac{W_{Line} - W_{Lamp}}{W_{Lamp}} \times 100$$

where:

 W_{line} = line watts at nominal system voltage W_{lamp} = lamp watts at nominal system voltage

Ballast output to lamp. At nominal system voltage and nominal lamp voltage, the ballast shall deliver lamp wattage with the variation specified in the following table. Example: For a 400w luminaire, the ballast shall deliver 400 watts ±2.5% at a lamp voltage of 100v for the nominal system voltage of 240v which is the range of 390w to 410w.

Nominal Ballast Wattage	Output to lamp variation
750	± 2.0%
400	± 2.5%
310	± 2.5%
250	± 4.0%
150	± 4.0%
70	± 4.0%

Ballast output over lamp life. Over the life of the lamp the ballast shall produce average output wattage of the nominal lamp rating as specified in the following table. Lamp wattage readings shall be taken at 5-volt increments throughout the ballast trapezoid. Reading shall begin at the lamp voltage (L_V) specified in the table and continue at 5 volt increments

until the right side of the trapezoid is reached. The lamp wattage values shall then be averaged and shall be within the specified value of the nominal ballast rating. Submittal documents shall include a tabulation of the lamp wattage vs. lamp voltage readings. Example: For a 400w luminaire, the averaged lamp wattage reading shall not exceed the range of ±3% which is 388 to 412 watts"

Nominal Ballast Wattage	<u>LV</u> Readings begin at	Maximum Wattage Variation
750	110v	± 3%
400	90v	± 3%
310	90v "	± 3%
250	90v	± 4%
150	50v	± 4%
70	45v	± 5%

Add the following to Article 1067(f) of the Standard Specifications:

"Independent Testing. Independent testing of luminaires shall be required whenever the quantity of luminaires of a given wattage and distribution, as indicated on the plans, is 50 or more. For each luminaire type to be so tested, one luminaire plus one luminaire for each 50 luminaires shall be tested. Example: A plan quantity of 75 luminaires would dictate that 2 to be tested; 135 luminaires would dictate that three be tested." If the luminaire performance table is missing from the contract documents, the luminaire(s) shall be tested and the test results shall be evaluated against the manufacturer's published data. The test luminaire(s) results shall be equal to or better than the published data. If the test results indicated performance not meeting the published data, the test luminaire will be designated as failed and corrective action as described herein shall be performed.

The Contractor shall be responsible for all costs associated with the specified testing, including but not limited to shipping, travel and lodging costs as well as the costs of the tests themselves, all as part of the bid unit price for this item. Travel, lodging and other associated costs for travel by the Engineer shall be direct-billed to or shall be pre-paid by the Contractor, requiring no direct reimbursement to the Engineer or the independent witness, as applicable"

The Contractor shall select one of the following options for the required testing with the Engineer's approval:

- a. Engineer Factory Selection for Independent Lab: The Contractor may select this option if the luminaire manufacturing facility is within the state of Illinois. The Contractor shall propose an independent test laboratory for approval by the Engineer. The selected luminaires shall be marked by the Engineer and shipped to the independent laboratory for tests.
- b. Engineer Witness of Independent Lab Test: The Contractor may select this option if the independent testing laboratory is within the state of Illinois. The Engineer shall select, from the project luminaires at the manufacturer's facility or at the Contractor's storage facility, luminaires for testing by the independent laboratory.
- c. Independent Witness of Manufacturer Testing: The independent witness shall select from the project luminaires at the manufacturers facility or at the Contractor's storage facility, the luminaires for testing. The Contractor shall propose a qualified independent agent, familiar with the luminaire requirements and test procedures, for approval by the Engineer, to witness the required tests as performed by the luminaire manufacturer.

The independent witness shall as a minimum meet the following requirements:

- ▶ Have been involved with roadway lighting design for at least 15 years.
- Not have been the employee of a luminaire or ballast manufacturer within the last 5 years.
- Not associated in any way (plan preparation, construction or supply) with the particular project being tested.
- ▶ Be a member of IESNA in good standing.
- Provide a list of professional references.

This list is not an all inclusive list and the Engineer will make the final determination as to the acceptability of the proposed independent witness.

d. Engineer Factory Selection and Witness of Manufacturer Testing:
The Contractor may select this option if the luminaire manufacturing facility is within the state of Illinois. At the Manufacturer's facility, the Engineer shall select the luminaires to be tested and shall be present during the testing process. The Contractor shall schedule travel by the Engineer to and from the Manufacturer's laboratory to witness the performance of the required tests."

Add the following to Article 1067.02(a)(1) of the Standard Specifications:

"The beam of maximum candlepower for luminaires specified or shown to have a 'medium' distribution shall be at 70 degrees from the horizontal \pm 2.5 degrees. Submittal information shall identify the angle."

Revise Article 1067.06(a)(1) of the Standard Specifications to read:

"The lamps shall be of the clear type and shall have a color of 1900° to 2200° Kelvin."

Revise Article 1067.06(a)(4) of the Standard Specifications to read:

<u>Lamp</u> <u>Wattage</u>	Initial Lumens	Mean Lumens	<u>Rated</u> <u>Life</u> (Hours)	<u>Lamp</u> <u>Voltage</u>
50	4,000	3,600	24,000	52
70	6,300	5,450	24,000	52
100	9,400	8,000	24,000	55
150	15,800	13,800	24,000	55
200	21,400	19,260	24,000	100
250	27,000	24,300	24,000	100
310	37,000	33,300	24,000	100
400	50,000	45,000	24,000	100
750	105,000	94,500	24,000	120

Add the following table(s) to Article 1067 of the Standard Specifications:

IDOT DISTRICT 1 LUMINAIRE PERFORMANCE TABLE - TRANSITION AREAS

GIVEN CONDITIONS					
ROADWAY DATA	Pavement Width Number of Lanes I.E.S. Surface Classification	Roadway Width 50 (ft) 2 R3			
	Q-Zero Value	.07			
LIGHT POLE DATA	Mounting Height Mast Arm Length Pole Set-Back From Edge of Pavement	30.0 (ft) 8 (ft) 10 (ft) / 2 (ft)			
LUMINAIRE DATA	Lamp Type Lamp Lumens I.E.S. Vertical Distribution I.E.S. Control Of Distribution I.E.S. Lateral Distribution Total Light Loss Factor	HPS 16,000 Medium Cutoff Type III 0.7			
LAYOUT DATA	Spacing Configuration Luminaire Overhang over edge of pavement	120 (ft) Two Rows - Opposite 2.25 (ft)			

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION	Ave. Horizontal Illumination, E _{AVE}	N/A Lux
	Uniformity Ratio, E _{AVE} /E _{MIN}	N/A (Max)
LUMINANCE	Average Luminance, L _{AVE}	0.9 Cd/m ²
	Uniformity Ratio, L _{AVE} /L _{MIN}	3.0 (Max)
	Uniformity Ratio, L _{MAX} /L _{MIN}	5.0 (Max)
	Veiling Luminance Ratio, L _V /L _{AVE}	0.3 (Max)

WIRE AND CABLE

Effective: January 1, 2007

Revise the second sentence of the first paragraph of Article 1066.02(a) to read:

"The cable shall be rated at a minimum of 90°C dry and 75°C wet and shall be suitable for installation in wet and dry locations, and shall be resistant to oils and chemicals."

Revise the second paragraph of Article 1066.02(b) to read:

"Uncoated conductors shall be according to ASTM B3, ICEA S-95-658/NEMA WC70, and UL Standard 44. Coated conductors shall be according to ASTM B 33, ASTM B 8, ICEA S-95-658/NEMA WC70 and UL Standard 44."

Revise the third paragraph of Article 1066.02(b) to read:

"All conductors shall be stranded. Stranding meeting ASTM B 8, ICEA S-95-658/NEMA WC70 and UL Standard 44. Uncoated conductors meeting ASTM B 3, ICEA S-95-658/NEMA WC70 and UL Standard 44."

Revise the first sentence of Article 1066.03(a)(1) to read:

"General. Cable insulation designated as XLP shall incorporate cross-linked polyethylene (XLP) insulation as specified and shall meet or exceed the requirements of ICEA S-95-658, NEMA WC70, U.L. Standard 44."

Add the following to Article 1066.03(a)(1) of the Standard Specifications:

"The cable shall be rated 600 volts and shall be UL Listed Type RHH/RHW/USE."

Revise the Aerial Electric Cable Properties table of Article 1066.03(a)(3) to read:

Aerial Electric Cable Properties

Phase Conductor			Messenger wire		
Size AWG	Stranding	Average Insulation Thickness		Minimum Size AWG	Stranding
		mm	mils		
6	7	1.1	(45)	6	6/1
4	7	1.1	(45)	4	6/1
2	7	1.1	(45)	2	6/1

Pha	ase Conductor			Messenger wire	
Size AWG	Stranding			Minimum Şize AWG	Stranding
1/0	19	1.5	(60)	1/0	6/1
2/0	19	1.5	(60)	2/0	6/1
3/0	19	1.5	(60)	3/0	6/1
4/0	19	1.5	(60)	4/0	6/1

Revise the first paragraph of Article 1066.03(b) to read:

"EPR Insulation. Cable insulation shall incorporate ethylene propylene rubber (EPR) as specified and the insulation shall meet or exceed the requirements of ICEA S-95-658, NEMA Standard Publication No. WC70, and U.L. Standard 44, as applicable."

Add the following to Article 1066.03(b) of the Standard Specifications:

"Cable sized No. 2 AWG and smaller shall be U.L. listed Type RHH/RHW and may be Type RHH/RHW/USE. Cable sized larger than No. 2 AWG shall be U.L. listed Type RHH/RHW/USE."

Revise Article 1066.04 to read:

"Aerial Cable Assembly. The aerial cable shall be an assembly of insulated aluminum conductors according to Section 1066.02 and 1066.03. Unless otherwise indicated, the cable assembly shall be composed of three insulated conductors and a steel reinforced bare aluminum conductor (ACSR) to be used as the ground conductor. Unless otherwise indicated, the code word designation of this cable assembly is "Palomino". The steel reinforced aluminum conductor shall conform to ASTM B-232. The cable shall be assembled according to ANSI/ICEA S-76-474."

Revise the second paragraph of Article 1066.05 to read:

"The tape shall have reinforced metallic detection capabilities consisting of a woven reinforced polyethylene tape with a metallic core or backing."

Revise Article 1066.08 to read:

"Electrical Tape. Electrical tape shall be all weather vinyl plastic tape resistant to abrasion, puncture, flame, oil, acids, alkalis, and weathering, conforming to Federal Specification MIL-I-24391, ASTM D1000 and shall

Hunt Club Road Roundabouts Section 02-00076-13-CH Lake County, Illinois Contract No. 63457

be listed under UL 510 Standard. Thickness shall not be less than 0.215 mm (8.5 mils) and width shall not be less than 20 mm (3/4-inch)."

UNIT DUCT

Effective: January 1, 2007

Revise the second paragraph of Article 816.03(a) to read:

"The unit duct shall be installed at a minimum depth of 760 mm (30-inches) unless otherwise directed by the Engineer."

Revise Article 1088.01(c) to read:

"(c) Coilable Nonmetallic Conduit.

General:

The duct shall be a plastic duct which is intended for underground use and which can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties of performance. The duct shall be a plastic duct which is intended for underground use and can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties of performance.

The duct shall be made of high density polyethylene which shall meet the requirements of ASTM D 2447, for schedule 40. The duct shall be composed of black high density polyethylene meeting the requirements of ASTM D 3350, Class C, Grade P33. The wall thickness shall be in accordance with Table 2 for ASTM D 2447.

The duct shall be UL Listed per 651-B for continuous length HDPE coiled conduit. The duct shall also comply with NEC Article 354.100 and 354.120.

Submittal information shall demonstrate compliance with the details of these requirements.

Dimensions:

Duct dimensions shall conform to the standards listed in ASTM D2447. Submittal information shall demonstrate compliance with these requirements.

Nominal	Size	Nomin	al I.D.	Nomina	al O.D.	Minima	um Wall
mm	in	mm	in	mm	in	mm	in
31.75	1.25	35.05	1.380	42.16	1.660	3.556 +0.51	0.140 +0.020
38.1	1.50	40.89	1.610	48.26	1.900	3.683 +0.51	0.145 +0.020

Nomin	al Size	Pulled	Tensile
mm	in	N	lbs
31.75	1.25	3322	747
38.1	1.50	3972	893

Marking:

As specified in NEMA Standard Publication No. TC-7, the duct shall be clearly and durably marked at least every 3.05 meters (10 feet) with the material designation (HDPE for high density polyethylene), nominal size of the duct and the name and/or trademark of the manufacturer.

Performance Tests:

Polyethylene Duct testing procedures and test results shall meet the requirements of UL 651. Certified copies of the test report shall be submitted to the Engineer prior to the installation of the duct. Duct crush test results shall meet or exceed the following requirements:

Duct Diameter		Min. force required to deform sample 50%	
mm	in	N	lbs
35	1.25	4937	1110
41	1.5	4559	1025

TRENCH AND BACKFILL FOR ELECTRICAL WORK

Effective: January 1, 2007

Revise the first sentence of Article 819.03(a) of the Standard Specifications to read:

"Trench. Trenches shall have a minimum depth of 30 in. (760 mm) or as otherwise indicated on the plans, and shall not exceed 12 in. (300 mm) in width without prior approval of the Engineer."



Environmental Survey Request Borrow/Waste/Use Areas

		Borrow 🗵
Во	rrow/Waste/Use Area Coordinator	Topsoil [
(21	7) 782-4771	Excess Earthwork Material Disposal
A.	Submittal Date: Requesting Agency: DOH D Previous survey request(s) submitted for this project? Yes Date(s) of prior submittal(s):	OOA ☐ Local ☒ Other: No Addendum #
B.	Route: CH 29 Marked: Hunt Club Road County(ies): Section: 02-00076-13-CH Project N Job No.: P- 91-114-05 C- 91-114-05 County(ies):	<u>Lake</u> District: <u>1</u> o.:C <u>MM-8003(473)</u> ct No.: <u>63457</u>
C.	⊠ Borrow/ ☐ Waste/ ☐ Use Area Location (Check each which applies	S.):
٠		
D.	m³ (yds³) borrow from this area. Borrow/Was Current Land Use (Check each which applies.): ☐ Timber ☐ Row C	ste/Use Area Size: ha. (acres) rops
E.	Name of Contractor:	
	Contact Person: Address:	Phone:
	Name of District/Local Resident Engineer:	Phone:
F.	Has Borrow Area been approved by Bureau of Materials? (Check one.) Date of Approval:	☐ Yes ☐ No ☐ Not Applicable
F. G.		☐ Yes ☐ No ☐ Not Applicable

BORROW/WASTE/USE AREAS

Instructions

NOTE: PLEASE FILL OUT THE ENTIRE FORM. INCOMPLETE FORMS OR ATTACHMENTS WILL BE RETURNED FOR ADDITIONAL INFORMATION. If additional space is needed, incorporate necessary information in the transmittal memorandum. A TRANSMITTAL MEMORANDUM MUST BE SUBMITTED WITH EACH REQUEST FORM.

- Submit survey request at earliest possible date to ensure that construction schedules will be met.
- Complete and submit individual forms and attachments for <u>each</u> borrow area, haul road, plant site, staging/storage area, waste area, etc. to be surveyed.
- In order to avoid repeated trips to the same project site, indicate the number of requests being submitted for this project as the last entry on this form.

C. Borrow/Use Area Location:	Describe the location of borrow area(s), haul roads, plant sites, staging/storage area, waste area, etc. Include location map* and plan sketch.
B. Route: Marked:	FAP, FAI, FAU, CH, TR, etc. Illinois State route designations, U.S. route designations, etc.
	Local – County or Municipality project
	DOWR - Division of Water Resources project
	DOA – Division of Aeronautic project
A. Requesting Agency:	DOH – Division of Highways project

Submittals/Attachments:

- Transmittal Memorandum
- 1 original and 2 copies of this form, <u>each</u> with a location map*, plan sketch and signed "Landowner Release Form"
- 3 set of plan view layouts with <u>approximate</u> ROW/easement limits
- 1 copy of ground level photos is required.
 - * Copies from recent plat books are also very useful.

SUBMIT TO APPROPRIATE DISTRICT OFFICE FOR FORWARDING TO:

Bureau of Design & Environment Illinois Department of Transportation 2300 South Dirksen Parkway, Room 330 Springfield, IL 62764

Attn: Peter J. Frantz

For additional information, call 217/782-4770.



Landowner Agreement For BDE 2289

	Borrow 🖂
	Topsoil Excess Earthwork Material Disposal
	Ziopodu [
- ,	
Γο whom it may concern:	
I, said property owner,	
onan do hereby grant to the State Historic Preservation Of Program (ITARP), or their agents, permission to surv	· · · · · · · · · · · · · · · · · · ·
(Indicate location of property by county, range, township,	section and sub-section, as necessary.)
	(Signature of Property Owner)
	(Name and Address of Property Owner)
rogram (HARP), or their agents, acting on behalf of	owner of said property, do hereby grant and the Illinois Transportation Archaeological Research the Illinois Department Of Transportation, to remove ifacts shall remain in public ownership, in the custody of rsity of Illinois, or their agents.
	(Signature of Property Owner)
	(Name and Address of Property Owner)

INTENTIONALLY

BLANK



Environmental Survey Request Borrow/Waste/Use Areas

		Borrow L	_]
Boi	row/Waste/Use Area Coordinator	Topsoil 🛭	⅓
	7) 782-4771	Excess Earthwork Material Disposal	
A.	Submittal Date: Requesting Agency: DO Previous survey request(s) submitted for this project? Y Date(s) of prior submittal(s):	H	
B.		nty(ies): Lake District: 1 roject No.:CMM-8003(473) Contract No.: 63457	_
C.	☐ Borrow/ ☐ Waste/ ☐ Use Area Location (Check each which	applies.):	
D.	m³ (yds³) borrow from this area. Born Current Land Use (Check each which applies.): ☐ Timber ☐	ow/Waste/Use Area Size: ha. (acres) Row Crops □ Pasture □ Other (Describe):	
E	Name of Contractor:		\dashv
,	Contact Person:	Phone:	
	Address: Name of District/Local Resident Engineer:	Phone:	
F.	Has Borrow Area been approved by Bureau of Materials? (Che Date of Approval:	ck one.)	
G.	This request is number of requests for this project		1
	ATTACHMENTS REQUIRED	(LEAVE THIS SPACE BLANK)	7

BORROW/WASTE/USE AREAS

Instructions

NOTE: PLEASE FILL OUT THE ENTIRE FORM. INCOMPLETE FORMS OR ATTACHMENTS WILL BE RETURNED FOR ADDITIONAL INFORMATION. If additional space is needed, incorporate necessary information in the transmittal memorandum. A TRANSMITTAL MEMORANDUM MUST BE SUBMITTED WITH EACH REQUEST FORM.

- Submit survey request at <u>earliest</u> possible date to ensure that construction schedules will be met.
- Complete and submit individual forms and attachments for <u>each</u> borrow area, haul road, plant site, staging/storage area, waste area, etc. to be surveyed.
- In order to avoid repeated trips to the same project site, indicate the number of requests being submitted for this project as the last entry on this form.

DOH – Division of Highways project
DOA – Division of Aeronautic project
DOWR – Division of Water Resources project
Local – County or Municipality project
FAP, FAI, FAU, CH, TR, etc. Illinois State route designations, U.S. route designations, etc.
Describe the location of borrow area(s), haul roads, plant sites, staging/storage area, waste area, etc. Include location map* and plan sketch.

Submittals/Attachments:

- Transmittal Memorandum
- 1 original and 2 copies of this form, <u>each</u> with a location map*, plan sketch and signed "Landowner Release Form"
- 3 set of plan view layouts with approximate ROW/easement limits
- 1 copy of ground level photos is required.
 - * Copies from recent plat books are also very useful.

SUBMIT TO APPROPRIATE DISTRICT OFFICE FOR FORWARDING TO:

Bureau of Design & Environment Illinois Department of Transportation 2300 South Dirksen Parkway, Room 330 Springfield, IL 62764

Attn: Peter J. Frantz

For additional information, call 217/782-4770.



Landowner Agreement For BDE 2289

	Borrow
	Topsoil D
	Excess Earthwork Material Disposal
o whom it may concern:	
, said property owner,	(Name and Address of Property Owner)
o hereby grant to the State Historic Preserva Program (ITARP), or their agents, permission	tion Officer and the Illinois Transportation Archaeological Research to survey and/or test excavate said property, located:
5 (vivia), or allow agente, permission	
(Indicate location of property by county, range, to	washin section and sub-section as necessary)
(was a second of property by county, runge, to	morne, codion and dab deciron, as necessary.
	(Signature of Property Owner)
	(eignature of Froperty Owner)
	(Name and A.C.)
	(Name and Address of Property Owner)
	ourser of said weaponts, do house, went
ermission for the State Historic Preservation	owner of said property, do hereby grant Officer and the Illinois Transportation Archaeological Research
rogram (ITARP), or their agents, acting on be	ehalf of the Illinois Department Of Transportation, to remove
intracts found on said property and agree that he State Historic Preservation Officer and the	t all artifacts shall remain in public ownership, in the custody of
To state the total of total valid to state of the total and the	of mycrotty of millions, of their agents.
	•
	(Signature of Property Owner)
	(Orginature of Property Owner)
	(Name and Address of Property Owner)

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Environmental Survey Request Borrow/Waste/Use Areas

		',		Borrow	· 📙
Bor	row/Waste/Use Area Coordinator			Topsoil	
	7) 782-4771	E	xcess Earthwork	Material Disposal	\boxtimes
A.	Submittal Date: Requesting Agency: DOH DOP Previous survey request(s) submitted for this project? Yes Date(s) of prior submittal(s):	OA □ Loca No	l ⊠ Other: Addendum #		_
B.		_ <u>Lake</u> o.:CMM-8003 et No.:634		District: 1	·
C.	☐ Borrow/ ☑ Waste/ ☐ Use Area Location (Check each which applies	5.):			
D.	m³ (yds³) borrow from this area. Borrow/Was Current Land Use (Check each which applies.): ☐ Timber ☐ Row Ci	ste/Use Area rops ☐ Pasi	Size: ha. ture □ Other (I	(acres) Describe):	
E.	Name of Contractor:				-
	Contact Person: Address:	Phone:	-		_
	Name of District/Local Resident Engineer:	Phone:	_		- -
F.	Has Borrow Area been approved by Bureau of Materials? (Check one.) Date of Approval:	☐Yes	□ No □ Not	Applicable	
G.	This request is number of requests for this project.				
	ATTACHMENTS REQUIRED	THIS SPACE BL	ANK)		

BORROW/WASTE/USE AREAS

Instructions

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	DOA - Division of Aeronautic project
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	Local – County or Municipality project
B. Route: Marked:	FAP, FAI, FAU, CH, TR, etc. Illinois State route designations, U.S. route designations, etc.
C. Borrow/Use Area Location:	Describe the location of borrow area(s), haul roads, plant sites, staging/storage area, waste area, etc. Include location map* and plan sketch.

Submittals/Attachments:

- Transmittal Memorandum
- 1 original and 2 copies of this form, <u>each</u> with a location map*, plan sketch and signed "Landowner Release Form"
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Bureau of Design & Environment Illinois Department of Transportation 2300 South Dirksen Parkway, Room 330 Springfield, IL 62764

Attn: Peter J. Frantz

For additional information, call 217/782-4770.



Landowner Agreement For BDE 2289

	Borrow
	Topsoil 🗌 Excess Earthwork Material Disposal 🔯
To whom it may concern:	
I, said property owner,(Name a	and Address of Property Owner)
do hereby grant to the State Historic Preservation Office Program (ITARP), or their agents, permission to survey	er and the Illinois Transportation Archaeological Research
(Indicate location of property by county, range, township, se	ection and sub-section, as necessary.)
	(Signature of Property Owner)
	(Oignature of Property Owner)
	(Name and Address of Property Owner)
l, permission for the State Historic Preservation Officer ar Program (ITARP), or their agents, acting on behalf of th artifacts found on said property and agree that all artifac the State Historic Preservation Officer and the Universit	re Illinois Department Of Transportation, to remove cts shall remain in public ownership, in the custody of
·	
	(Signature of Property Owner)
	(Name and Address of Property Owner)

INTENTIONALLY

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Storm Water Pollution Prevention Plan

Route FAU 2661 (CH 29)	Marked Rt. Hunt Club Road
Section 02-00076-13-CH	Project Nò. CMM-8003(473)
County Lake	Contract No. 63457
Environmental Protection Agency on May 30, 2003 for storm	s of the NPDES Permit Number ILR10, issued by the Illinois n water discharges from Construction Site Activities. This plar DES Permit Number ILR40 for discharges from small municipa
NPDES permits associated with this project:	
☐ ILR10 Permit No. (if applicable):	
	CDOT projects
I certify under penalty of law that this document and all attachr accordance with a system designed to assure that qualified pe submitted. Based on my inquiry of the person or persons who gathering the information, the information submitted is, to the bar aware that there are significant penalties for submitting fals for knowing violations.	ersonnel properly gathered and evaluated the information
Martin G. Buehler Print Name County Engineer Title	Many Bucher Signature Date
Lake County Division of Transportation	

I. Site Description:

A. The following is a description of the project location:

Agency

The project is located along from 665 feet south of the intersection with Millburn Road to 610 feet north of the intersection with Wadsworth Road. The project also extends west at the Millburn Road intersection for 687 feet and east at the Wadsworth Road intersection 580 feet. The project corridor is located in the Village of Old Mill Creek, Lake County. Illinois.

B. The following is a description of the construction activity which is the subject of this plan:

The project will consit of the construction of single lane roundabouts on Hunt Club Road at the intersections with Millburn Road and Wadsworth Road. This will require that the approach legs to the roundabouts be reconstructed with painted medians transistioning to combination concrete curb and gutter medians. The approach legs are rural cross sections that turn into an urban cross section with combination concrete curb and gutters along the medians, roundabout center islands, and outer edges of pavement. The section between the roundabouts that is not being reconstructed will include shoulder widening and resurfacing.

The majority of the storm water conveyance system will be open ditches. At the roundabouts where combination concrete curb and gutter is present, storm sewer will be installed.

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C. The following is a description of the intended sequence of major activities which will disturb soils for major portions of the construction site, such as grubbing, excavation and grading:

The construction staging plan sheet describes the major activities that will disturb portions of the construction site.

D. The total area of the construction site is estimated to be 12 acres.

The total area of the site that is estimated will be disturbed by excavation, grading or other activities is <u>11.5</u> acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

0.60

F. The following is a description of the soil types found at the project site followed by information regarding their erosivity:

Below is a summary of the soil types found on-site followed by their respective Erosion Factor Kf. The Erosion Factor Kf indicates the erodibility of the fine earth fraction of the material less than 2 millimeters in size. The scale ranges from 0.02 (low Erodibility) to 0.69 (High Erodibility).

Blount Silt Loam - 0.32

Ashkum Silty Clay Loam - 0.20

Beecher Silt Loam - 0.28

Ozaukee Silt Loam - 0.32

Orthents, Clayey, Undulating - 0.43

Wauconda and Beecher Silt Loams - 0.37 (Wauconda only)

Additional information on the soil types on-site can be found in the Roadway Soils Investigation Report included in the contract documents, which is incorporated by reference as part of this plan.

G. The following is a description of potentially erosive areas associated with this project:

Potentially erosive areas are located on the downstream end sections of culverts and storm sewers.

H. The following is a description of soil disturbing activities, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

Most of the site will have soil disturbing activities in the parkway. The foreslopes and backslopes of the proposed roadway embankments and roadside ditches range from 1:3 (V:H) to 1:5. Foreslope vertical lengths of the proposed roadway range from 2 feet to 6 feet. The backslope vertical lengths range from zero (no backslope) to 6 feet.

The bottoms of proposed unstabilized ditches and swales pose a soil erosion hazard.

I. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

J. The following is a list of receiving water(s) and the ultimate receiving water(s), and areal extent of wetland acreage at the site. The location of the receiving waters can be found on the erosion and sediment control plans:

The project is located in the Mill Creek subwatershed part of the Des Plaines River Watershed in Lake County. See the temporary soil and erosion control plan notes sheet for watershed maps in Lake County.

Part of the tributary drainage area that is conveyed through the project site discharges to a tributary stream of the Mill Creek at the Simpson Driveway.

The site contains the wetland types listed below, followed by the amount being removed. All wetlands on site will be removed.

Forested Wetlands = 0.13 acres

West Meadow = 0.06 acres

The location of the wetlands is shown on the temporary soil and erosion control plan sheets.

K. The following pollutants of concern will be associated with this construction project:

\boxtimes	Soil Sediment	\boxtimes	Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
\boxtimes	Concrete	\boxtimes	Antifreeze / Coolants
\boxtimes	Concrete Truck Waste	\boxtimes	Waste water from cleaning construction equipment
\boxtimes	Concrete Curing Compounds		Other (specify)
\boxtimes	Solid Waste Debris		Other (specify)
\boxtimes	Paints		Other (specify)
\boxtimes	Solvents		Other (specify)
\boxtimes	Fertilizers / Pesticides		Other (specify)

II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the contractor will be responsible for its implementation as indicated. The contractor shall provide to the resident engineer a plan for the implementation of the measures indicated. The contractor, and subcontractors, will notify the resident engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the permit. Each such contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls

- 1. Stabilized Practices: Provided below is a description of interim and permanent stabilization practices, including site specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(A)(1)(a) and II(A)(3), stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 7 days after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of 14 or more calendar days.
 - a. Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable thereafter.

	The following Stabilization Practices will be used for this project:
	 □ Preservation of Mature Vegetation □ Vegetated Buffer Strips □ Protection of Trees □ Geotextiles □ Temporary Erosion Control Seeding □ Other (specify) □ Temporary Mulching □ Other (specify)
	Describe how the Stabilization Practices listed above will be utilized:
	Protection of existing trees will be provided, including tree trunk protection and root pruning, to minimize the surface soil disturbances.
	Temporary erosion control seeding will be provided in areas where permanent seeding is proposed if the site is ready to be stabilized. Temporary seeding will also be provided on stockpiles after the amount of days specified in II.A.1.
	Permanent seeding with erosion control blanket will be constructed as soon as earthwork for the prospective stage of construction in the area is completed.
	Erosion mat and flocculation powder are included in the project to be used on an as-needed basis.
2.	Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.
٠	The following Structural Practices will be used for this project:
	☑ Perimeter Erosion Barrier ☑ Rock Outlet Protection ☑ Temporary Ditch Check ☑ Riprap ☑ Storm Drain Inlet Protection ☐ Gabions ☑ Sediment Trap ☐ Slope Mattress ☐ Temporary Pipe Slope Drain ☐ Retaining Walls ☐ Temporary Sediment Basin ☐ Slope Walls ☐ Temporary Stream Crossing ☐ Concrete Revetment Mats ☑ Stabilized Construction Exits ☐ Level Spreaders ☐ Turf Reinforcement Mats ☑ Other (specify) Flocculation Logs ☐ Permanent Check Dams ☑ Other (specify) Drainage Swales ☐ Permanent Sediment Basin ☐ Other (specify) ☐ Aggregate Ditch ☐ Other (specify) ☐ Paved Ditch ☐ Other (specify)
	Describe how the Structural Practices listed above will be utilized:
	Perimeter erosion barrier shall be placed along the outside of the project limits, with the exception of where point discharges flow off-site. The erosion control barrier will prevent eroeion from leaving the construction site where stormwater has the potential to sheet flow off-site and where construction activities are relatively close to the project limits.
	Temproary ditch checks are being provided in the proposed ditches where point discharges flow off-site and upstream of the point discharges. Temporary ditch checks will be spaced out in the ditches according to recommended spacing in the IDOT Bureau of Design and Environment manual.

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immediately after installation.

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Riprap is provided at all downstream end section of culverts and storm sewers.

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Inlet protection will be provided on existing open frames and grates and for proposed storm sewer grates

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- 3. Storm Water Management: Provided below is a description of measures that will be installed during the construction process to control pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.
 - a. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Section 59-8 (Erosion and Sediment Control) in Chapter 59 (Landscape Design and Erosion Control) of the Illinois Department of Transportation Bureau of Design and Environment Manual. If practices other than those discussed in Section 59-8 are selected for implementation or if practices are applied to situations different from those covered in Section 59-8, the technical basis for such decisions will be explained below.

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

Description of Storm Water Management Controls.

N/A

4. Other Controls:

a. Vehicle Entrances and Exits – Stabilized construction entrances and exits must be constructed to prevent tracking of sediments onto roadways.

The contractor will provide the resident engineer with a written plan identifying the location of stabilized entrances and exits and the procedures (s)he will use to construct and maintain them.

- b. Material Delivery, Storage, and Use The following BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage, and use:
 - All products delivered to the project site must be properly labeled.
 - Water tight shipping containers and/or semi trailers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents, and grease.
 - A storage/containment facility should be chosen for larger items such as drums and items shipped or stored on pallets. Such material is to be covered by a tin roof or large sheets of plastic to prevent precipitation from coming in contact with the products being stored.
 - Large items such as light stands, framing materials and lumber shall be stored in the open in a general storage area. Such material shall be elevated with wood blocks to minimize contact with storm water runoff.
 - Spill clean-up materials, material safety data sheets, an inventory of materials, and emergency contact numbers shall be maintained and stored in one designated area and each Contractor is to inform his/her employees and the resident engineer of this location.

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- c. Stockpile Management BMPs shall be implemented to reduce or eliminate pollution of storm water from stockpiles of soil and paving materials such as but not limited to portland cement concrete rubble, asphalt concrete, asphalt concrete rubble, aggregate base, aggregate sub base, and pre-mixed aggregate. The following BMPs may be considered:
 - Perimeter Erosion Barrier
 - Temporary Seeding
 - Temporary Mulch
 - Plastic Covers
 - Soil Binders
 - Storm Drain Inlet Protection

The contractor will provide the resident engineer with a written plan of the procedures (s)he will use on the project and how they will be maintained.

- d. Waste Disposal. No materials, including building materials, shall be discharged into Waters of the State, except as authorized by a Section 404 permit.
- e. The provisions of this plan shall ensure and demonstrate compliance with applicable State and/or local waste disposal, sanitary sewer or septic system regulations.
- f. The contractor shall provide a written and graphic plan to the resident engineer identifying where each of the above areas will be located and how they are to be managed.

5. Approved State or Local Laws

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

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

The engineering plans and specifications describe the procedures and requirements for sediment and erosion control.

III. Maintenance:

The following is a description of procedures that will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. The resident engineer will provide maintenance guides to the contractor for the practices associated with this project.

Erosion control practices will be maintained according to the engineering plans and special provisions and according to the IDOT BDE and Lake County Stormwater Management Commission requirements. A special provision has been provided for the pay item "MAINTENANCE OF TEMPORARY EROSION CONTROL SYSTEMS" that describes the requirements in further detail.

IV. Inspections:

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

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- A. Disturbed areas, use areas (storage of materials, stockpiles, machine maintenance, fueling, etc.), borrow sites, and waste sites shall be inspected for evidence of, or the potential for, pollutants entering the drainage system. Erosion and sediment control measures identified in the plan shall be observed to ensure that they are operating correctly. Discharge locations or points that are accessible, shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters. Locations where vehicles enter or exit the site shall be inspected for evidence of off site sediment tracking.
- B. Based on the results of the inspection, the description of potential pollutant sources identified in section I above and pollution prevention measures identified in section II above shall be revised as appropriate as soon as practicable after such inspection. Any changes to this plan resulting from the required inspections shall be implemented within ½ hour to 1 week based on the urgency of the situation. The resident engineer will notify the contractor of the time required to implement such actions through the weekly inspection report.
- C. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, major observations relating to the implementation of this storm water pollution prevention plan, and actions taken in accordance with section IV(B) shall be made and retained as part of the plan for at least three (3) years after the date of the inspection. The report shall be signed in accordance with Part VI. G of the general permit.
- D. If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the resident engineer shall complete and file an "Incidence of Noncompliance" (ION) report for the identified violation. The resident engineer shall use forms provided by the Illinois Environmental Protection Agency and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of noncompliance shall be signed by a responsible authority in accordance with Part VI. G of the general permit.

The Incidence of Non-Compliance shall be mailed to the following address:

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

V. Non-Storm Water Discharges:

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

A. Spill Prevention and Control – BMPs shall be implemented to contain and clean-up spills and prevent material discharges to the storm drain system. The contractor shall produce a written plan stating how his/her company will prevent, report, and clean up spills and provide a copy to all of his/her employees and the resident engineer. The contractor shall notify all of his/her employees on the proper protocol for reporting spills. The contractor shall notify the resident engineer of any spills immediately.

At a minimum the Contractor shall have a spill kit on site that is adequately sized to absorb a full-tank fuel or antifreeze/coolant spill from any single piece of equipment that is used on the project. The spill kit shall be stored as close as practical to stormwater outfalls or potential receiving waters on the project site.

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- B. Concrete Residuals and Washout Wastes The following BMPs shall be implemented to control residual concrete, concrete sediments, and rinse water:
 - Temporary Concrete Washout Facilities shall be constructed for rinsing out concrete trucks. Signs shall be installed directing concrete truck drivers where designated washout facilities are located.
 - The contractor shall have the location of temporary concrete washout facilities approved by the resident engineer.
 - All temporary concrete washout facilities are to be inspected by the contractor after each use and all spills must be reported to the resident engineer and cleaned up immediately.
 - Concrete waste solids/liquids shall be disposed of properly.
- C. Litter Management A proper number of dumpsters shall be provided on site to handle debris and litter associated with the project. The Contractor is responsible for ensuring his/her employees place all litter including marking paint cans, soda cans, food wrappers, wood lathe, marking ribbon, construction string, and all other construction related litter in the proper dumpsters.

Location of dumpsters:

- D. Vehicle and Equipment Cleaning Vehicles and equipment are to be cleaned in designated areas only, preferably off site.
- E. Vehicle and Equipment Fueling A variety of BMPs can be implemented during fueling of vehicles and equipment to prevent pollution. The contractor shall inform the resident engineer as to which BMPs will be used on the project. The contractor shall inform the resident engineer how (s)he will be informing his/her employees of these BMPs (i.e. signs, training, etc.). Below are a few examples of these BMPs:
 - Containment
 - Spill Prevention and Control
 - Use of Drip Pans and Absorbents
 - Automatic Shut-Off Nozzles
 - Topping Off Restrictions
 - Leak Inspection and Repair
- F. Vehicle and Equipment Maintenance On site maintenance must be performed in accordance with all environmental laws such as proper storage and no dumping of old engine oil or other fluids on site.
- G. Portable Outdoor Toilets shall be placed outside of flood prone areas and as far as practical from waterways. Waste material to be disposed of properly.

Location(s) of portable outdoor toilets:

VI. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of an Erosion and Sediment Control Deficiency Deduction against the contractor and/or penalties under the NPDES permit which could be passed onto the contractor.

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Name of Firm

Street Address

Contractor Certification Statement

The Res their owr	ident Engineer is to make copies of this form separate form.	and every contractor a	nd sub-contractor will be required to complete
This cert accordar	ification statement is part of the Storm Water nce with General NPDES Permit No. ILR10 is	Pollution Prevention P sued by the Illinois Env	lan for the project described below, in rironmental Protection Agency.
Route	FAU 2661 (CH 29)	Marked Rt.	Hunt Club Road
Section	02-00076-13-CH	Project No.	CMM-8003(473)
County	Lake	Contract No.	63457
Storm W complian necessar	ce with the ILR10 and Storm Water Pollution y.	nentioned project. I ha	ve provided all documentation required to be in it is provided to be in its provide timely updates to these documents as
	Print Name		Signature
	Title		Date

Telephone

City/State/ZIP

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

NOTICE OF INTENT (NOI) GENERAL PERMIT TO DISCHARGE STORM WATER **CONSTRUCTION SITE ACTIVITIES**

OWNER INFORMATION													
COMPANY/ OWNER NAME:	Lake County	Division of	Transportat	ion .	OWNER TYPE: SELECT ONE County MS4 Community ✓ Yes No								
MAILING ADDRESS:	600 West W	inchester Ro	ad			-740@xt.							
CITY:	Libertyville		ST	ATE: IL	ZIP CODE: 60048	FAX: Area Code	(847)।	Number 362	2-5290				
CONTACT PERSON: Rich	ard D. McMo	rris, P.E.	W-14-74-		EMAIL: rmcmorris@lakecountyil.gov								
CONTRACT	OR INFORM	MATION											
CONTRACTOR NAME:								·					
MAILING ADDRESS:	·					PHONE: Area Code () N	umber	ext.				
CITY:						1		STATE:	ZIP CODE:				
CONSTRUC	TION SITE	NEODMAT	ION .					······································					
	✓ NEW SITE		ANGE OF INFO	RMATION F	or: ILR1	0		. <u>. </u>					
SELECT ONE: PROJECT					·		COUN	TV·					
NAME:	Hunt Club Ro	ad-Roadway	reconstruct	ion, wid	ening and	resurfacing	Lake						
STREET ADDRESS/ LOCATION	FAU Route 266 Wadsworth Roa		oad from Millb	urn to	Old Mill Creek ZIP CODE: 60083								
LATITUDE:	DEG. MIN. 25	SEC.	LONGITUDE:	DEG. 87	MIN. 58	SEC. S	ECTION: 32	TOWNSH 46N	IP: RANGE:				
APPROX CONST START DATE 09 / 01 / 20	APPROX CONST I	END DATE	TOTAL SIZE OF CONSTRUCTION SITE IN ACRES: 12 If less than 1 acre, is site part of larger common plan of development? Y										
STORM WA	TER POLLU	TION PRE	VENTION F	PLAN IN	NFORMA'	TION		·					
STORM WATER POLLUTION PREVENTION PLAN INFORMATION HAS STORM WATER POLLUTION PREVENTION PLAN BEEN SUBMITTED TO AGENCY? YES NO (SUBMIT SWPPP ELECTRONICALLY TO: epa.constilr10swppp@illinois.gov)													
WILL STORM WATER POLLUTION PREVENTION PLAN BE AVAILABLE AT SITE? YES NO													
LOCATION OF SWPPP FOR VIEWING: ADDRESS: On-site at field office									lan ols				
LOCATION OF SWPPP FOR VIEWING: ADDRESS: On-Site at Held Office CITY: Old Mill Creek SWPPP CONTACT INFORMATION: INSPECTOR QUALIFICATIONS:													
NAME:		·				I .	SELECT						
PHONE:		FAX: ()		EMAIL:									
PROJECT INSPECTOR, IF DIFFERENT THAN ABOVE: NAME: INSPECTOR QUALIFICATIONS: SELECT ONE Other													
PHONE:		FAX:		EMAIL:									

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY NOTICE OF INTENT (NOI) GENERAL PERMIT TO DISCHARGE STORM WATER

CONSTRUCTION SITE ACTIVITIES

TYPE OF CONSTRUCTION	ON (SELECT AL	L THAT APPLY)							
SELECT ONE Transportation			SIC Co	de:					
TYPE DETAILED DESCRIPTION OF F	PROJECT:								
medians. The approach legs are rural cro	o the roundabouts be recon ss sections that turn into an	structed with painted medians	s transitioning to c	with Millburn Road and Wadsworth Road. ombination concrete curb and gutter curb and gutters along the medians, onstruction will have shoulder widening and					
The majority of the storm water conveya sewer will be installed.	nce system will be open dit	tches. At the roundabouts who	ere combination co	oncrete curb and gutter is present, storm					
HISTORIC PRESERVATION	ON AND ENDAN	GERED SPECIES	S COMPLIA	NCE					
HAS THIS PROJECT BEEN SUBMITT	ED TO THE FOLLOWIN	G STATE AGENCIES TO S	SATISFY APPLIC	ABLE REQUIREMENTS FOR					
HISTORIC PRESE	COMPLIANCE WITH ILLINOIS LAW ON: HISTORIC PRESERVATION YES NO http://www.illinoishistory.gov/PS/rcdocument.htm ENDANGERED SPECIES YES NO http://dnrecocat.state.il.us/ecopublic/								
RECEIVING WATER INFO	ORMATION								
DOES YOUR STORM WATER DISCHA	ARGE DIRECTLY TO:	✓ WATERS OF THE S	STATE OR	☐ STORM SEWER					
OWNER TO STORM SEWER SYSTEM	S: Lake County D	ivision of Transports	ition						
NAME OF CLOSEST RECEIVING WAT	TERBODY TO WHICH Y	ou discharge: Unnar	ned tributary	to Mill Creek					
person or persons who manage this is, to the best of my knowledge and	lified personnel proper system, or those person belief, true, accurate, a ty of fine and imprison	rly gather and evaluate the considering of the considering the complete. I am aware note that the considering the constant of	ne information so or gathering the that there are so orlify that the r	on and supervision in accordance with a submitted. Based on my inquiry of the information submitted significant penalties for submitting false provisions of the permit, including the plan, will be complied with.					
OWNER SIGNATURE:		DA	TE:	FOR OFFICE WAY					
	OR MAIL COMPLETI	ED FROM TO:		FOR OFFICE USE ONLY LOG:					
SUBMIT ELECTRONICALLY TO: epa.constilr10swppp@illinois.gov				PERMIT NO. ILR10					
	SPRINGFIELD, ILLIN			DATE:					
Information required by this form must be provide being denied. This form has been approved by the	d to comply with 415 ILCS 5/39	(1996). Failure to do so may preve	ent this form from bei	ng processed and could result in your application					

IL 532 2104 WPC 623 Rev. 8/08



INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Please adhere to the following instructions:

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the lower right hand corner.

< Submit completed forms to:

Illinois Environmental Protection Agency Division of Water Pollution Control Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217)782-0610 www.epa.state.il.us

- Reports must be typed or printed legibly and signed.
- Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.
- If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.
- NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.
- Use the formats given in the following examples for correct form completion.

	Example	<u>Format</u>
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W"

- For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."
- < Submit a fee of \$500 and the Storm Water Pollution Plan (SWPPP) for initial permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA.
- < SWPPP should be submitted electronically to: <u>epa.constilr10swppp@illinois.gov</u> When submitting electronically, use Project Name and City as indicated on NOI form.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY CONSTRUCTION SITE STORM WATER DISCHARGE INCIDENCE OF NON-COMPLIANCE (ION)

PERMITTEE NAME:											REA COD	(8	47) 377-7400						
STREET:	600 West Winchester Road CITY:									Libertyville ST: IL ZIP: 6004							0048		
CONSTRUCTION SITE NAME:	FAU Route 2661/Hunt Club Road																		
COUNTY:	Lake										ION:	32	-	TOWNSHIP: 46 I			N RANGE: 11 E		
NPDES PERMIT NUMBER:	i L R 1 0 LATITUDE: 42 25								MIN. 25	SEC. 30		LONGIT	UDE:	deg. 87	мім 58		SEC.		
CAUSE OF NON-CO	MPLIAN	ICE:																	
!																			
ACTIONS TAKEN TO	PREVI	ENT AN	Y FURTI	HER NO	ON-COI	MPLIA	NCE:												
				•							-								
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ACTIONS TAKEN TO	REDUC	E THE	ENVIRO	NMEN	TAL IM	PACT	RESUL	TING FF	RON	M THE	NON-C	OMPLIANO	CE:						
			• • •					-											
SIGNATURE:							 '	TITLE:			DAT	E: '· ·							
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IL 532 2105 WPC 624 Rev. 6/98)

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Complete and submit this form for any violation of the Storm Water Pollution Prevention Plan observed during any inspection conducted, including those not required by the Plan. Please adhere to the following guidelines.

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- · · · Submit completed forms to:

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SECTION	12	1 or 2 numerical digits						
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RANGE	12W	1 or 2 numerical digits followed by "E" or "W"						

NOTICE OF TERMINATION (NOT)

OF COVERAGE UNDER THE GENERAL PERMIT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION SITE ACTIVITIES

Please use the tab or arrow keys

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CITY:	Libertyville	ZIP: 60048														
CONTACT PERSON:	Richard D. McMorris		TELEPHONE NUMBER:			AREA CODE NUMBE 847 377-			ER ·7400)						
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I certify under penalty of law that disturbed soils at the identified facility have been finally stabilized or that all storm water discharges associated with industrial activity from the identified facility that are authorized by an NPDES general permit have otherwise been eliminated. I understand that by submitting this notice of termination, that I am no longer authorized to discharge storm water associated with industrial activity hy the general permit, and that discharging pollutants in storm water associated with industrial activity to Waters of the State is unlawful under the Environmental Protection Act and the Clean Water Act where the discharge is not authorized by an NPDES permit.																
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	<u>Example</u>	<u>Format</u>
SECTION	12	1 or 2 numerical digits
TOWNSHIP	12N	1 or 2 numerical digits followed by "N" or "S"
RANGE	12W	1 or 2 numerical digits followed by "E" or "W"

···· Final stabilization has occurred when:

- (a) all soil disturbing activities at the site have been completed
- (b) a uniform perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures,
- (c) or equivalent permanent stabilization measures have been employed.



DEPARTMENT OF THE ARMY

CHICAGO DISTRICT, CORPS OF ENGINEERS 111 NORTH CANAL STREET CHICAGO, ILLINOIS 60606-7206

MAY 21 2009

Technical Services Division Regulatory Branch LRC-2008-83

SUBJECT: Permit Authorization for Proposed Hunt Club Road Improvements Located South of Wadsworth Road to Simpson Road, Old Mill Creek, Lake County, Illinois (Section 32 and S ½ of Section 29, T46N R11E)

Chuck Gleason Lake County Division of Transportation 600 W. Winchester Road Libertyville, IL 60048-1381

Dear Mr. Gleason:

This office has verified that your proposed activity complies with the terms and conditions of Regional Permit 3 (Transportation Projects) and the overall RPP under Category II of the Regional Permit Program dated April 1, 2007. The activity may be performed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP. Enclosed is your copy of the executed RPP Permit authorization.

This verification expires three years from the date of this letter, and covers only your project as described in your notification and as shown on the plans titled "Hunt Club Road Wetlands" dated January 26, 2009, prepared by Strand Associates, Inc. If the design, location, or purpose of the project is changed, you should contact this office to determine the need for further authorization.

This office is in receipt of your Butterfield Road Wetland Mitigation Bank ledger confirming your usage of **0.492** mitigation credits.



Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Ms. Kimberly Kubiak of my staff by telephone at (312) 846-5541 or email at kimberly.j.kubiak@usace.army.mil.

Sincerely,

Leesa A. Beal

Chief, East Section Regulatory Branch

Enclosures

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Copy Furnished (with authorization):

United States Fish & Wildlife Service (Rogner) Lake County SMC (Joe Hmieleski)

Copy Furnished (w/o authorization):

Illinois Environmental Protection Agency (Allison)
Illinois Department of Natural Resources (Schanzle)
Illinois Department of Natural Resources/OWR (Jereb)
Strand Associates, Inc. (Jim McCarthy)



Corporate Office 360 S. Main Place, Carol Stream, IL 60188-2404 630.462.2600 • Fax 630.653.2988

Local Offices:
1701 W. Market Street, Suite B, Bloomington, IL 61701-2641
309.821.0430 • Fax 309.821.1242

457 E. Gundersen Drive, Carol Stream, IL 60188-2492 630.653.3920 • Fax 630.653.2726

209 Cleveland Street, Suite C, Cary, IL 60013-2978 847.516.0505 • Fax 847.516.0527

650 Peace Road, Suite D, DeKalb, IL 60115 815.748.2100 • Fax 815.748.2110

401 Riverside Drive, Suite 24, Gurnee, IL 60031-5906 847.249.6040 • Fax 847.249.6042

2235 23⁸⁰ Avenue, Rockford, IL 61104-7334 815.394.2562 • Fax 815.394.2566

203 Earl Road, Suite A, Shorewood, IL 60404-9446 815.744.1510 • Fax 815.744.1728

8201 W. 18380 Street, Suite C, Tinley Park, IL 60487-9208 708.429.2080 • Fax 708.429.2144

Geotechnical & Environmental Engineering

Construction Materials Engineering & Testing

Laboratory Testing of Solls, Concrete & Asphalt

Geo-Environmental Drilling & Sampling

Roadway Soils Investigation

Hunt Club Road Improvements

Lake County, Illinois

Strand Associates, Inc.

GEOTECHNICAL GROUP

CAROL STREAM

February 14, 2008 L - 64,184

ROADWAY SOILS INVESTIGATION HUNT CLUB ROAD IMPROVEMENTS LAKE COUNTY, ILLINOIS

PREPARED FOR: STRAND ASSOCIATES, INC. 1170 SOUTH HOUBOLT ROAD JOLIET, ILLINOIS 60431

PREPARED BY:
TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
(630) 653-3920

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ROADWAY SOILS INVESTIGATION HUNT CLUB ROAD IMPROVEMENTS LAKE COUNTY, ILLINOIS

1.0 INTRODUCTION

This report presents results of the soils investigation performed for the improvements to Hunt Club Road in Old Mill Creek, Illinois. These geotechnical services were provided in accordance with the TSC Proposal No. 32,757 dated December 22, 2004 and the attached General Conditions, incorporated herein by reference.

The improvements to Hunt Club Road extend from Millburn Road north to Wadsworth Road, a distance of approximately 3860 lineal feet. They include roundabout intersections at Millburn and Wadsworth, and approximately 1400 feet of resurfacing in-between.

The proposed pavement grades will be within ±1.0 foot of existing in most areas, along the proposed centerlines. However, preliminary plans provided indicate that the roundabout intersections may require 5 to 6 feet of fill be placed at Millburn, and approximately 3 to 5 feet of fill be placed at Wadsworth to bring the surrounding area up to final grade.

Work performed for this study included performing subgrade borings throughout the limits of the project in accordance with standard IDOT procedures. This report presents results of the field investigation and laboratory testing and provides recommendations for design and construction of the



roadway improvements. Specifically addressed are treatment of unsuitable or unstable subgrade soil types as well as a discussion of the subgrade support characteristics for pavement design and considerations for underground utility construction.

2.0 FIELD INVESTIGATION AND LABORATORY TESTING

Fourteen (14) soil borings and four (4) pavement cores were performed for this study. It is noted that Borings 13 and 14 were located outside the project limits. Reference is made to the Boring Location Plan included in the Appendix for the drilling layout where station, offset and elevation for each boring is provided.

Four-inch diameter pavement cores were obtained at four (4) locations (Borings 5-8). The cores were taken using an electric drill and core barrel containing diamond cutting bits. Granular base course and subbase materials were also sampled and measured for thickness. The pavement core and aggregate samples were examined by a materials technician in the laboratory. Detailed information of the results are provided in the Appendix under "Pavement Core Results".

Borings 1 through 12 were performed to depths of 10 to 15 feet at 150-500 foot intervals (greater spacing in resurfacing areas) along the project limits. Soil sampling was generally performed at continuous intervals to a depth of 5 feet and at 2.5 foot intervals thereafter. The soil samples were taken in conjunction with the Standard Penetration Test, for which driving resistance to a 2" split-spoon sampler (N value in blows per 6" interval) provides an indication of the relative density of granular materials and consistency of cohesive soils. Water level readings were taken during and following completion of drilling operations. The bore holes were immediately backfilled to preclude possible hazards to the public.

Soil samples were examined in the laboratory to verify field descriptions and to classify them in accordance with the AASHTO Soil Classification System. Laboratory testing included moisture content determinations for all cohesive and intermediate (silt or loamy) soil types. An estimate of unconfined compressive strength was obtained for cohesive samples using a calibrated hand penetrometer.

Reference is made to the boring logs in the Appendix which indicate subsurface stratigraphy and soil descriptions, results of field and laboratory tests, as well as water level observations. Definitions of



descriptive terminology are also included. While strata changes are shown as a definite line on the boring logs, the actual transition between soil layers will probably be more gradual.

3.0 DISCUSSION OF TEST DATA

3.1 Pavement Composition

Detailed Pavement Core Results (Cores 5-8) are provided in the Appendix. The results are summarized below.

Cores 5-7 found approximately 11.1 to 12.9 inches of bituminous concrete. At the location of Core 8, a minimum of 8 inches of bituminous concrete was found; however, an exact measurement was made difficult due to deterioration of the asphalt. The subbase consisted of crushed gravel with some Clay content, and was approximately 7 to 10 inches in thickness.

Borings 1-12 were also drilled through the existing pavement. The results generally match those of the cores, with 10 to 13 inches of bituminous concrete encountered at each boring location. This was underlain by 5 to 9 inches of sand and gravel subbase in most areas, the exceptions being Borings 2 and 5 where it extended to depths of 1 to 2.5 feet below existing grade. The pavement measurements at the borings should be considered approximate due to disturbance created by augering procedures.

3.2 Subgrade Soil

Very soft Organic Clay was found at depths between 4 and 5.5 feet in Boring 2, located near the center of the southern roundabout (Millburn). It had an unconfined compressive strength of less than 0.25 tons per square foot (tsf) at a moisture contents of 45 percent. It should be noted that this is where the sand and gravel fill was deepest, possibly indicating past remediation of this area during the construction of Hunt Club Road. Black Silty Clay (topsoil) fill and Clay Fill materials were found between the granular fill and the organic clay. These soils had marginal strengths and moisture contents on the order of 24 percent.

Soft Clay was also found at depths of 10.5 to 13 feet in Boring 4, exhibiting an unconfined compressive strength of 0.5 tsf at a moisture content of 30 percent. Tough Clay predominating in this boring



exhibited marginal strength (1.0 - 1.5 tsf) at relatively high moisture contents of 24 to 28 percent. It should be noted that marginal-strength cohesive soils were also found at shallow depths in Borings 1, 3, 4, 7 and 9. In the case of Boring 1, Clay Fill found at depths of 3.5 to 5.5 feet had a relatively high moisture content of 33 percent.

Clay or Clay Loam Fill was generally found in the uppermost soils at each boring, extending to depths of up to 5.5 feet below existing grade. Subsurface soils otherwise consisted of native Clay or Clay Loam, exhibiting unconfined compressive strengths of 1.5 to 4.5+ tsf at moisture contents ranging from 12 to 23 percent. Firm Silt was found at depths of 3½ to 8 feet in Boring 7, and had Standard Penetration Test (N) values of 10 to 16 blows per foot (bpf).

3.3 Groundwater Observations

Free water was encountered at depths of 6 to 10 feet below existing grade in Borings 2 and 4, coinciding with where organic/soft Clays were found. The remaining borings were "dry" both during and upon completion of drilling operations.

Please note that 24 hour water level observations were not taken for this study due to "open hole" hazards and concerns for public safety. The actual phreatic surface may have been intercepted by the bore holes even though "dry" groundwater observations were made.

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 Subgrade Support Value for Pavement Design

It should be noted that IBR testing was not included in the scope of this project. The IBR value used for pavement design is typically based on the worst soil type (lowest IBR) within the limits of the project. Based on these test results and soil conditions encountered in the remaining borings, an IBR value of no greater than 2.5 is recommended for pavement design. This value represents a typical design bearing value for cohesive subgrade soils in the Chicago area. Should a Mechanistic design be performed, it is recommended that a "Poor" subgrade support rating be used.



According to preliminary information provided by Strand Associates, the proposed pavement Is to consist of 10.25 inches bituminous concrete underlain by 12 inches IDOT District 1 Aggregate Subgrade. The subgrade elevation at each boring in the following table was determined using the cross-sections provided.

4.2 Stripping Unsuitable Soils

Normal topsoil stripping of all vegetation and root zone materials will be required for widening beyond existing shoulder areas. A nominal topsoil stripping depth of at least 6 inches is therefore recommended for estimation of Contract quantities.

Boring 2 encountered black Silty Clay (topsoil) as well as very soft Organic Clay below the existing pavement and granular fill materials. The actual depth to subgrade at this location is approximately 1.5 feet above the existing ground surface, indicating that the pavement will be supported by new fill. However, this material will likely be present in the ditches where fill is to be placed and will likely become unstable and need to be undercut and replaced with engineered fill.

Several borings encountered cohesive subgrade soils having marginal stability characteristics. The soil test data in poor areas is characterized by hand penetrometer strength values less than 2.5 tsf and/or moisture contents greater than 22 percent. Areas of soft pumpy subgrade and/or very moist soil types will require undercutting and replacing with a granular Fill. However, with the exception of Borings 3 and 9, these materials will likely be bridged by more suitable soils/new fill above.

4.3 Compressible Soils

Boring 2 encountered potentially compressible soils. At that location, approximately 6 feet of fill will be placed to raise grade. It is estimated that this could cause up to an inch of settlement of the relatively moist Organic Clay below. If no settlement can be tolerated, these materials would need to be removed and replaced during mass-grading operations.

It should be noted that these estimated settlements are minor, and the flexible pavements can typically experience up to 2 inches of settlement with no noticeable performance impact. It is our general

recommendation that they be left in-place. However, if the Organic Clay at Boring 2 is exposed during construction, it should ideally be removed in any case.

The pedological maps do not indicate any areas of "muck" with the project limits. However, due to the large amount of fill to be placed and the presence of an isolated Organic Clay layer, additional borings centered on the proposed roundabout centerline in the maximum fill areas (particularly at Millburn Road) would ideally be performed to determine if soil conditions worsen.

4.4 Guidelines for Subgrade Remediation

Once initial stripping operations have been completed, exposed subgrade soils should be tested with a Cone Penetrometer in accordance with the IDOT Subgrade Stability Manual to determine the remedial treatment depths. Observations of heavy construction vehicles on subgrade areas will help to delineate areas which have deficient strength.

All earthwork, new embankment construction and subgrade preparation should be in accordance with Division 200 and 300 of the IDOT Standard Specifications. Compaction for subgrade materials should be to at least 95 percent Standard Proctor density (AASHTO T-99), except for lower zones of new embankment which may be permitted for lower densities. Remedial work for unstable subgrade should consist of discing, aerating, and recompacting exposed subgrade soils. Solutions to a persistent pumping problem may include use of a geotextile fabric, removal of unsuitable soils and replacement with granular fill, or a combination thereof.

The subgrade stability will be influenced by such factors as surface drainage provided by the contractor as well as the prevailing temperature and precipitation experienced during construction. The amount of trafficking and subgrade disturbance created by heavy construction vehicles will also have an influence on subgrade stability. The Contractor should try to make full use of inlets or ditches in order to maintain positive drainage for subgrade areas. Temporary drainage ditches or pumping from depressional areas should be provided as needed during construction in order to prevent ponded water from affecting the stability of the roadway:



Aggregate Fill may be required for bridging over weak subgrade soils which demonstrate persistent stability problems. Aggregate materials needed beneath the Aggregate Subgrade (ayer may consist of the IDOT Porous Granular Embankment-Subgrade (PGES). A specification sheet for the aggregate gradation and placement procedures of this material is included in the Appendix.

4.5 Estimated Quantities for Stripping and Aggregate Fill

The following table summarizes the estimated quantities of undercut and PGES materials below proposed subgrade level at each boring. The depths to subgrade were taken from cross sections provided by the Client. Note that the PGES materials are to be placed beneath the 12-inch aggregate subgrade layer and are to be used only as a bridging layer over soft, pumpy subgrade or for replacement of unsuitable soils. Borings 5 though 8 are excluded from the following table as only resurfacing is planned in these areas.

Estimated Quantities for Undercutting and Porous Granular Embankment -Subgrade (PGES) Replacement Fill

Davina	Ground	Proposed	Statio	n Limits	Estimated							
Boring	Surface Elevation	Subgrade	From To		Thickness PGES	Soil Conditions at Subgrade Level						
Millburn Avenue Roundabout												
1	709.5	± 0.0	79+72	85+20	NR	Asphalt and Subbase over Clay Fill (WC=17%)						
2	709,5	+1.5	85+20	86+78	NR	New Fill Subgrade**						
3	N/A	-1.5 ¹⁾			6 Inches	Pavement over Clay Loam FILL (WC=16/13%)						
4	710.0	-0.5	86+78	89+70	NR	Pavement over Clay FILL (WC=21/20%)						
				Wadsworth	Road Roundab	out						
9	734.5	-0.5	108+48	111+75	6 Inches	Pavement over Clay Loam FILL (WC=14/13%)						
10	735.0	-0.5	111+75	113+30	NR	Pavement over Silty Clay Loam Fill (WC=13/22%)						
11	734.0	-1.0	113+30	115+00	NR	Pavement over Hard Clay (WC=23/18%)						
12	N/A	-1.5 ¹⁾			NR	Pavement over Clay FILL (WC=23/20%)						

NR Not Required

^{**} See Section 4.3 "Compressible Solls" for more information.

1) Cross sections not available: depth to subgrade shown was assumed. If enough fill is placed for a suitable bridging layer, the 6 inches at Boring 3 may be eliminated.

The need for undercutting unstable subgrade and PGES replacement Fill should be based on direct observations made during construction once the subgrade soils are exposed and proof-rolling or cone penetrometer testing procedures can be conducted. All quantities of PGES materials not required during construction should be deleted from the construction costs. Normal IDOT procedure requires cone penetrometer testing immediately prior to undercutting subgrade in order to document the need for the undercut and replacement Fill.

4.6 Underdrain Placement

Wherever possible, it is best to install transverse underdrains at the low points of undercut areas where an open-graded coarse aggregate backfill is placed, such as the Aggregate Subgrade layer or PGES materials. Maximum spacing between transverse underdrains should be about 200 to 300 feet within these materials or otherwise at the low points of the roadway profile.

All underdrains should outlet into ditches or storm sewers in such manner as to allow positive drainage. It is best to install the underdrains at a depth of at least 2½ feet below proposed pavement grade.

4.7 Drainage Structures /Utility Construction

It is our understanding that storm sewer improvements will be included in the proposed construction. The following discussion addresses the basic concerns for this work.

The soil borings performed for this study have encountered the following soil conditions which may pose significant problems for trench excavations.

- Relatively soft cohesive or marginally cohesive soils with strength values less than 1.25 tsf.

 These materials will be unstable during trenching and may need a thickened layer of granular bedding. They were encountered in many of the borings, specifically at Borings 2-5 and 7.
- Silt encountered in Boring 7: if wet and exposed by excavation, may become unstable.

A thickened granular bedding layer may otherwise be required where pipe inverts lie within relatively weak cohesive soil (Qp<1.25 tsf) or granular soils which are not fully dewatered. If the trench bottom is considered unstable, 12 to 18 inches of additional granular bedding may be placed to provide a satisfactory base for pipe installation.

Depending on the locations and inverts of new sewers, it may be required to install a tight sheeting and bracing system and/or perform preconstruction dewatering procedures such as pumping from wells or a well point system in some areas, in order to maintain a relatively "dry" excavation during construction. The Contractor should be made aware of these subsurface conditions during the initial bid phase of the project so that he will be prepared to implement adequate construction methods to control subsurface conditions. Please note that the actual phreatic surface may be somewhat higher than indicated by observations during the drilling operation.

Protective measures for excavation support should include the use of safety trench boxes, sheeting and bracing, or other appropriate methods. In this regard, the contractor must be responsible for meeting OSHA requirements, local regulations and/or project specifications with the respect to the safety of his work force and protection of adjacent structures.

5.0 CLOSURE

The analysis and recommendations submitted in this report are based upon the data obtained from the twelve (12) soil borings and four (4) pavement cores performed within the project limits at the locations indicated on the Boring Location Plan and Plan and Profile Sheets. This report does not reflect any variations which may occur between these borings, the nature and extent of which may not become evident until during the course of construction. If variations are then identified, recommendations contained in this report should be re-evaluated after performing on-site observations.

It should be noted that additional borings, testing, and analysis are recommended in connection with the organic soils encountered.



Mark L. Corbin
Registered Professional Engineer
Illinois No. 062-047916 We are available to review this report with you at your convenience.

Prepared by,

Brian Bucek, E.I.

Staff Engineer

IMPORTANT INFORMATION ABOUT YOUR GEOTECHNICAL ENGINEERING REPORT

As the client of a consulting geotechnical engineer, you should know that site subsurface conditions cause more construction problems than any other factor. ASFE/The Association of Engineering Firms Practicing in the Geosciences offers the following suggestions and observations to help you manage your risks.

A GEOTECHNICAL ENGINEERING REPORT IS BASED ON A UNIQUE SET OF PROJECT-SPECIFIC FACTORS

Your geotechnical engineering report is based on a subsurface exploration plan designed to consider a unique set of project-specific factors. These factors typically include: the general nature of the structure involved, its size, and configuration; the location of the structure on the site; other improvements, such as access roads, parking lots, and underground utilities; and the additional risk created by scope-of-service limitations imposed by the client. To help avoid costly problems, ask your geotechnical engineer to evaluate how factors that change subsequent to the date of the report may affect the report's recommendations.

Unless your geotechnical engineer indicates otherwise, do not use your geotechnical engineering report:

- when the nature of the proposed structure is changed, for example, if an office building will be erected instead of a parking garage, or a refrigerated warehouse will be built instead of an unrefrigerated one;
- when the size, elevation, or configuration of the proposed structure is altered;
- when the location or orientation of the proposed structure is modified;
- when there is a change of ownership; or
- for application to an adjacent site.

Geotechnical engineers cannot accept responsibility for problems that may occur if they are not consulted after factors considered in their report's development have changed.

SUBSURFACE CONDITIONS CAN CHANGE

A geotechnical engineering report is based on conditions that existed at the time of subsurface exploration. Do not base construction decisions on a geotechnical engineering report whose adequacy may have been affected by time. Speak with your geotechnical consultant to learn if additional tests are advisable before construction starts. Note, too, that additional tests may be required when subsurface conditions are affected by construction operations at or adjacent to the site, or by natural events such as floods, earthquakes, or ground water fluctuations. Keep your geotechnical consultant apprised of any such events.

MOST GEOTECHNICAL FINDINGS ARE PROFESSIONAL JUDGMENTS

Site exploration identifies actual subsurface conditions only at those points where samples are taken. The data were extrapolated by your geotechnical engineer who then applied judgment to render an opinion about overall subsurface conditions. The actual interface between materials may be far more gradual or abrupt than your report indicates. Actual conditions in areas not sampled may differ from those predicted in your report. While nothing can be done to prevent such situations, you and your geotechnical engineer can work together to help minimize their impact. Retaining your geotechnical engineer to observe construction can be particularly beneficial in this respect.

A REPORT'S RECOMMENDATIONS CAN ONLY BE PRELIMINARY

The construction recommendations included in your geotechnical engineer's report are preliminary, because they must be based on the assumption that conditions revealed through selective exploratory sampling are indicative of actual conditions throughout a site. Because actual subsurface conditions can be discerned only during earthwork, you should retain your geotechnical engineer to observe actual conditions and to finalize recommendations. Only the geotechnical engineer who prepared the report is fully familiar with the background information needed to determine whether or not the report's recommendations are valid and whether or not the contractor is abiding by applicable recommendations. The geotechnical engineer who developed your report cannot assume responsibility or liability for the adequacy of the report's recommendations if another party is retained to observe construction.

GEOTECHNICAL SERVICES ARE PERFORMED FOR SPECIFIC PURPOSES AND PERSONS

Consulting geotechnical engineers prepare reports to meet the specific needs of specific individuals. A report prepared for a civil engineer may not be adequate for a construction contractor or even another civil engineer. Unless indicated otherwise, your geotechnical engineer prepared your report expressly for you and expressly for purposes you indicated. No one other than you should apply this report for its intended purpose without first conferring with the geotechnical engineer. No party should apply this report for any purpose other than that originally contemplated without first conferring with the geotechnical engineer.

GEOENVIRONMENTAL CONCERNS ARE NOT AT ISSUE

Your geotechnical engineering report is not likely to relate any findings, conclusions, or recommendations

about the potential for hazardous materials existing at the site. The equipment, techniques, and personnel used to perform a geoenvironmental exploration differ substantially from those applied in geotechnical engineering. Contamination can create major risks. If you have no information about the potential for your site being contaminated, you are advised to speak with your geotechnical consultant for information relating to geoenvironmental issues.

A GEOTECHNICAL ENGINEERING REPORT IS SUBJECT TO MISINTERPRETATION

Costly problems can occur when other design professionals develop their plans based on misinterpretations of a geotechnical engineering report. To help avoid misinterpretations, retain your geotechnical engineer to work with other project design professionals who are affected by the geotechnical report. Have your geotechnical engineer explain report implications to design professionals affected by them, and then review those design professionals' plans and specifications to see how they have incorporated geotechnical factors. Although certain other design professionals may be familiar with geotechnical concerns, none knows as much about them as a competent geotechnical engineer.

BORING LOGS SHOULD NOT BE SEPARATED FROM THE REPORT

Geotechnical engineers develop final boring logs based upon their interpretation of the field logs (assembled by site personnel) and laboratory evaluation of field samples. Geotechnical engineers customarily include only final boring logs in their reports. Final boring logs should not under any circumstances be redrawn for inclusion in architectural or other design drawings, because drafters may commit errors or omissions in the transfer process. Although photographic reproduction eliminates this problem, it does nothing to minimize the possibility of contractors misinterpreting the logs during bid preparation. When this occurs, delays, disputes, and unanticipated costs are the all-too-frequent result.

To minimize the likelihood of boring log misinterpretation, give contractors ready access to the complete geotechnical engineering report prepared or authorized for their use. (If access is provided only to the report prepared for you, you should advise contractors of the report's limitations, assuming that a contractor was not one of the specific persons for whom the report was prepared and that developing construction cost esti-

mates was not one of the specific purposes for which it was prepared. In other words, while a contractor may gain important knowledge from a report prepared for another party, the contractor would be well-advised to discuss the report with your geotechnical engineer and to perform the additional or alternative work that the contractor believes may be needed to obtain the data specifically appropriate for construction cost estimating purposes.) Some clients believe that it is unwise or unnecessary to give contractors access to their geotechnical engineering reports because they hold the mistaken impression that simply disclaiming responsibility for the accuracy of subsurface information always insulates them from attendant liability. Providing the best available information to contractors helps prevent costly construction problems. It also helps reduce the adversarial attitudes that can aggravate problems to disproportionate scale.

READ RESPONSIBILITY CLAUSES CLOSELY

Because geotechnical engineering is based extensively on judgment and opinion, it is far less exact than other design disciplines. This situation has resulted in wholly unwarranted claims being lodged against geotechnical engineers. To help prevent this problem, geotechnical engineers have developed a number of clauses for use in their contracts, reports, and other documents. Responsibility clauses are not exculpatory clauses designed to transfer geotechnical engineers' liabilities to other parties. Instead, they are definitive clauses that identify where geotechnical engineers' responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses are likely to appear in your geotechnical engineering report. Read them closely. Your geotechnical engineer will be pleased to give full and frank answers to any questions.

RELY ON THE GEOTECHNICAL ENGINEER FOR ADDITIONAL ASSISTANCE

Most ASFE-member consulting geotechnical engineer-ing firms are familiar with a variety of techniques and approaches that can be used to help reduce risks for all parties to a construction project, from design through construction. Speak with your geotechnical engineer not only about geotechnical issues, but others as well, to learn about approaches that may be of genuine benefit. You may also wish to obtain certain ASFE publications. Contact a member of ASFE or ASFE for a complimentary directory of ASFE publications.



TELEPHONE: 301/565-2733 FACSIMILE: 301/589-2017

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ISC

MEMERAL COMPLITUDO

Geotechnical and Construction Services

TESTING SERVICE CORPORATION

1. PARTIES AND SCOPE OF WORK: If Client is ordering the torvices on behalf of another. Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client, TSC shall have no duty or obligation other than those dirlies and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party, Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.

2. SCHEDULING OF SERVICES; The services set torth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.

3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.

4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this agreement.

5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C.§ 6901, ut, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.

B. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction of Improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's accommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is holng tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to

perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

7. SAMPLE DISPOSAL: Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.

8. TERMINATION: This Agreement may be terminated by either party upon seven days prior written notice. In the event of termination, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses.

9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.

10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC

for its services on the project at time of completion), the limit on damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, pariners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors, in the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportloned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.

12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.

13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim: (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Should litigation be necessary, the parties consent to Jurisdiction and venue in an appropriate Illinois State Court in and for the County of DuPage, Wheaton, Illinois or the Federal District Court for the Northern District of Illinois, Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.

REV 01/06

APPENDIX

SOIL TEXTURAL CLASSIFICATION SYSTEM

AASHTO SOIL CLASSIFICATION SYSTEM

LEGEND FOR BORING LOGS

SPECIFICATIONS FOR "POROUS GRANULAR EMBANKMENT, SUBGRADE"

PAVEMENT CORE RESULTS (2)

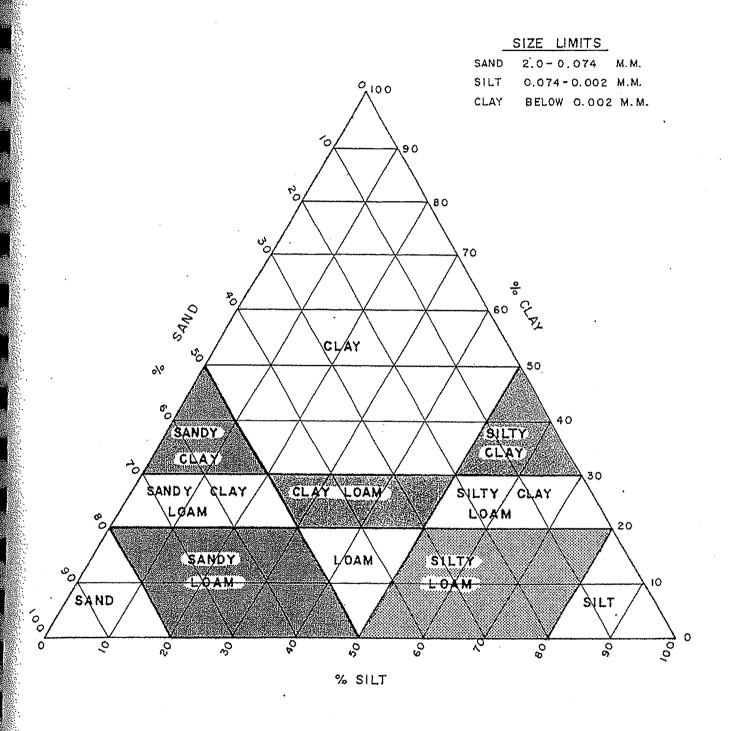
SUMMARY REPORT ON PAVEMENT BASE & SUB-BASE DESIGN

> BORING LOGS (14)

PLAN AND PROFILE SHEETS (3)

TESTING SERVICE CORPORATION

I DH TEXTURAL CLASSIFICATION CHART

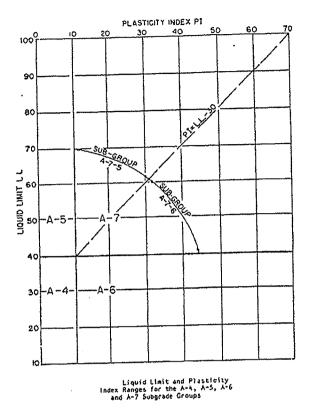


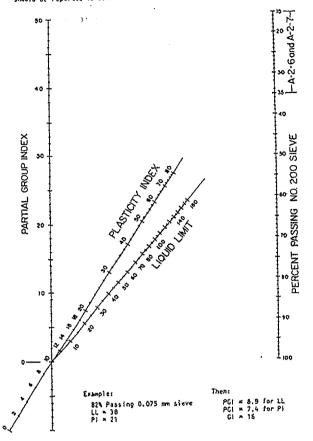
TESTING SERVICE CORPORATION AASHTO CLASSIFICATION CHART

Group Index (C1) = $\{f-3S\}(0.2+0.005 (tL-40)\}+0.01\{f-15\}(PI-10)$ where $F=\xi Passing 0.075$ mm sieve, LL = Liquid Limit, and P) = Plasticity Index

When marking with Λ -2-6 and Λ -2-7 subgroups the Partial Group Index {PC[] is determined from the Pi only.

When the combined Portial Group Indices are negative, the Group Index should be reported as zero.





AASHTO SOIL CLASSIFICATION SYSTEM

		······································	Gra (35% or	Silt-Clay Materials (more than 35% passing No. 200)								
General Classification			133%07	iess passing r	0.244/	-,					A-7	
	A	-1			A_{\uparrow}	2					A-7-5, A-7-6	
Group Classification	A-1-a	A-1-b	A-3	A-2-4	A-2-5	A-2-6	A-2-7	A-4	A-5	A-6		
Sieve analysis, % passing: No. 10 No. 40 No. 200	50 max 30 max 15 max	50 max 25 max	51 min 10 max	35 max	35 max	35 max	35 max	36 min	36 min	36 min	36 min	
Characteristics of frac- tion passing No. 40: Liquid limit Plasticity index	6 max Stone fragments, gravel and sand				41 min 10 max	40 max 11 min	1		41 min 10 max	40 max 11 min	41 min 11 mint	
Usual types of significant constituent materials			Fine sand	Silty	or clayey	gravel and	sand	Silty soils Claye			ey soils	
General rating as sub- grade	cellent to	llent to good					Fair to poor					

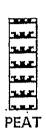
[†] Plasticity index of A-7-5 subgroup is equal to or less than LL minus 30. Plasticity index of A-7-6 subgroup is greater than LL minus 30.

TESTING SERVICE CORPORATION

LEGEND FOR BORING LOGS



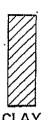


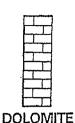












SAMPLE TYPE:

SS = Split Spoon

ST = Thin-Walled Tube

A = Auger

FIELD AND LABORATORY TEST DATA:

N = Standard Penetration Resistance in Blows per 6 inch Interval

Wc = In-Situ Water Content

Qu = Unconfined Compressive Strength in Tons per Square Foot

* Pocket Penetrometer Measurement; Maximum Reading = 4.5 tsf

yD = Dry Unit Weight in Pounds per Cubic Foot

WATER LEVELS:

While Drilling

▼ End of Boring

▼ 24 Hours

SOIL DESCRIPTION:

MATERIAL

PARTICLE SIZE RANGE
Over 12 inches

BOULDER

COBBLE

Large GRAVEL Small GRAVEL

Coarse SAND Medium SAND

Fine SAND SILT and CLAY 12 inches to 3 inches 3 inches to % inch % inch to No. 4 Sieve No. 4 Sieve to No. 10 Sieve

Passing No. 200 Sieve

No. 10 Sieve to No. 40 Sieve No. 40 Sieve to No. 200 Sieve

COHESIVE SOILS

COHESIONLESS SOILS

CONSISTENCY	<u> </u>			
Very Soft	Less than 0.3			
Soft	0.3'to 0.6			
Stiff	0.6 to 1.0	• •		
Tough	1.0 to 2.0			
Very Tough	2.0 to 4.0			
Hard	4.0 and over		•	

RELATIVE DENSITY	N
Very Loose	0 - 4
Loose	4 - 10
Firm	10 - 30
Dense	30 - 50
Very Dense	50 and over

MODIFYING TERM PERCENT BY WEIGHT Trace 1 - 10 Little 10 - 20 Some 20 - 35

POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES)

This work consists of furnishing, placing, and compacting porous granular material to the lines and grades shown on the plans or as directed by the Engineer in accordance with applicable portions of Section 207 of the Standard Specifications. The material shall be used as a bridging layer over soft, pumpy, loose soil and for placing under water and shall conform with Article 1004.06 of the Standard Specifications except the gradation shall be as follows:

1. Crushed Stone, Crushed Blast Furnace Slag, and Crushed Concrete

Sieve Size	Percent Passing
* 150 mm (*6 inches)	97 ± 3
* 100 mm (*4 inches)	90 ± 10
50 mm (2 inches)	45 ± 25
75 um (#200)	5 ± 5

2. Gravel, Crushed Gravel and Pit Run Gravel

Sieve Size	Percent Passing
* 150 mm (*6 inches)	97 ± 3
* 100 mm (*4 inches)	90 ± 10
50 mm (2 inches)	55 ± 25
4.75 mm (#4)	30 ± 20
75 um (#200)	5 ± 5

* For undercuts greater than 450 mm (18 inches) the percent passing the 150 mm (6 inches) sieve may be 90 ± 10 and the 100 mm (4 inches) sieve requirement eliminated.

The porous granular material shall be placed in one lift when the total thickness to be placed is 600 mm (2 feet) or less or as directed by the Engineer. Each lift of the porous granular material shall be rolled with a vibratory roller meeting the requirements of Article 1101.01 of the Standard Specifications to obtain the desired keying or interlock and compaction. The Engineer shall verify that adequate keying has been obtained.

A 75 mm (3 inches) nominal thickness top lift of capping aggregate having a gradation of CA-6 will be required when Aggregate Subgrade is not specified in the contract and Porous Granular Embankment, Subgrade will be used under the pavement and shoulders. Capping aggregate will not be required when embankment meeting the requirements of Section 207 of the Standard Specifications or granular subbase is placed on top of the porous granular material.

Construction equipment not necessary for the completion of the replacement material will not be allowed on the undercut areas until completion of the recommended thickness of the porous granular embankment subgrade.

Full depth subgrade undercut should occur at limits determined by the Engineer. A transition slope to the full depth of undercut shall be made outside of the undercut limits at a taper of 300 mm (1 foot) longitudinal per 25 mm (1 inch) depth below the proposed subgrade or bottom of the proposed aggregate subgrade when included in the contract.

PAVEMENT CORE RESULTS

(Each component of pavement section listed from top down.)

CORE 5

Sta. 91+90, 5' RT

- 1.5" Surface Course
- 1.5" Binder Course (Fabric observed underlying lift)
- 2.3" Surface Course
- 1.3" Surface Course
- 1.5" Binder Course
- 0.5" Surface Course
- 0.8" Binder Course
- 2.6" Emulsified Bituminous Concrete

12.0" Total Asphalt Thickness

,10.0" Crushed Gravel (max. 1" size, trace clay)

~22" depth - Subgrade

CORE 6

Sta. 96+90, 6' LT

- 1.6" Surface Course
- 1.7" Binder Course (Fabric observed underlying lift)
- 1.5" Surface Course
- 1.2" Surface Course
- 1.3" Binder Course
- 0.6" Surface Course
- 0.9" Binder Course
- 2.3" Emulsified Bituminous Concrete

11.1" Total Asphalt Thickness

10.0" Crushed Gravel (max. 1" size, trace clay)

~21" depth - Subgrade

PAVEMENT CORE RESULTS

(Each component of pavement section listed from top down.)

CORE 7 Sta. 100+80, 5' RT

- 1.4" Surface Course
- 1.6" Binder Course (Fabric observed underlying lift)
- 1.3" Surface Course
- 1.7" Surface Course
- 1.5" Surface Course
- 1.3" Surface Course
- 0.5" Surface Course
- 0.9" Binder Course
- 2.7" Emulsified Bituminous Concrete

12.9" Total Asphalt Thickness

10.0" Crushed Gravel (max. 1" size, trace clay)

~23" depth - Subgrade

CORE 8

Sta. 105+95, 6' LT

- 1.4" Surface Course
- 1.6" Binder Course (Fabric observed underlying lift)
- 1.4" Surface Course
- 1.1" Surface Course (deteriorated not bonded to overlying lift)
- 0.8" Surface Course (deteriorated not bonded to overlying lift)
- 1.9" Emulsified Bituminous Concrete (deteriorated not bonded to underlying lift)
 8.2" Total Asphalt Thickness
- 10.0" Crushed Gravel (max. 1" size, trace clay)
- ~22" depth Subgrade

Illinois Department of Transportation

Summary Report on Pavement Base and Sub-Base Design

SHEET 1 of 1

STATE JOB NUMBER	PROJ	ECT	ROUTE	Hunt Club Road			
SECTION	COUN	TY Lake	DATE				
ADTYEAR _	DESIG	N PERIOD	CLASS HIGH	CLASS HIGHWAY			
PASSENGER CARS PER D	AY TRUC	KS S.U. PER DAY	TRUCKS M.L	TRUCKS M.U. PER DAY			
** TENTATIVE PAVEMENT S	TRUCTURE:						
TYPE SURFACE COURSE	Bituminous (Concrete Surface Cours	e THICKNESS	S 2.0 Inches			
TYPE BASE COURSE	Bituminous	Concrete Binder Course	THICKNESS	8.25 Inches			
STA. TO STA.	79+72 to 85+20	85+20 to 86+78	86+78 to 89+70	108+48 to 115+00			
* STA. OF TEST							
* DRAINAGE CLASS	POOR	FAIR	FAIR	FAIR			
* AVE. FROST PENETRATION	45 Inches	45 Inches	45 Inches	45 Inches			
GRAIN SIZE CLASSIFICATION	Brown, Gray & Black CLAY	Engineered Fill over Sand and Gravel	Dark Brown & Gray CLAY	Brown & Gray Clay/Clay Loam			
H R B CLASS AND GROUP INDEX	A-7-6		A-6/A-7-6	A-6/A-7-6			
* PERCENT SILT							
STD. DRY DENSITY AASHTO T99							
BEARING RATIO							
SUBGRADE SUPPORT RATING (SSR)	POOR	POOR .	POOR	POOR			
OPTIMUM MOISTURE							
DC14AD1/D.		Annual Marie Control of the Control					

REMARKS:

- 1. District 1 Aggregate Subgrade 12" to be placed beneath all areas of new pavement.
- 2. See Recommendations of report for possible undercut areas and PGES replacement fill beneath Aggregate Subgrade 12".
- 3. Periodic underdrains are recommended at low point of undercut areas containing PGES or Aggregate Subgrade fill.

	BORIN	G	1			DAT	E STAF	RTED	8-29-	05	DATE COMPLETED 8-29-05 JOB L-64,18
						- ATION					WATER LEVEL OBSERVATION
	GROU			-		9.3					₩ WHILE DRILLING Dry
	END 0			-		9.3					▼ AT END OF BORING Dry
•	ţ,	ERY	Ş	ta. 84	+35;	6' RT					▼ 24 HOURS
	SNGT	SCO	SAN	ta. 84 MPLE TYPE	N	wc	Qu	YDRY	DEPTH	FLEV	SOIL DESCRIPTIONS
0 —			NO.	TYPE			-	 			GOLD BEGGIN, TIGHTO
											12" Bituminous Concrete**
-			A	SS	4-5				1.0		6" Gravel and Sand Subbase**
-	XX		1 B			16,6	3.75*		1.5	107.8	
			2	SS	3-	23.4	1.5*				
	₩/		-	00	4-4		/				FILL - Brown, gray and black CLAY, trace
											organic, moist A-7-6
	\bigotimes		3	SS	2- 2-2	32.8	2.0*				
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		L.	Ì						5.5	703.8	
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-			4	SS	4- 7-10	19.7	2.0*				
											Very tough brown and gray CLAY LOAM, trace gravel, occasional Cobbles, moist A-6
											A-6
_											
			5	SS	8- 10-14	16.8	3.0*				
10 —	ZZZ	\prod	1					-n-			E-1-15 : 140 %
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,								٠. [İ		 * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.
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•		GROUN	ND !	SUR	FACE		VATIOI 19.5	NS				WATER LEVEL OBSERVATIONS ▼ WHILE DRILLING 8.0 '
		END OF			-		9.5					▼ WHILE DRILLING 8.0 '▼ AT END OF BORING 6.0 '
	•	æ	ERY	S	ta. 86	+05;	15' R	Т				▼ 24 HOURS
		LENGT	RECOV	SAI NO.	ta. 86 MPLE TYPE	N	wc	Qu	γ_{DRY}	DEPTH	ELEV,	SOIL DESCRIPTIONS
	· .											12" Bituminous Concrete**
:				1	SS	5-6	5.6			1.0	708.5	FILL - Brown SAND and GRAVEL, moist A-1
				A 2	ss	3-	9.5] -	2.5	707.0	
	-			В	33	3-4	24.3	1.0*	99.9	3.5	706.0	FILL - Black SILTY CLAY (topsoil), very moist A-7-5
				A 3	ss	2-	24.0	1,25*	99.9	4.0	705.5	FILL - Black and gray CLAY, very moist A-7-6
	5			В		2-4	44.8	<0.25*				Very soft brown ORGANIC CLAY, very moist A-7-6
										5.5	704.0	∇
EH				_Λ	ss	6-	15.4	2.0*				V
FEET				1		6-7	10.4	2.0				Very tough brown CLAY LOAM, trace gravel,
E IN	-						.					moist A-6
RFAC	_			-	00							
BELOW SURFACE	10—			5	S\$	6- 7-8	20.4	3.0*				
BELC												End of Boring at 10.0'
ANCE												* Approximate unconfined compressive strength based on measurements with a
DISTANC	. –				.							calibrated pocket penetrometer.
						ļ						** - Approximated from disturbed sides of augered borehole.
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	15											
	-											
900	4											
5												
; ; 2												
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	20					Div	vision lin	es betweer e boundar	n deposits	represen		
; D	RILL RIG	NO1	44			in-	silu, the	transition r	uaà pe ĉi	adval adval	≠s; 	47

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PROJECT Hunt Club Road Improvements, Lake County, Illinois Strand Associates, Inc., Madison Wisonsin CLIENT BORING 8-29-05 8-29-05 DATE STARTED DATE COMPLETED **ELEVATIONS** WATER LEVEL OBSERVATIONS 712.5 ▼ WHILE DRILLING **GROUND SURFACE** Dry END OF BORING 702.5 Dry 24 HOURS Millburn Road Sta. 8+00; 7' LT SAMPLE γ_{DRY} | DEPTH WC Qu ELEV. SOIL DESCRIPTIONS NO. TYPE 11" Bituminous Concrete** 0.9 711.6 Gravel and Sand Subbase** 1.4 711.1 SS 16.0 2.0* 117.2 FILL - Brown CLAY LOAM, trace gravel, moist 12.6 1.0* 118.0 2.5 710.0 SS 3-5 В 16.7 4.5+* SS 15.0 4.5+* 5-5 Hard to very tough brown CLAY LOAM, trace gravel, moist SS 15.4 4.5+* 6-8 SS 6-15.8 3.0* 6-7 10 End of Boring at 10.0' Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole. 15-20 Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. 148 DRILL RIG NO. 144

FEET

DISTANCE BELOW SURFACE IN

64184.GPJ TSC_ALL.GDT 3/30/10

	ВО	RING	4		ELF	DA VATIO	DATE COMPLETED 8-29-05 JOB L-64,184				
		OOF	BORI	•	7′ 69	10.0 95.0					WATER LEVEL OBSERVATIONS ▼ WHILE DRILLING 10.0 ' ▼ AT END OF BORING 9.0 '
		TH		Sta. 87 MPLE	7+50; 1	6' LT	· ————	1			▼ 24 HOURS
0-		LENGTH	NO.	TYPE	· N	wc	Qu	YDRY	DEPTH	ELEV.	SOIL DESCRIPTIONS
			A			6.9			1.1	708.9	13" Bituminous Concrete**
			1 B	SS	3-3	20.9		107.7 108.2 98.3	1.5	708.5	Gravel and Sand Subbase (trace asphalt)**
			2	SS	3- 3-4		1.5*				FILL - Dark brown and gray CLAY, moist to very moist A-6/A-7-6
	-		3	3 SS	2- 2-3	24.3	1.5*				
5-	-				2-0				5.5	704.5	
			4	ss	3-	25.6	1.5*				
-					3-4						Tough brown and gray CLAY, moist to very moist
_			5	SS	1-	27.7	1.0*				A-7-6 ▽
10-					1-1				10.5	200 1	$\cdot oldsymbol{ abla}$
-					10.5	699.5					
-	-		6	ss	1-1	29.5	0.5*				Soft brown and gray CLAY, very moist A-7-6
				-		13.0	697.0	Tough brown and gray CLAY LOAM, trace			
15		$\langle \cdot \rangle$	7	SS	7- 7-9	15.6	1.5*				gravel, moist A-6
-											End of Boring at 15.0'
_					}						 Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.
											** - Approximated from disturbed sides of augered borehole.
_											

140

TSC 64184.GPJ TSC_ALL.GDT 1/29/08

	PROJECT	Hu	nt Clu								
	CLIENT	Str	TSC								
	BORING	<u>5</u>			DAT	E STAR	ΓED	9-1-0	5	DATE COMPLETED 9-1-05	JOB L-64,184
	GROUND S			71: 70:		S 				WATER LEV ▼ WHILE DRILLING ✓ AT END OF BORING	/EL OBSERVATIONS Dry Dry
			ta. 91-							▼ 24 HOURS	ыу
	LENGTH RECOVERY	SAI	MPLE	N	wc	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTION	S
0 —		NO.	TYPE								-
_								1.0	712.2	12" Bituminous Concrete**	
		1	SS	4-4	7.5				744.0	Gravel and Sand Subbase**	
_		2	ss	3- 4-4	19.5	2.25*		2.0	711.2	Very tough brown CLAY, moist A-6	
								3.5	709.7		
_		3	ss	4- 4-3	18.7	1.5*					
5			-							Tough brown CLAY LOAM, trace occasional Cobbles, moist A-6	gravel,
-		4	ss	4- 5 - 7	16.2	1.5*			·	v.	
_								8.0	705.2		
-		5	SS	5- 6-7	18.9	4.0*				Hard brown CLAY LOAM, trace (A-6	gravel, moist
10 —										End of Boring at 10.0' * Approximate unconfined comp	ressive
									:	strength based on measureme calibrated pocket penetromete	nts with a
_										** - Approximated from disturbed augered borehole.	sides of
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20 — DRILL F	RIG NO1	44	-	i	approxin	nate bour	idaries be	osits repre etween soi e gradual.	types;	50	
			· · · · · · · · · · · · · · · · · · ·								

DISTANCE BELOW SURFACE IN FEET

TSC 64184.GPJ TSC_ALL.GDT 3/30/10

	PROJECT	Hunt Club Road Improvements, Lake County, Illinois											
	CLIENT	Strand Associates, Inc., Madison Wisonsin											
	BORING	<u>6</u>			DATE STARTED _			8-29-0	05	DATE COMPLETED 8-29-05 JOB L-64,184			
	GROUND S	SURFACE 71			ATIONS 7.8	3				WATER LEVEL OBSERVATIONS WHILE DRILLING Dry			
	END OF BO		_	707						✓ AT END OF BORING Dry			
	Sta. 96+90; WECOVERY RECOVERY NO. TYPE N TYPE			+90; 6	S' LT					▼ 24 HOURS			
0	LENGT RECOV	SAN NO.	MPLE TYPE	N	wc	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS			
0—										12" Bituminous Concrete**			
_		A 1 B	SS	5-7	4.7 17.0	2.75*		1.0 1.5 2.0	716.8 716.3 715.8	Gravel and Sand Subbase** FILL - Dark brown CLAY LOAM, trace gravel,			
_		2	SS	4- 5-7	22.6	3.0*		2.0	7 10.0	most Av			
5		3	ss	5- 6-8	14.4	4.5+*							
-		4	SS	4- 5-7	20.5	4.5+*				Very tough to hard brown CLAY LOAM, trace gravel, occasional sand seams, moist A-6			
		5	SS	5- 7-7	16.2	3.25*							
10—					Division	lines betw	veen dep	osits repre	sent	** Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. *** - Approximated from disturbed sides of augered borehole.			
DRILL F	RIG NO. <u>1</u>	44	-		approxir	nate bour	idaries be	etween soil e gradual.	types; ,	51			

DISTANCE BELOW SURFACE IN FEET

TSC 64184.GPJ TSC_ALL.GDT 3/30/10

PROJECT Hunt Club Road Improvements, Lake County, Illinois Strand Associates, Inc., Madison Wisonsin CLIENT **BORING** DATE STARTED 9-1-05 DATE COMPLETED 9-1-05 L-64,184 **ELEVATIONS** WATER LEVEL OBSERVATIONS **GROUND SURFACE** 720.0 ▼ WHILE DRILLING Drv END OF BORING 710.0 Sta. 100+80; 5' RT 24 HOURS SAMPLE YDRY DEPTH WC ELEV. Qu SOIL DESCRIPTIONS NO. TYPE 12" Bituminous Concrete** 1.0 719.0 4.7 Gravel and Sand Subbase (trace asphalt)** SS 5-6 1 17.0 2.5* 114.1 1.8 718.2 В FILL - Dark brown CLAY, moist A-6 718.0 2.0 Tough brown and gray CLAY LOAM, trace gravel, very moist A-6 SS 18.8 1.25* 4-5 716.5 3.5 SS 20.6 6-6 Firm brown and gray SILT, moist A-4 SS 18.2 5-7-9 8.0 712.0 Very tough gray CLAY LOAM, trace gravel, moist 3.0* SS 6-12.8 A-6 5-6 10 End of Boring at 10.0' * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole. 15-Division lines between deposits represent approximate boundaries between soil types; in-situ, the transition may be gradual. DRILL RIG NO. 144

FEET

SURFACE IN

DISTANCE BELOW

ISC 64184.GPJ TSC_ALL.GDT 3/30/10

	PROJECT	Hunt Club Road Improvements, Lake County, Illinois												
	CLIENT	Str	and A	ssoc	iates,	Inc., N	/ladisc	n Wisc	nsin			<u>50</u>		
	BORING	8			DAT	E SȚAR	red _	8-29-	05	D.	ATE COMPLETED	8-29-05	JOB _	L-64,184
	GROUND :				ATION: 6.8	3				$oldsymbol{ abla}$	V WHILE DRILLING	WATER LEVEL OBSERVATIONS Dry		
	END OF BORING 7		710				·		∇	AT END OF BORING				
	었 Sta. 105+ 표된			5+95;	6' LT					•	24 HOURS			
0	LENGTH	SAN NO.	MPLE	N	wc	Qu	γ_{DRY}	DEPTH	ELEV.		SOIL	DESCRIPTIO	NS	
0											12" Bituminous Co	ncrete**		
_		А	ss	F 7				1.0			Gravel and Sand S	Subbase**	1,	,
_	\bigcirc	1 B	55	5-7	12.2	4.0*		1.5	725.3		-		-	
		A 2	SS	4-	15.3	3.25*					FILL - Dark brown A-6	CLAY, moist	t	
		В	33	5-6	17.0	4.5+*		3.5	723.3					
_		3	ss	4-	16.0	4.5+*			:					
5—				5-5		,,,,								
5—			•											
_														
		4	ss.	7-	12.3	4.5+*					Hard brown and gr gravel, moist A-6	ay CLAY LO	AM, trace	:
		1		10-12							Å-6			
														:
_		5	ss	6-	15.7	4.5+*								
10 —				9-11										
											End of Boring at 1	0.0'		
_											* Approximate und strength based o calibrated pocket	n measurem	ents with	a
											** - Approximated f	•		:
	_										augered borehole.	. orr. arotarbo		
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15—	1													
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20—														
	RIG NO. <u>1</u>	44	-	a	approxin	nate boun	daries be	osits repre tween soil e gradual.	types; 1	5	3			

DISTANCE BELOW SURFACE IN FEET

TSC 64184.GPJ TSC_ALL.GDT 3/30/10

PROJECT Hunt Club Road Improvements, Lake County, Illinois CLIENT Strand Associates, Inc., Madison Wisonsin **BORING** 9-1-05 DATE STARTED DATE COMPLETED 9-1-05 L-64.184 **ELEVATIONS** WATER LEVEL OBSERVATIONS **GROUND SURFACE** 733.5 V WHILE DRILLING Dry END OF BORING 723.5 ∇ AT END OF BORING Dry 24 HOURS LENGTH RECOVERY Sta. 111+00: 6' RT SAMPLE γ_{DRY} |DEPTH Ν WC Qu ELEV. SOIL DESCRIPTIONS NO. TYPE 11" Bituminous Concrete** 0.9 732.6 Gravel and Sand Subbase** SS 4-4 13.5 1.75* 1.5 732.0 FILL - Dark gray and brown CLAY LOAM, trace 13.2 1.5* gravel, trace organic, moist A-6 SS 3.0 730.5 5-5 Very tough brown and gray CLAY, moist В 21.9 2.5* 730.0 3.5 SS 15.9 4.5+* 5-7 Hard brown and gray CLAY LOAM, trace gravel, moist A-6 SS 4.5+* 5-17.8 7-9 SS 16.7 4.5+* 6-9-10 10 End of Boring at 10.0' Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole. 15 20 Division lines between deposits represent approximate boundaries between soil types; DRILL RIG NO. 144 in-situ, the transition may be gradual.

FEET

SURFACE IN

DISTANCE BELOW

ISC 64184.GPJ TSC_ALL.GDT 3/30/10

PROJECT Hunt Club Road Improvements, Lake County, Illinois CLIENT Strand Associates, Inc., Madison Wisonsin **BORING** DATE STARTED 8-29-05 DATE COMPLETED 8-29-05 **ELEVATIONS** WATER LEVEL OBSERVATIONS GROUND SURFACE 735.0 WHILE DRILLING Dry END OF BORING 725.0 abla at end of boring Sta. 112+50; 4' LT 24 HOURS Sta. 11

RECOVERY
RECOVERY
SAMPLE
ON TYPE WC γ_{DRY} DEPTH Qu ELEV. SOIL DESCRIPTIONS 12" Bituminous Concrete** 1.0 734.0 Gravel and Sand Subbase** SS 5-5 1.5 733.5 13.2 4.5+* FILL - Dark brown SILTY CLAY LOAM, moist В 2.0 733.0 SS 6-22.4 3.0* 5-6 Very tough brown to brown and gray CLAY, moist A-6/A-7-6 SS 5-20.3 4.5+* 7-7 5.5 729.5 SS 9-16.0 4.5+* SURFACE IN PÉE 10-12 Hard brown and gray CLAY LOAM, trace gravel, moist A-6 SS 15.7 4.5+* 9-12 BELOW End of Boring at 10.01 Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole. Division lines between deposits represent approximate boundaries between soil types; DRILL RIG NO. 144 in-situ, the transition may be gradual.

PROJECT Hunt Club Road Improvements, Lake County, Illinois CLIENT Strand Associates, Inc., Madison Wisonsin BORING DATE STARTED 9-1-05 DATE COMPLETED 9-1-05 JOB **ELEVATIONS** WATER LEVEL OBSERVATIONS GROUND SURFACE 734.0 WHILE DRILLING Dry END OF BORING 724.0 ∇ AT END OF BORING Sta. 114+10; 7' RT 24 HOURS SG. 17
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S YDRY DEPTH ELEV. WC N Qu SOIL DESCRIPTIONS 10" Bituminous Concrete** 8.0 733.2 6.3 Gravel and Sand Subbase** SŞ 732.5 1.5 22.9 4.5* Hard brown and gray CLAY, moist A-7-6 2.0 732,0 SS 5-17.9 4.5+* 5-5 SS 14.7 4.5+* 7-7 Hard brown to brownish-gray CLAY LOAM, trace gravel, moist A-6 \$\$ 9-13.8 4.5+* 9.9 NH SURFACE SS 9-14.0 4.5+* 10-12 DISTANCE BELOW End of Boring at 10.0' * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole. 15 Division lines between deposits represent approximate boundaries between soll types; DRILL RIG NO. 144 in-situ, the transition may be gradual.

			rku	WEU!	<u> </u>	int,Gi	up Ko	oad in	prove	nents,	Lake	County	, Illinois	
			CLIE	NT			\ssoc	iates	, Inc., N	adiso	n Wisc	onsin		
	, .	BORING 12 DATE STARTED 8-29-05		DATE COMPLETED 8-29-05 JOB L-64,184										
· ·			GROUND S		ORIN	PRING							WATER LEVEL OBSERVATIONS ▼ WHILE DRILLING Dry ✓ AT END OF BORING Dry	
				TH		Vadsw Ita. 11	vorth +70;	orth Road +70; 7' RT					▼ 24 HOURS	
·.		0		LENG.	SAI NO.	Vadswita. 11 WPLE TYPE	N	wc	Qu	γ_{DRY}	DEPTH	ELEV.	SOIL DESCRIPTIONS	
		_											12" Bituminous Concrete**	
				\bigvee	A 1	SS	6-7				1.0	į.	Gravel and Sand Subbase**	
,		· _			.B 2	SS	5- 5-8	19.6	4.5+*				FILL - Brown CLAY, moist A-7-6	
		-			3	ss	5- 5-7	15.0	4.5+*		3.5			
OB IN PRET	i				4	SS	5- 5-7	15.3	4.5+*				Hard brown to brown and gray CLAY LOAM, trace gravel, moist A-6	
BELOW SURFACE					5	SS	5- 7-9	15.2	4.5+*					
													End of Boring at 10.0'	
DISTANCE		_					,			-			* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer.	
Ö.	·· ·												** - Approximated from disturbed sides of augered borehole.	
	15	_												
80/6		4												
TSC 64184GPJ TSC_ALL.GDT 1729/08			American control of the second control of th		,		Water from the control of the contro				Management of the state of the			
TSC 64184,1	20 - DRILI	L RIG	G NO.	14	4		ар	proxima	es betwee te boundar transition	ies belwe	en soil ty	nt pes;	~~~~·	

Strand Associates, Inc., Madison Wisonsin Strand Associates, Inc., Madison Strand Associate	PRO	DJECT	Hu	Hunt Club Road Improvements, Lake County, Illinois									
GROUND SURFACE END OF BORING FILE DO F BORING FILE DATA BOOK BORING FILE DATA BOOK BORING FILE DATA BOOK BORING FILE DATA BOOK BORING Dry A TEND OF BORING FILE DATA BOOK BORING Dry A TEND OF BORING DRY A TEND OF BORING BOR A TEND OF BORING DRY A TEND OF BORING BOR A TEND OF BOR A TEND OF BOR A TEND OF BOR A TEND OF BOR A TEND OF BOR A TEND OF BOR A TEND OF BOR A TEND OF BOR A TEND O	CLI	ENT	Str	and A	ssoc	iates,	Inc., N	ladiso	n Wiso	nsin			
The property of the propert	BOI	RING						TED	9-1-05				
SAMPLE N WC Qu Y DEPTH ELEV SOIL DESCRIPTIONS Dry	GRI	OUND S	SURF	ACE		4.0							
1 SS 3 19.6 4.5+* 108.4		OF BO	ORING	G _									
1 SS 3- 44 18.2 4.5+* 108.4 A A SS 4- 45 17.0 4.5+* 108.0 3.5 701.0 A SS 4- 45 17.0 4.5+* 108.0 A SS 4- 45 18.8 2.75* SS 8- 22.4 3.0* The standard of th		H ERY									▼ 24 HOURS		
1 SS 3- 44 18.2 4.5+* 108.4 A A SS 4- 45 17.0 4.5+* 108.0 3.5 701.0 A SS 4- 45 17.0 4.5+* 108.0 A SS 4- 45 18.8 2.75* SS 8- 22.4 3.0* The standard of th		SNGT	SAMPLE			wc	Qu	γ _{DRY}	DEPTH ELEV.		SOIL DESCRIPTIONS		
1 SS 3. 4.4 18.2 4.5** 108.0 3.0 701.0 8.5 4.5 17.0 4.5** 108.0 3.0 701.0 8.5 4.5 17.0 4.5** 108.0 3.5 701.0 8.5 4.5 17.0 4.5** 16.8 2.75*	0-		NO.	TYPE		-							
A A B A A B A A B A A B A A B A B A B A					٠								
10			1	SS		19.6	4.5+*	109.4			FILL - Dark brown SILTY CLAY, moist		
B 4-5 17.0 4.5+* 3.0 701.0 Hard brown to brown and gray CLAY, moist A-6 Very tough brown to brown and gray CLAY, moist Very tough brown to brown and gray CLAY, moist A-6 Find of Boring at 10.0' Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole.			Α			18.2	4.5+*	105.0					
S SS 8- 22.4 3.0° End of Boring at 10.0° Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ***- Approximated from disturbed sides of augered borehole.**				SS					3.0	701.0	Hard brown to brown and gray CLAY moist		
Very tough brown to brown and gray CLAY, moist A-6 End of Boring at 10.0' * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole.			В		. •	17.0	4.5+*		3.5	700.5			
Very tough brown to brown and gray CLAY, moist A-6 S SS 6-7-7 22.4 3.0* End of Boring at 10.0' Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. "*- Approximated from disturbed sides of augered borehole.			3	ss		20.7	2.5*						
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5 SS 6-7-7 22.4 3.0* End of Boring at 10.0' * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. *** - Approximated from disturbed sides of augered borehole.				00	,	10.0	0.75*				Very tough brown to brown and gray CLAY,		
End of Boring at 10.0' * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole.	-///		4	55		16.8	2.75"				A-6		
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End of Boring at 10.0' * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. *** - Approximated from disturbed sides of augered borehole.													
End of Boring at 10.0' * Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole.	- ///		5	SS		22.4	3.0*						
* Approximate unconfined compressive strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole. 15—	10-				1-1								
strength based on measurements with a calibrated pocket penetrometer. ** - Approximated from disturbed sides of augered borehole. 15—											-		
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20 Division lines between denosits represent													
DRILL RIG NO. 144 approximate boundaries between soil types; in-situ, the transition may be gradual.		VO '	144			approxi	mate bou	ndaries b	etween so	il types;	198		

DISTANCE BELOW SURFACE IN FEET

TSC 64184.GPJ TSC_ALL.GDT 3/30/10

		PROJECT	Hur	nt Clu	b Roa	ıd İm	proven	nents,	Lake C	ounty,	Illinois
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		GROUND S		_	705 695						▼ WHILE DRILLINGDryDry
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			1	SS	4- 5-4	18.4	4.5+*	109.0		703.0	
	-		2	SS	4- 4-4	18.8	4.5+*	106.2			Very tough to hard brown and gray CLAY, moist A-6 [Possible Fill]
	5-		3	SS	4- 5-5	18.6	3.5*	112.2			
					:				5.5	700.0	
IN FEET			4 SS	SS	5- 6-8	1 1					Hard brown to brownish-gray CLAY LOAM, trace gravel, moist A-6
W SURFACE			5	SS	6- 7-7	17.5	4.5+*				·
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TSC 64184.GPJ TSC_ALL.GDT 3/30/10

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

SPECIAL PROVISION FOR COOPERATION WITH UTILITIES

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

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

Replace Article 105.07 of the Standard Specifications with the following:

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

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

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

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

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

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

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

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

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

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

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

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

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

SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007 Revised: August 1, 2007

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

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

Lake County
The TRUST, TEMPEL FARMS, and the trustees, officers, directors, shareholders, agents and employees
of TEMPEL FARMS
The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

State of Illinois DEPARTMENT OF TRANSPORTATION Bureau of Local Roads & Streets

SPECIAL PROVISION FOR FILLING HMA CORE HOLES WITH NON-SHRINK GROUT

Effective: January 1, 2008

All references to Sections and Articles in this Special Provision shall be construed to mean specific Sections and Articles in the Standard Specifications for Road and Bridge Construction adopted by the Department of Transportation.

Add the following after the first paragraph of Article 406.07(c) of the Standard Specifications:

"Upon completion of coring for density testing, all free water shall be removed from the core holes prior to filling. All core holes shall be filled with a non-shrink grout from the Department's approved list, which shall be mixed in a separate container prior to placement in the hole. Only enough water to permit placement and consolidation by rodding shall be used, and the material shall be struck-off flush with the adjacent pavement."

ALKALI-SILICA REACTION FOR CAST-IN-PLACE CONCRETE (BDE)

Effective: August 1, 2007 Revised: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to precast products or precast prestressed products.

Aggregate Expansion Values. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

Aggregate Groups. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

	AGGREGATE	GROUPS					
Coarse Aggregate or Coarse Aggregate Blend	Fine Aggregate or Fine Aggregate Blend						
ASTM C 1260 Expansion	ASTM C 1260 Expansion						
	≤ 0.16%	> 0.16% - 0.27%	> 0.27%				
≤ 0.16%	Group I	Group II	Group III				
> 0.16% - 0.27%	Group II	Group II	Group III				
> 0.27%	Group III	Group III	Group IV				

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Group | - Mixture options are not applicable. Use any cement or finely divided mineral.

Group II - Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III - Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

For Class PP-3 concrete the mixture options are not applicable, and any cement may be used with the specified finely divided minerals.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$

Where: a, b, c... = percentage of aggregate in the blend; A, B, C... = expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".
 - 1) Class F Fly Ash. For Class PV, BS, MS, DS, SC, and SI concrete and cement aggregate mixture II (CAM II), Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
 - 2) Class C Fly Ash. For Class PV, MS, SC, and SI Concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.

For Class PP-1, RR, BS, and DS concrete and CAM II, Class C fly ash with less than 26.5 percent calcium oxide content shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

3) Ground Granulated Blast-Furnace Slag. For Class PV, BS, MS, SI, DS, and SC concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.

For Class PP-1 and RR concrete, ground granulated blast-furnace slag shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.

For Class PP-2, ground granulated blast-furnace slag shall replace 25 to 30 percent of the portland cement at a minimum replacement ratio of 1:1.

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- 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. For latex concrete, the ASTM C 1567 test shall be performed without the latex. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content $(Na_2O + 0.658K_2O)$, a new ASTM C 1567 test will not be required.

Testing. If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement Concrete or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

ALKALI-SILICA REACTION FOR PRECAST AND PRECAST PRESTRESSED CONCRETE (BDE)

Effective: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in precast and precast prestressed concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to cast-in-place concrete.

Aggregate Expansion Values. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content ($Na_2O + 0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

Aggregate Groups. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

	AGGREGATE	GROUPS				
Coarse Aggregate or Coarse Aggregate Blend	Fine Aggregate or Fine Aggregate Blend					
ASTM C 1260 Expansion	ASTM C 1260 Expansion					
	≤ 0.16%	> 0.16% - 0.27%	> 0.27%			
≤ 0.16%	Group I	Group II	Group III			
> 0.16% - 0.27%	Group II	Group II	Group III			
> 0.27%	Group III	Group III	Group IV			

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

Group I - Mixture options are not applicable. Use any cement or finely divided mineral.

Group II - Mixture options 1, 2, 3, 4, or 5 shall be used.

Group III - Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + ...$

Where: a, b, c... = percentage of aggregate in the blend; A, B, C... = expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral portland cement".
 - 1) Class F Fly Ash. For Class PC concrete, precast products, and PS concrete, Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
 - 2) Class C Fly Ash. For Class PC Concrete, precast products, and Class PS concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.
 - 3) Ground Granulated Blast-Furnace Slag. For Class PC concrete, precast products, and Class PS concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.
 - 4) Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in

the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content $(Na_2O + 0.658K_2O)$, a new ASTM C 1567 test will not be required.

<u>Testing.</u> If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS (BDE)

Effective: November 1, 2008 Revised: November 1, 2010

Replace the first paragraph of Article 107.22 of the Standard Specifications with the following:

"All proposed borrow areas, including commercial borrow areas; use areas, including, but not limited to temporary access roads, detours, runarounds, plant sites, and staging and storage areas; and/or waste areas are to be designated by the Contractor to the Engineer and approved prior to their use. Such areas outside the State of Illinois shall be evaluated, at no additional cost to the Department, according to the requirements of the state in which the area lies; and approval by the authority within that state having jurisdiction for such areas shall be forwarded to the Engineer. Such areas within Illinois shall be evaluated as described herein.

A location map delineating the proposed borrow area, use area, and/or waste area shall be submitted to the Engineer for approval along with an agreement from the property owner granting the Department permission to enter the property and conduct cultural and biological resource reconnaissance surveys of the site for archaeological resources, threatened or endangered species or their designated essential habitat, wetlands, prairies, and savannahs. The type of location map submitted shall be a topographic map, a plat map, or a 7.5 minute quadrangle map. Submittals shall include the intended use of the site and provide sufficient detail for the Engineer to determine the extent of impacts to the site. The Engineer will initiate cultural and biological resource reconnaissance surveys of the site, as necessary, at no cost to the Contractor. The Engineer will advise the Contractor of the expected time required to complete all surveys. If the proposed area is within 150 ft (45 m) of the highway right-of-way, a topographic map of the proposed site will be required as specified in Article 204.02."

CEMENT (BDE)

Effective: January 1, 2007 Revised: April 1, 2009

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

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

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

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

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

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

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

For cast-in-place construction, portland-pozzolan cement shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-

reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall be limited to cement kiln dust at a maximum of 1.0 percent.

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

Portland blast-furnace slag cement shall be according to ASTM C 595 and shall meet the standard physical and chemical requirements. Type IS portland blast-furnace slag cement may be used for cast-in-place, precast, and precast prestressed concrete, except when Class PP concrete is used. The blast-furnace slag constituent for Type IS shall be a maximum of 25 percent of the weight (mass) of the portland blast-furnace slag cement.

For cast-in-place construction, portland blast-furnace slag cement shall not be used in concrete mixtures when the air temperature is below 40 °F (4 °C) without permission of the Engineer. If permission is given, the mix design strength requirement may require the Contractor to increase the cement or eliminate the cement factor reduction for a water-reducing or high range water-reducing admixture which is permitted according to Article 1020.05(b).

The total of all organic processing additions shall be a maximum of 1.0 percent by weight (mass) of the cement. Organic processing additions shall be limited to grinding aids as defined in (a) above. Inorganic processing additions shall be limited to cement kiln dust at a maximum of 1.0 percent.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
 - (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified ASTM C 191.
 - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, 3200 psi (22,100 kPa) at 6.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified ASTM C 109.
 - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.

- (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.
- (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to AASHTO T 161, Procedure B.
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used only where specified by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to ASTM C 150, except the time of setting shall not apply. The chemical requirements shall be determined according to ASTM C 114 and shall be as follows: minimum 38 percent aluminum oxide (Al₂O₃), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide (MgO), maximum 0.4 percent sulfur trioxide (SO₃), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.
- 1001.02 Uniformity of Color. Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.
- 1001.03 Mixing Brands and Types. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.
- 1001.04 Storage. Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

CONCRETE ADMIXTURES (BDE)

Effective: January 1, 2003 Revised: April 1, 2009

Replace the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. The use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted when approved by the Engineer. Admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Department will maintain an Approved List of Corrosion Inhibitors. Corrosion inhibitor dosage rates shall be according to Article 1020.05(b)(12). Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted when determining an admixture dosage from this list. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity. finely divided mineral sources(s) and quantity, influence of other admixtures, haul time. placement conditions, and other factors as appropriate shall be considered. Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour. When a retarding admixture is required or appropriate for a bridge deck or bridge deck overylay pour, the initial set time shall be delayed until the deflections due to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

When determining water in admixtures for water/cement ratio, the Contractor shall calculate 70 percent of the admixture dosage as water, except a value of 50 percent shall be used for a latex admixture used in bridge deck latex concrete overlays."

Revise Section 1021 of the Standard Specifications to read:

"SECTION 1021. CONCRETE ADMIXTURES

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

Corrosion inhibitors will be maintained on the Department's Approved List of Corrosion Inhibitors. All other concrete admixture products will be maintained on the Department's

Approved List of Concrete Admixtures. For the admixture submittal, a report prepared by an independent laboratory accredited by the AASHTO Materials Reference Laboratory (AMRL) for Portland Cement Concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, for corrosion inhibitors the ASTM G 109 test information specified in ASTM C 1582 is not required to be from and independent lab. All other information in ASTM C 1582 shall be from and independent lab.

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

Prior to the approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to AASHTO T 161, Procedure B. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

The manufacturer shall include in the submittal the following admixture information: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and the manufacturing range for pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM C 494. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to ASTM C 260.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, and 1021.07, the pH allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to ASTM C 494.

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

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass).

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.

1021.02Air-Entraining Admixtures. Air-entraining admixtures shall be according to AASHTO M 154.

1021.03 Retarding and Water-Reducing Admixtures. The admixture shall be according to the following.

- (a) The retarding admixture shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall be according to AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

1021.04Accelerating Admixtures. The admixture shall be according to AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating).

1021.05Self-Consolidating Admixtures. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete mixture that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall be according to AASHTO M 194, Type F.

The viscosity modifying admixture shall be according to ASTM C 494, Type S (specific performance).

1021.06Rheology-Controlling Admixture. The rheology-controlling admixture shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. The rheology-controlling admixture shall be according to ASTM C 494, Type S (specific performance).

1021.07 Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.

- (a) Calcium Nitrite. The corrosion inhibitor shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution, and shall comply with the requirements of AASHTO M 194, Type C (accelerating).
- (b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582."

CONCRETE MIX DESIGNS (BDE)

Effective: April 1, 2009

Add the following to Article 1020.05(c) of the Standard Specifications:

- "(5) Performance Based Finely Divided Mineral Combination. For Class PV and SI concrete a performance based finely divided mineral combination may be used. The minimum cement factor, maximum cement factor, and water cement ratio of Article 1020.04 shall be replaced with the values below, and the performance based finely divided mineral combination herein is an alternative to Articles 1020.05(c)(1), (c)(2), (c)(3), and (c)(4). The mix design shall meet the following requirements and the Engineer may request a trial batch.
 - a. The mixture shall contain a minimum of 375 lbs/cu yd (222 kg/cu m) of portland cement. For a blended cement, a sufficient amount shall be used to obtain the required 375 lbs/cu yd (222 kg/cu m) of portland cement in the mixture. For example, a blended cement stated to have 20 percent finely divided mineral, ignoring any ASTM C 595 tolerance on the 20 percent, would require a minimum of 469 lbs/cu yd (278 kg/cu m) of material in the mixture. When the mixture is designed for cement content from 375 lbs/cu yd (222 kg/cu m) to 400 lbs/cu yd (237 kg/cu m), the total of organic processing additions, inorganic processing additions, and limestone addition in the cement shall not exceed 5.0 percent.
 - b. The mixture shall contain a maximum of two finely divided minerals. The finely divided mineral in a blended cement shall count toward the total number of finely divided minerals allowed. The finely divided mineral(s) shall constitute a maximum of 35.0 percent of the total cement plus finely divided mineral(s). The fly ash portion shall not exceed 30.0 percent for Class C fly ash or 25.0 percent for Class F fly ash. The Class C and F fly ash combination shall not exceed 30.0 percent. The ground granulated blast-furnace slag portion shall not exceed 35.0 percent. The microsilica or high-reactivity metakaolin portion used together or separately shall not exceed 5.0 percent. The finely divided mineral in the blended cement shall apply to the maximum 35.0 percent, and shall be determined as discussed in a above for determining portland cement in blended cement.
 - c. For central mixed Class PV and SI concrete, the mixture shall contain a minimum of 535 lbs/cu yd (320 kg/cu m) of cement and finely divided mineral(s) summed together, and a water-reducing admixture shall be used. The value shall be 565 lbs/cu yd (335 kg/cu m) without a water-reducing admixture.

For truck mixed or shrink mixed Class PV and SI concrete, the mixture shall contain a minimum of 575 lbs/cu yd (345 kg/cu m) of cement and finely

divided mineral(s) summed together, and a water-reducing admixture shall be used. The value shall be 605 lbs/cu yd (360 kg/cu m) without a water-reducing admixture.

- d. The mixture shall contain a maximum of 705 lbs/cu yd (418 kg/cu m) of cement and finely divided mineral(s) summed together.
- e. The mixture shall have a water/cement ratio of 0.32 0.44.
- f. The mixture shall not be used for placement underwater.
- g. The combination of cement and finely divided mineral(s) shall have an ASTM C 1567 expansion value ≤ 0.16 percent, and shall be performed on the aggregate in the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly.

If during the two year time period the Contractor needs to replace the portland cement, and the replacement portland cement has an equal or lower total equivalent alkali content (Na $_2$ O + 0.658K $_2$ O), a new ASTM C 1567 test will not be required. However, replacement of a blended cement with another cement will require a new ASTM C 1567 test."

CONSTRUCTION AIR QUALITY - DIESEL RETROFIT (BDE)

Effective: June 1, 2010

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 1/	600-749	2002
	750 and up	2006
3/	100,000	2002
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 ^{2/}	50-99	2004
04110 1, 20 12	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

- 1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.
- 2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (http://www.epa.gov/otaq/retrofit/verif-list.htm), or verified by the California Air Resources Board (CARB) (http://www.arb.ca.gov/diesel/verde/verdev.htm); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)

Effective: April 1, 2009 Revised: July 1, 2009

<u>Diesel Vehicle Emissions Control</u>. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively (15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall submit copies of monthly summary reports and include certified copies of the ULSD diesel fuel delivery slips for diesel fuel delivered to the jobsite for the reporting time period, noting the quantity of diesel fuel used.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from 1/2 hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end

with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

CONSTRUCTION AIR QUALITY - IDLING RESTRICTIONS (BDE)

Effective: April 1, 2009

Idling Restrictions. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

- 1) The motor vehicle has a gross vehicle weight rating of less than 8000 lb (3630 kg).
- 2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
- 3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
- 4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
- 5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
- 6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
- 7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
- 8) When the motor vehicle idles due to mechanical difficulties over which the operator has no control.
- 9) The outdoor temperature is less than 32 °F (0 °C) or greater than 80 °F (26 °C).

When the outdoor temperature is greater than or equal to 32 °F (0 °C) or less than or equal to 80 °F (26 °C), a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be \$1,000.00 for each deficiency identified.

DETERMINATION OF THICKNESS (BDE)

Effective: April 1, 2009

Revise Articles 353.12 and 353.13 of the Standard Specifications to Articles 353.13 and 353.14 respectively.

Add the following Article to the Standard Specifications:

"353.12 Tolerance in Thickness. The thickness of base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction, bike paths, and individual locations less than 500 ft (150 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness.

The procedure described in Article 407.10(b) will be followed, except the option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 354.09 of the Standard Specifications to read:

"354.09 Tolerance in Thickness. The thickness of base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course widening thickness.

The procedure described in Article 407.10(b) will be followed, except:

- (a) The width of a unit shall be the width of the widening along one edge of the pavement.
- (b) The length of the unit shall be 1000 ft (300 m).
- (c) The option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 355.09 of the Standard Specifications to read:

"355.09 Tolerance in Thickness. The thickness of HMA base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 500 ft (150 m) long, will be evaluated according to Article 407.10(b). Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to

placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness."

Revise Article 356.07 of the Standard Specifications to read:

"356.07 Tolerance in Thickness. The thickness of HMA base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated according to Article 407.10(b) except, the width of a unit shall be the width of the widening along one edge of the pavement and the length of a unit shall be 1000 ft (300 m). Temporary locations are defined as those constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s)and subtract them from the measured core thickness to determine the base course widening thickness."

Revise Article 407.10 of the Standard Specifications to read:

"407.10 Tolerance in Thickness. Determination of pavement thickness shall be performed after the pavement surface tests and corrective action have been completed according to Article 407.09. Pay adjustments made for pavement thickness will be in addition to and independent of those made for pavement smoothness. Pavement pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous pavement shall be evaluated with the following exclusions: temporary pavements; variable width pavements; radius returns; short lengths of contiguous pavements less than 500 ft (125 m) in length; and constant width portions of turn lanes less than 500 ft (125 m) in length. Temporary pavements are defined as pavements constructed and removed under the same contract.

The method described in Article 407.10(a), shall be used except for those pavements constructed in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m). The method described in Article 407.10(b) shall be used in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m).

- (a) Percent Within Limits. The percent within limits (PWL) method shall be as follows.
 - (1) Lots and Sublots. The pavement will be divided into approximately equal lots of not more than 5000 ft (1500 m) in length. When the length of a continuous strip of pavement is 500 ft (150 m) or greater but less than 5000 ft (1500 m), these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement will be grouped together to form lots approximately 5000 ft (1500 m) in length. Short segments between structures will be measured continuously with the structure segments omitted. Each lot will be subdivided into ten equal sublots. The width of a sublot and lot will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.

(2) Cores. Cores 2 in. (50 mm) in diameter shall be taken from the pavement by the Contractor, at locations selected by the Engineer. The exact location for each core will be selected at random, but will result in one core per sublot. Core locations will be specified prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the core lengths. The cores will be measured with a device supplied by the Department immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples shall be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

(3) Deficient Sublot. When the length of the core in a sublot is deficient by more than ten percent of plan thickness, the Contractor may take three additional cores within that sublot at locations selected at random by the Engineer. If the Contractor chooses not to take additional cores, the pavement in that sublot shall be removed and replaced.

When the three additional cores are taken, the length of those cores will be averaged with the original core length. If the average shows the sublot to be deficient by ten percent or less, no additional action is necessary. If the average shows the sublot to be deficient by more than ten percent, the pavement in that sublot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient sublots to remain in place. For deficient sublots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient sublot is removed and replaced, or additional lifts are placed, the corrected sublot shall be retested for thickness. The length of the new core taken in the sublot will be used in determining the PWL for the lot.

When a deficient sublot is left in place, and no additional lift(s) are placed, no payment will be made for the deficient sublot. The length of the original core taken in the sublot will be used in determining the PWL for the lot.

(4) Deficient Lot. After addressing deficient sublots, the PWL for each lot will be determined. When the PWL of a lot is 60 percent or less, the pavement in that lot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient lots to remain in place. For deficient lots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient lot is removed and replaced, or additional lifts are placed, the corrected lot shall be retested for thickness. The PWL for the lot will then be recalculated based upon the new cores; however, the pay factor for the lot shall be a maximum of 100 percent.

When a deficient lot is left in place, and no additional lift(s) are placed, the PWL for the lot will not be recalculated.

(5) Right of Discovery. When the Engineer has reason to believe the random core selection process will not accurately represent the true conditions of the work, he/she may order additional cores. The additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action. The need for, and location of, additional cores will be determined prior to commencement of coring operations.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, more additional cores shall be taken to determine the limits of the deficient pavement and that area shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the sublot. An acceptable core is a core with a length of at least 90 percent of plan thickness.

For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement.

When the additional cores show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

- (6) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are placed, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness.
- (7) Determination of PWL. The PWL for each lot will be determined as follows.

Definitions:

xi = Individual values (core lengths) under consideration

n = Number of individual values under consideration (10 per lot)

 \bar{x} = Average of the values under consideration

LSL = Lower Specification Limit (98% of plan thickness)

Q_L = Lower Quality Index

s = Sample Standard Deviation

PWL = Percent Within Limits

Determine \bar{x} for the lot to the nearest two decimal places.

Determine s for the lot to the nearest three decimal places using:

$$S = \sqrt{\frac{\sum (x_1 - \overline{x})^2}{n - 1}} \quad \text{where} \qquad \qquad \sum (x_1 - \overline{x})^2 = (x_1 - \overline{x})^2 + (x_2 - \overline{x})^2 + \dots + (x_{10} - \overline{x})^2$$

Determine Q_L for the lot to the nearest two decimal places using:

$$Q_{L} = \frac{(\overline{x} - LSL)}{S}$$

Determine PWL for the lot using the Q_L and the following table. For Q_L values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.

(8) Pay Factors. The pay factor (PF) for each lot will be determined, to the nearest two decimal places, using:

PF (in percent) = 55 + 0.5 (PWL)

If \bar{x} for a lot is less than the plan thickness, the maximum PF for that lot shall be 100 percent.

(9) Payment. Payment of incentive or disincentive for pay items subject to the PWL method will be calculated using:

Payment = (((TPF/100)-1) x CUP) x (TOTPAVT - DEFPAVT)

TPF = Total Pay Factor

CUP = Contract Unit Price

TOTPAVT = Area of Pavement Subject to Coring

DEFPAVT = Area of Deficient Pavement

The TPF for the pavement shall be the average of the PF for all the lots; however, the TPF shall not exceed 102 percent.

Area of Deficient pavement (DEFPAVT) is defined as an area of pavement represented by a sublot deficient by more than ten percent which is left in place with no additional thickness added.

Area of Pavement Subject to Coring (TOTPAVT) is defined as those pavement areas included in lots for pavement thickness determination.

	PERCENT WITHIN LIMITS						
Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)
0.00	50.00	0.40	65.07	0.80	78.43	1.20	88.76
0.01	50.38	0.41	65.43	0.81	78.72	1.21	88.97
0.02	50.77	0.42	65.79	0.82	79.02	1.22	89.17
0.03	51.15	0.43	66.15	0.83	79.31	1.23	89.38
0.04	51.54	0.44	66.51	0.84	79.61	1.24	89.58
0.05	51.92	0.45	66.87	0.85	79.90	1.25	89.79
0.06	52.30	0.46	67.22	0.86	80.19	1.26	89.99
0.07	52.69	0.47	67.57	0.87	80.47	1.27	90.19
0.08	53.07	0.48	67.93	0.88	80.76	1.28	90.38
0.09	53.46	0.49	68.28	0.89	81.04	1.29	90.58
0.10	53.84	0.50	68.63	0.90	81.33	1.30	90.78
0.11	54.22	0.51	68.98	0.91	81.61	1.31	90.96
0.12	54.60	0.52	69.32	0.92	81.88	1.32	91.15
0.13	54.99	0.53	69.67	0.93	82.16	1.33	91.33
0.14	55.37	0.54	70.01	0.94	82.43	1.34	91.52
0.15	55.75	0.55	70.36	0.95	82.71	1.35	91.70
0.16	56.13	0.56	70.70	0.96	82.97	1.36	91.87
0.17	56.51	0.57	71.04	0.97	83.24	1.37	92.04
0.18	56.89	0.58	71.38	0.98	83.50	1.38	92.22
0.19	57.27	0.59	71.72	0.99	83.77	1.39	92.39
0.20	57.65	0.60	72.06	1.00	84.03	1.40	92.56
0.21	58.03	0.61	72.39	1.01	84.28	1.41	92.72
0.22	58.40	0.62	72.72	1.02	84.53	1.42	92.88
0.23	58.78	0.63	73.06	1.03	84.79	1.43	93.05
0.24	59.15	0.64	73.39	1.04	85.04	1.44	93.21
0.25	59.53	0.65	73.72	1.05	85.29	1.45	93.37
0.26	59.90	0.66	74.04	1.06	85.53	1.46	93.52
0.27	60.28	0.67	74.36	1.07	85.77	1.47	93.67
0.28	60.65	0.68	74.69	1.08	86.02	1.48	93.83
0.29	61.03	0.69	75.01	1.09	86.26	1.49	93.98
0.30	61.40	0.70	75.33	1.10	86.50	1.50	94.13
0.31	61.77	0.71	75.64	1.11	86.73	1.51	94.27
0.32	62.14	0.72	75.96	1.12	86.96	1.52	94.41
0.33	62.51	0.73	76.27	1.13	87.20	1.53	94.54
0.34	62.88	0.74	76.59	1.14	87.43	1.54	94.68
0.35	63.25	0.75	76.90	1.15	87.66	1.55	94.82
0.36	63.61	0.76	77.21	1.16	87.88	1.56	94.95
0.37	63.98	0.77	77.51	1.17	88.10	1.57	95.08
0.38	64.34	0.78	77.82	1.18	88.32	1.58	95.20
0.39	64.71	0.79	78.12	1.19	88.54	1.59	95.33

^{*}For Q_L values less than zero, subtract the table value from 100 to obtain PWL

PERCENT WITHIN LIMITS (continued)					
Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)	Quality Index (Q _L)*	Percent Within Limits (PWL)
1.60	95.46	2.00	98.83	2.40	99.89
1.61	95.58	2.01	98.88	2.41	99.90
1.62	95.70	2.02	98.92	2.42	99.91
1.63	95.81	2.03	98.97	2.43	99.91
1.64	95.93	2.04	99.01	2.44	99.92
1.65	96.05	2.05	99.06	2.45	99.93
1.66	96.16	2.06	99.10	2.46	99.94
1.67	96.27	2.07	99.14	2.47	99.94
1.68	96.37	2.08	99.18	2.48	99.95
1.69	96.48	2.09	99.22	2.49	99.95
1.70	96.59	2.10	99.26	2.50	99.96
1.71	96.69	2.11	99.29	2.51	99.96
1.72	96.78	2.12	99.32	2.52	99.97
1.73	96.88	2.13	99.36	2.53	99.97
1.74	96.97	2.14	99.39	2.54	99.98
1.75	97.07	2.15	99.42	2.55	99.98
1.76	97.16	2.16	99.45	2.56	99.98
1.77	97.25	2.17	99.48	2.57	99.98
1.78	97.33	2.18	99.50	2.58	99.99
1.79	97.42	2.19	99.53	2.59	99.99
1.80	97.51	2.20	99.56	2.60	99.99
1.81	97.59	2.21	99.58	2.61	99.99
1.82	97.67	2.22	99.61	2.62	99.99
1.83	97.75	2.23	99.63	2.63	100.00
1.84	97.83	2.22	99.66	2.64	100.00
1.85 1.86 1.87 1.88 1.89	97.91 97.98 98.05 98.11 98.18	2.25 2.26 2.27 2.28 2.29	99.68 99.70 99.72 99.73 99.75	≥ 2.65	100.00
1.90 1.91 1.92 1.93 1.94	98.25 98.31 98.37 98.44 98.50	2.30 2.31 2.32 2.33 2.34	99.77 99.78 99.80 99.81 99.83		
1.95 1.96 1.97 1.98 1.99	98.56 98.61 98.67 98.72 98.78	2.35 2.36 2.37 2.38 2.39	99.84 99.85 99.86 99.87 99.88		

^{*}For Q_L values less than zero, subtract the table value from 100 to obtain PWL

- (b) Minimum Thickness. The minimum thickness method shall be as follows.
 - (1) Length of Units. The length of a unit will be a continuous strip of pavement 500 ft (150 m) in length.
 - (2) Width of Units. The width of a unit will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
 - (3) Thickness Measurements. Pavement thickness will be based on 2 in. (50 mm) diameter cores.

Cores shall be taken from the pavement by the Contractor at locations selected by the Engineer. When determining the thickness of a unit, one core shall be taken in each unit.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the cores. Core measurements will be determined immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples may be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

- (4) Unit Deficient in Thickness. In considering any portion of the pavement that is deficient, the entire limits of the unit will be used in computing the deficiency or determining the remedial action required.
- (5) Thickness Equals or Exceeds Specified Thickness. When the thickness of a unit equals or exceeds the specified plan thickness, payment will be made at the contract unit price per square yard (square meter) for the specified thickness.
- (6) Thickness Deficient by Ten Percent or Less. When the thickness of a unit is less than the specified plan thickness by ten percent or less, a deficiency deduction will be assessed against payment for the item involved. The deficiency will be a percentage of the contract unit price as given in the following table.

Percent Deficiency (of Plan Thickness)	Percent Deduction (of Contract Unit Price)
0.0 to 2.0	0
2.1 to 3.0	20
3.1 to 4.0	28
4.1 to 5.0	32
5.1 to 7.5	43
7.6 to 10.0	50

(7) Thickness Deficient by More than Ten Percent. When a core shows the pavement to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient pavement. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient pavement. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient pavement shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness. The thickness of the new core will be used to determine the pay factor for the corrected area.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement. In addition, an amount equal to two times the contract cost of the deficient pavement will be deducted from the compensation due the Contractor.

The thickness of the first acceptable core on each side of the core more than ten percent deficient will be used to determine any needed pay adjustments for the remaining areas on each side of the area deficient by more than ten percent. The pay adjustment will be determined according to Article 407.10(b)(6).

(8) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. These additional cores shall be taken at specific locations determined by the

Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, the procedures outlined in Article 407.10(b)(7) shall be followed, except the Engineer will determine the additional core locations.

When the additional cores, ordered by the Engineer, show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

(9) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness."

Revise Article 482.06 of the Standard Specifications to read:

"482.06 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. When the contract includes square yards (square meters) as the unit of measurement for HMA shoulder, thickness determinations shall be made according to Article 407.10(b)(3) and the following.

- (a) Length of the Units. The length of a unit shall be a continuous strip of shoulder 2500 ft (750 m) long.
- (b) Width of the Units. The width of the unit shall be the full width of the shoulder.
- (c) Thickness Deficient by More than Ten Percent. When a core shows the shoulder to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient shoulder. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient shoulder. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient shoulder will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient shoulder shall be brought to specified thickness by the addition of the applicable mixture, at no additional cost to the Department and subject to the lift thickness requirements of Article 312.05, or by removal and replacement with a new mixture. However, the surface elevation of the completed shoulder shall not exceed by more than 1/8 in. (3 mm) the surface elevation of the adjacent pavement. When requested in writing by the Contractor, the Engineer may permit in writing such thin shoulder to remain in place. When an area of thin shoulder is left in place, and no additional lift(s) are placed, no payment will be made for the thin shoulder. In addition,

an amount equal to two times the contract unit price of the shoulder will be deducted from the compensation due the Contractor.

When an area of deficient shoulder is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

(d) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. When the additional cores, ordered by the Engineer, show the shoulder to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04. When the additional core shows the shoulder to be less than 90 percent of plan thickness, the procedure in (c), above shall be followed."

Revise Article 483.07 of the Standard Specifications to read:

"483.07 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. Thickness determinations shall be made according to Article 482.06 except the option of correcting deficient pavement with additional lift(s) shall not apply."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: January 1, 2010

<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 Illinois Unified Certification Program (IL UCP) DBE Directory.

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

<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 companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

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

DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination and in an arena of fair and open competition, DBE companies can be expected to perform 15.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

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

<u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is a material bidding requirement. The failure of the bidder to comply will render the bid not responsive.

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The names and addresses of DBE firms that will participate in the contract;

- (2) A description, including pay item numbers, of the work each DBE will perform;
- (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
- (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
- (6) If the contract goal is not met, evidence of good faith efforts.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document the good faith efforts of the bidder before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan commits sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not commit sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere pro forma efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder

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must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision and that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons why good faith efforts have not been found.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issue of whether an adequate good faith effort was made to meet the contract goal. The request will be forwarded to the Department's Reconsideration Officer. Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contact. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) The Contractor must notify and obtain written approval from the Department's Bureau of Small Business Enterprises prior to replacing a DBE or making any change in the participation of a DBE. Approval for replacement will be granted only if it is demonstrated that the DBE is unable or unwilling to perform. The Contractor must make every good faith effort to find another certified DBE subcontractor to substitute for the original DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the original DBE, to the extent needed to meet the contract goal.
- (c) Any deviation from the DBE condition-of-award or contract specifications must be approved, in writing, by the Department. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract.
- (d) In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonably competitive price. If this occurs, the Contractor

shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

- (e) Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted.
- (f) If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (g) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (h) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (i) of this part.
- (i) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract

until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

(j) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

DOWEL BARS (BDE)

Effective: April 1, 2007 Revised: January 1, 2008

Revise the fifth and sixth sentences of Article 1006.11(b) of the Standard Specifications to read:

"The bars shall be epoxy coated according to AASHTO M 284, except the thickness of the epoxy shall be 7 to 12 mils (0.18 to 0.30 mm) and patching of the ends will not be required. The epoxy coating applicator shall be certified according to the current Bureau of Materials and Physical Research Policy Memorandum, "Epoxy Coating Plant Certification Procedure". The Department will maintain an approved list."

ENGINEER'S FIELD OFFICE TYPE A (BDE)

Effective: April 1, 2007 Revised: August 1, 2008

Revise Article 670.02 of the Standard Specifications to read:

"670.02 Engineer's Field Office Type A. Type A field offices shall have a minimum ceiling height of 7 ft (2 m) and a minimum floor space 450 sq ft (42 sq m). The office shall be provided with sufficient heat, natural and artificial light, and air conditioning.

The office shall have an electronic security system that will respond to any breach of exterior doors and windows. Doors and windows shall be equipped with locks. Doors shall also be equipped with dead bolt locks or other secondary locking device.

Windows shall be equipped with exterior screens to allow adequate ventilation. All windows shall be equipped with interior shades, curtains, or blinds. Adequate all-weather parking space shall be available to accommodate a minimum of ten vehicles.

Suitable on-site sanitary facilities meeting Federal, State, and local health department requirements shall be provided, maintained clean and in good working condition, and shall be stocked with lavatory and sanitary supplies at all times.

Sanitary facilities shall include hot and cold potable running water, lavatory and toilet as an integral part of the office where available. Solid waste disposal consisting of two waste baskets and an outside trash container of sufficient size to accommodate a weekly provided pick-up service.

In addition, the following furniture and equipment shall be furnished.

- (a) Four desks with minimum working surface 42 x 30 in. (1.1 m x 750 mm) each and five non-folding chairs with upholstered seats and backs.
- (b) One desk with minimum working surface 48×72 in. $(1.2 \times 1.8 \text{ m})$ with height adjustment of 23 to 30 in. (585 to 750 mm).
- (c) One four-post drafting table with minimum top size of 37 1/2 x 48 in. (950 mm x 1.2 m). The top shall be basswood or equivalent and capable of being tilted through an angle of 50 degrees. An adjustable height drafting stool with upholstered seat and back shall also be provided.
- (d) Two free standing four drawer legal size file cabinet with lock and an underwriters' laboratories insulated file device 350 degrees one hour rating.
- (e) One 6 ft (1.8 m) folding table with six folding chairs.

- (f) One equipment cabinet of minimum inside dimension of 44 in. (1100 mm) high x 24 in. (600 mm) wide x 30 in. (750 mm) deep with lock. The walls shall be of steel with a 3/32 in. (2 mm) minimum thickness with concealed hinges and enclosed lock constructed in such a manner as to prevent entry by force. The cabinet assembly shall be permanently attached to a structural element of the field office in a manner to prevent theft of the entire cabinet.
- (g) One refrigerator with a minimum size of 16 cu ft (0.45 cu m) with a freezer unit.
- (h) One electric desk type tape printing calculator.
- (i) A minimum of two communication paths. The configuration shall include:
 - (1) Internet Connection. An internet service connection using telephone DSL, cable broadband, or CDMA wireless technology. Additionally, an 802.11g/N wireless router shall be provided, which will allow connection by the Engineer and up to four Department staff.
 - (2) Telephone Lines. Three separate telephone lines.
- (j) One plain paper copy machine capable of reproducing prints up to 11 x 17 in. (280 x 432 mm) with an automatic feed tray capable of storing 30 sheets of paper. Letter size and 11 x 17 in. (280 x 432 mm) paper shall be provided.
- (k) One plain paper fax machine with paper.
- (I) Two telephones, with touch tone, where available, and a digital telephone answering machine, for exclusive use by the Engineer.
- (m) One electric water cooler dispenser.
- (n) One first-aid cabinet fully equipped.
- (o) One microwave oven, 1 cu ft (0.03 cu m) minimum capacity.
- (p) One fire-proof safe, 0.5 cu ft (0.01 cu m) minimum capacity.
- (q) One electric paper shredder.
- (r) One post mounted rain gauge, located on the project site for each 5 miles (8 km) of project length."

Revise the first sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"The building or buildings fully equipped as specified will be paid for on a monthly basis until the building or buildings are released by the Engineer."

Revise the last sentence of the first paragraph of Article 670.07 of the Standard Specifications to read:

"This price shall include all utility costs and shall reflect the salvage value of the building or buildings, equipment, and furniture which become the property of the Contractor after release by the Engineer, except that the Department will pay that portion of the monthly long distance telephone bills that, when combined, exceed \$150."

EQUIPMENT RENTAL RATES (BDE)

Effective: August 2, 2007 Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

- "(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
 - a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: 0.5 x (FHWA hourly rate - EOC).

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry.

b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

FLAGGER AT SIDE ROADS AND ENTRANCES (BDE)

Effective: April 1, 2009

Revise the second paragraph of Article 701.13(a) of the Standard Specifications to read:

"The Engineer will determine when a side road or entrance shall be closed to traffic. A flagger will be required at each side road or entrance remaining open to traffic within the operation where two-way traffic is maintained on one lane of pavement. The flagger shall be positioned as shown on the plans or as directed by the Engineer."

Revise the first and second paragraph of Article 701.20(i) of the Standard Specifications to read:

"Signs, barricades, or other traffic control devices required by the Engineer over and above those specified will be paid for according to Article 109.04. All flaggers required at side roads and entrances remaining open to traffic including those that are shown on the Highway Standards and/or additional barricades required by the Engineer to close side roads and entrances will be paid for according to Article 109.04."

HMA - HAULING ON PARTIALLY COMPLETED FULL-DEPTH PAVEMENT (BDE)

Effective: January 1, 2008

Revise Article 407.08 of the Standard Specifications to read:

"407.08 Hauling on the Partially Completed Full-Depth Pavement. Legally loaded trucks will be permitted on the partially completed full-depth HMA pavement only to deliver HMA mixture to the paver, provided the last lift has cooled a minimum of 12 hours. Hauling shall be limited to the distances shown in the following tables. The pavement surface temperature shall be measured using an infrared gun. The use of water to cool the pavement to permit hauling will not be allowed. The Contractor's traffic pattern shall minimize hauling on the partially completed pavement and shall vary across the width of the pavement such that "tracking" of vehicles, one directly behind the other, does not occur.

MAXIMUM HAULING DISTANCE FOR PAVEMENT SURFACE TEMPERATURE BELOW 105 °F (40 °C)					
Total In-Place	Thickness of Lift Being Placed				
Thickness Being	3 in. (75 mm) or less		More than 3 in. (75 mm)		
Hauled On,	Modified Soil	Granular	Modified Soil	Granular	
in. (mm)	Subgrade	Subbase	Subgrade	Subbase	
3.0 to 4.0	0.75 miles	1.0 mile	0.50 miles	0.75 miles	
(75 to 100)	(1200 m)	(1600 m)	(800 m)	(1200 m)	
4.1 to 5.0	1.0 mile	1.5 miles	0.75 miles	1.0 mile	
(101 to 125)	(1600 m)	(2400 m)	(1200 m)	(1600 m)	
5.1 to 6.0	2.0 miles	2.5 miles	1.5 miles	2.0 miles	
(126 to 150)	(3200 m)	(4000 m)	(2400 m)	(3200 m)	
6.1 to 8.0	2.5 miles	3.0 miles	2.0 miles	2.5 miles	
(151 to 200)	(4000 m)	(4800 m)	(3200 m)	(4000 m)	
Over 8.0 (200)	No Restrictions				

MAXIMUM HAULING DISTANCE FOR						
PAVEMENT S	PAVEMENT SURFACE TEMPERATURE OF 105 °F (40 °C) AND ABOVE					
Total In-Place		Thickness of Li	ft Being Placed			
Thickness Being	3 in. (75 m	m) or less	More than 3	in. (75 mm)		
Hauled On,	Modified Soil	Granular	Modified Soil	Granular		
in. (mm)	Subgrade	Subbase	Subgrade	Subbase		
3.0 to 4.0	0.50 miles	0.75 miles	0.25 miles	0.50 miles		
(75 to 100)	(800 m)	(1200 m)	(400 m)	(800 m)		
4.1 to 5.0	0.75 miles	1.0 mile	0.50 miles	0.75 miles		
(101 to 125)	(1200 m)	(1600 m)	(800 m)	(1200 m)		
5.1 to 6.0	1.0 mile	1.5 miles	0.75 miles	1.0 mile		
(126 to 150)	(1600 m)	(2400 m)	(1200 m)	(1600 m)		
6.1 to 8.0	2.0 miles	2.5 miles	1.5 miles	2.0 miles		
(151 to 200)	(3200 m)	(4000 m)	(2400 m)	(3200 m)		
Over 8.0 (200)	No Restrictions					

Permissive hauling on the partially completed pavement shall not relieve the Contractor of his/her responsibility for damage to the pavement. Any portion of the full-depth HMA pavement that is damaged by hauling shall be removed and replaced, or otherwise repaired to the satisfaction of the Engineer.

Crossovers used to transfer haul trucks from one roadway to the other shall be at least 1000 ft (300 m) apart and shall be constructed of material that will prevent tracking of dust or mud on the completed HMA lifts. The Contractor shall construct, maintain, and remove all crossovers."

HOT-MIX ASPHALT – ANTI-STRIPPING ADDITIVE (BDE)

Effective: November 1, 2009

Revise the first and second paragraphs of Article 1030.04(c) of the Standard Specifications to read:

"(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283. To be considered acceptable by the Department as a mixture not susceptible to stripping, the conditioned to unconditioned split tensile strength ratio (TSR) shall be equal to or greater than 0.85 for 6 in. (150 mm) specimens. Mixtures, either with or without an additive, with TSRs less than 0.85 for 6 in. (150 mm) specimens will be considered unacceptable. Also, the conditioned tensile strength for mixtures containing an anti-strip additive shall not be lower than the original conditioned tensile strength determined for the same mixture without the anti-strip additive.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option."

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

<u>Description</u>. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 2 in. (50 mm), from each pavement edge. (i.e. for a 4 in. (100 mm) lift the near edge of the density gauge or core barrel shall be within 4 in. (100 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 - 96.0%	90.0%
IL-9.5,IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 - 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 - 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%"

HOT-MIX ASPHALT - DROP-OFFS (BDE)

Effective: January 1, 2010

Revise the third paragraph of Article 701.07 of the Standard Specifications to read:

"At locations where construction operations result in a differential in elevation exceeding 3 in. (75 mm) between the edge of pavement or edge of shoulder within 3 ft (900 mm) of the edge of the pavement and the earth or aggregate shoulders, Type I or II barricades or vertical panels shall be placed at 100 ft (30 m) centers on roadways where the posted speed limit is 45 mph or greater and at 50 ft (15 m) centers on roadways where the posted speed limit is less than 45 mph."

HOT-MIX ASPHALT – PLANT TEST FREQUENCY (BDE)

Effective: April 1, 2008 Revised: January 1, 2010

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

"Parameter	Frequency of Tests	Frequency of Tests All Other Mixtures	Test Method See Manual of Test
	High ESAL Mixture Low ESAL Mixture		Procedures for Materials
Aggregate Gradation % passing sieves:	1 washed ignition oven test on the mix per half day of production	1 washed ignition oven test on the mix per day of production	Illinois Procedure
1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 μm) No. 200 (75 μm)	Note 4.	Note 4.	
Note 1.			.
Asphalt Binder Content by Ignition Oven	1 per half day of production	1 per day	Illinois-Modified AASHTO T 308
Note 2.			
VMA	Day's production	N/A	Illinois Modified
Note 3.	≥ 1200 tons:		AASHTO R 35
	1 per half day of production		
	Day's production < 1200 tons:		
	1 per half day of production for first 2 days and 1 per day thereafter		
	(first sample of the day)		
Air Voids	Day's production ≥ 1200 tons:		
Bulk Specific	≥ 1200 tons:	1 per day	Illinois-Modified
Gravity of Gyratory Sample	1 per half day of production	i per day	AASHTO T 312

			
"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Frequency of Tests All Other Mixtures	Test Method See Manual of Test Procedures for Materials
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons: 1 per half day of production	1 per day	Illinois-Modified AASHTO T 209
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)		

Note 1. The No. 8 (2.36 mm) and No. 30 (600 $\mu m)$ sieves are not required for All Other Mixtures.

Note 2. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder 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 asphalt binder content.

Note 3. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design.

Note 4. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident."

HOT-MIX ASPHALT – QC/QA ACCEPTANCE CRITERIA (BDE)

Effective: January 1, 2010

Revise Article 1030.05(f)(3) of the Standard Specifications to read:

"(3) Department assurance tests for voids, field VMA, and density."

HOT-MIX ASPHALT – TRANSPORTATION (BDE)

Effective: April 1, 2008

Revise Article 1030.08 of the Standard Specifications to read:

"1030.08 Transportation. Vehicles used in transporting HMA shall have clean and tight beds. The beds shall be sprayed with asphalt release agents from the Department's approved list. In lieu of a release agent, the Contractor may use a light spray of water with a light scatter of manufactured sand (FA 20 or FA 21) evenly distributed over the bed of the vehicle. After spraying, the bed of the vehicle shall be in a completely raised position and it shall remain in this position until all excess asphalt release agent or water has been drained.

When the air temperature is below 60 °F (15 °C), the bed, including the end, endgate, sides and bottom shall be insulated with fiberboard, plywood or other approved insulating material and shall have a thickness of not less than 3/4 in (20 mm). When the insulation is placed inside the bed, the insulation shall be covered with sheet steel approved by the Engineer. Each vehicle shall be equipped with a cover of canvas or other suitable material meeting the approval of the Engineer which shall be used if any one of the following conditions is present.

- (a) Ambient air temperature is below 60 °F (15 °C).
- (b) The weather is inclement.
- (c) The temperature of the HMA immediately behind the paver screed is below 250 °F (120 °C).

The cover shall extend down over the sides and ends of the bed for a distance of approximately 12 in. (300 mm) and shall be fastened securely. The covering shall be rolled back before the load is dumped into the finishing machine."

80202

LIQUIDATED DAMAGES (BDE)

Effective: April 1, 2009

Revise the table in Article 108.09 of the Standard Specifications to read:

"Schedule of Deductions for Each Day of Overrun in Contract Time					
Original Contract Amount Daily Charges					
From More	To and Including	Calendar	Work		
Than		Day	Day		
\$ 0	\$ 100,000	\$ 375	\$ 500		
100,000	500,000	625	875		
500,000	1,000,000	1,025	1,425		
1,000,000	3,000,000	1,125	1,550		
3,000,000	5,000,000	1,425	1,950		
5,000,000	10,000,000	1,700	2,350		
10,000,000	And over	3,325	4,650"		

METAL HARDWARE CAST INTO CONCRETE (BDE)

Effective: April 1, 2008 Revised: April 1, 2009

Add the following to Article 503.02 of the Standard Specifications:

"(g) Metal Hardware Cast into Concrete......1006.13"

Add the following to Article 504.02 of the Standard Specifications:

"(j) Metal Hardware Cast into Concrete......1006.13"

Revise Article 1006.13 of the Standard Specifications to read:

"1006.13 Metal Hardware Cast into Concrete. Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3, 5, or 7.

The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

Insert Diameter	Proof Load
5/8 in. (16 mm)	6600 lb (29.4 kN)
3/4 in. (19 mm)	6600 lb (29.4 kN)
1 in. (25 mm)	9240 lb (41.1 kN)"

80203

26 pg 227 1

pg 227 has been nomaed

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007 Revised: November 1, 2009

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

"(a) National Pollutant Discharge Elimination System (NPDES) / Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, or the Contractor's activities represents a violation of the Department's NPDES permits, the Engineer will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the work effort required. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the Department's NPDES permits. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or portion of a calendar day until the deficiency is corrected to the satisfaction of the Engineer. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The base value of the daily monetary deduction is \$1000.00 and will be applied to each location for which a deficiency exists. The value of the deficiency deduction assessed for each infraction will be determined by multiplying the base value by a Gravity Adjustment Factor provided in Table A. Except for failure to participate in a required jobsite inspection of the project prior to initiating earthmoving operations which will be based on the total acreage of planned disturbance at the following multipliers: <5 Acres: 1; 5-10 Acres: 2; >10-25 Acres: 3; >25 Acres: 5. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day multiplied by a Gravity Adjustment Factor.

	Table A					
Deficiency Deduction Gravity Adjustment Factors						
Types of Violations	Soil Disturbed and Not Permanently					
	Stabilized	At Time of	Violation	•		
	< 5 5 - 10 >10 - 25 > 5					
	Acres	Acres	Acres	Acres		
Failure to Install or Properly	0.1 - 0.5	0.2 - 1.0	0.5 - 2.5	1.0 - 5		
Maintain BMP						
Careless Destruction of BMP	0.2 - 1	0.5 - 2.5	1.0 - 5.	1.0 - 5		
Intrusion into Protected Resource	1.0 - 5	1.0 - 5	2.0 - 10	2.0 - 10		
Failure to properly manage	0.2 - 1	0.2 - 1	0.5 - 2.5	1.0 - 5		
Chemicals, Concrete Washouts or						
Residuals, Litter or other Wastes						
Improper Vehicle and Equipment	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5		
Maintenance, Fueling or Cleaning			,	1.0 2.0		
Failure to Provide or Update	0.2 - 1	0.5 - 2.5	1.0 - 5	1.0 - 5		
Written or Graphic Plans Required						
by SWPPP	,	• '				
Failure to comply with Other	0.1 - 0.5	0.2 - 1	0.2 - 1	0.5 - 2.5"		
Provisions of the NPDES Permit			•	2.2 2.0		

PAVEMENT PATCHING (BDE)

Effective: January 1, 2010

Revise the first sentence of the second paragraph of Article 701.17(e)(1) of the Standard Specifications to read:

"In addition to the traffic control and protection shown elsewhere in the contract for pavement, two devices shall be placed immediately in front of each open patch, open hole, and broken pavement where temporary concrete barriers are not used to separate traffic from the work area."

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: January 1, 2006

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

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

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

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

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section

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

PERSONAL PROTECTIVE EQUIPMENT (BDE)

Effective: November 1, 2008

Revise the first sentence of Article 701.12 of the Standard Specifications to read:

"All personnel on foot, excluding flaggers, within the highway right-of-way shall wear a fluorescent orange, fluorescent yellow/green, or a combination of fluorescent orange and fluorescent yellow/green vest meeting the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 2 garments."

PORTLAND CEMENT CONCRETE PLANTS (BDE)

Effective: January 1, 2007

Add the following to Article 1020.11(a) of the Standard Specifications.

- "(9) Use of Multiple Plants in the Same Construction Item. The Contractor may simultaneously use central-mixed, truck-mixed, and shrink-mixed concrete from more than one plant, for the same construction item, on the same day, and in the same pour. However, the following criteria shall be met.
 - a. Each plant shall use the same cement, finely divided minerals, aggregates, admixtures, and fibers.
 - b. Each plant shall use the same mix design. However, material proportions may be altered slightly in the field to meet slump and air content criteria. Field water adjustments shall not result in a difference that exceeds 0.02 between plants for water/cement ratio. The required cement factor for central-mixed concrete shall be increased to match truck-mixed or shrink-mixed concrete, if the latter two types of mixed concrete are used in the same pour.
 - c. The maximum slump difference between deliveries of concrete shall be 3/4 in. (19 mm) when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the slump difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for slump by the Contractor. Thereafter, when a specified test frequency for slump is to be performed, it shall be conducted for each plant at the same time.
 - d. The maximum air content difference between deliveries of concrete shall be 1.5 percent when tested at the jobsite. If the difference is exceeded, but test results are within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and shall test subsequent deliveries of concrete until the air content difference is corrected. For each day, the first three truck loads of delivered concrete from each plant shall be tested for air content by the Contractor. Thereafter, when a specified test frequency for air content is to be performed, it shall be conducted for each plant at the same time.
 - e. Strength tests shall be performed and taken at the jobsite for each plant. When a specified strength test is to be performed, it shall be conducted for each plant at the same time. The difference between plants for their mean strength shall not exceed 450 psi (3100 kPa) compressive and 80 psi (550 kPa) flexural. The strength standard deviation for each plant shall not exceed 650 psi (4480 kPa) compressive and 110 psi (760 kPa) flexural. The mean and standard deviation requirements shall apply to the test of record. If the strength difference requirements are exceeded, the Contractor shall take corrective action.

f. The maximum haul time difference between deliveries of concrete shall be 15 minutes. If the difference is exceeded, but haul time is within specification limits, the concrete may be used. The Contractor shall take immediate corrective action and check subsequent deliveries of concrete until the haul time difference is corrected."

PRECAST CONCRETE HANDLING HOLES (BDE)

Effective: January 1, 2007 Add the following to Article 540.02 of the Standard Specifications: "(g) Handling Hole Plugs......1042.16" Add the following paragraph after the sixth paragraph of Article 540.06 of the Standard Specifications: "Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar." Add the following to Article 542.02 of the Standard Specifications: "(ee) Handling Hole Plugs1042.16" Revise the fifth paragraph of Article 542.04(d) of the Standard Specifications to read: "Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation." Add the following to Article 550.02 of the Standard Specifications: "(o) Handling Hole Plugs......1042.16" Replace the fourth sentence of the fifth paragraph of Article 550.06 of the Standard Specifications with the following: "Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation." Add the following to Article 602.02 of the Standard Specifications: "(p) Handling Hole Plugs...... 1042.16(a)" Replace the fifth sentence of the first paragraph of Article 602.07 of the Standard Specifications with the following:



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

Add the following to Section 1042 of the Standard Specifications:

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

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

The plug shall be according to the following.

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

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

RAISED REFLECTIVE PAVEMENT MARKERS (BDE)

Effective: November 1, 2009

Revised: April 1, 2010

Revise the first sentence of the second paragraph of Article 781.03(a) of the Standard Specifications to read:

"The pavement shall be cut to match the bottom contour of the marker using a concrete saw fitted with 18 and 20 in. (450 and 500 mm) diameter blades."

REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)

Effective: April 1, 2007 Revised: November 1, 2008

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

"At the time of manufacturing, the retroreflective prismatic sheeting used on channelizing devices shall meet or exceed the initial minimum coefficient of retroreflection as specified in the following table. Measurements shall be conducted according to ASTM E 810, without averaging. Sheeting used on cones, drums and flexible delineators shall be reboundable as tested according to ASTM D 4956. Prestriped sheeting for rigid substrates on barricades shall be white and orange. The sheeting shall be uniform in color and devoid of streaks throughout the length of each roll. The color shall conform to the latest appropriate standard color tolerance chart issued by the U.S. Department of Transportation, Federal Highway Administration, and to the daytime and nighttime color requirements of ASTM D 4956.

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

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

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

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

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

SEEDING (BDE)

Effective: July 1, 2004 Revised: July 1, 2010

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

		Table 1 - SEEDING MIXTURES	
	Class – Type	Seeds	lb/acre (kg/hectare)
1A	Salt Tolerant Lawn Mixture 7/	Bluegrass Perennial Ryegrass Red Fescue	60 (70) 20 (20) 20 (20)
		(Audubon, Sea Link, or Epic) Hard Fescue (Rescue 911, Spartan II, or Reliant IV)	20 (20)
		Fults Salt Grass 1/ or Salty Alkaligrass	60 (70)
2	Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	100 (110)
		Perennial Ryegrass	50 (55)
		Creeping Red Fescue	40 (50)
		Red Top	10 (10)
2A	Salt Tolerant Roadside Mixture 7/	Tall Fescue (Inferno, Tarheel II, Quest, Blade Runner, or Falcon IV)	60 (70)
]		Perennial Ryegrass	20 (20)
		Red Fescue (Audubon, Sea Link, or Epic)	30 (20)
		Hard Fescue (Rescue 911, Spartan II, or Reliant IV)	30 (20)
		Fults Salt Grass 1/ or Salty Alkaligrass	60 (70)
3	Northern Illinois Slope Mixture 7/	Elymus Canadensis (Canada Wild Rye)	5 (5)
		Perennial Ryegrass	20 (20)
		Alsike Cover 2/	5 (5)
		Desmanthus Illinoensis (Illinois Bundleflower) 2/, 5/	2 (2)
		Andropogon Scoparius (Little Bluestem) 5/	12 (12)
		Bouteloua Curtipendula (Side-Oats Grama)	10 (10)
		Fults Salt Grass 1/ or Salty Alkaligrass	30 (35)
		Oats, Spring	50 (55)
		Slender Wheat Grass 5/	15 (15)
		Buffalo Grass (Cody or Bowie) 4/, 5/, 9/	5 (5)

"Table 1 - SEEDING MIXTURES						
6A	Salt Tolerant Conservation	Andropogon Scoparius (Little Bluestem) 5/	5 (5)			
	Mixture	Elymus Canadensis (Canada Wild Rye) 5/	2 (2)			
		Buffalo Grass (Cody or Bowie) 4/, 5/, 9/	5 (5)			
		Vernal Alfalfa 2/	15 (15)			
		Oats, Spring	48 (55)			
		Fults Salt Grass 1/ or Salty Alkaligrass	20 (20)"			

Revise Note 7 of Table 1 – Seeding Mixtures of Article 250.07 of the Standard Specifications to read:

"7/ In Districts 1 through 6, the planting times shall be April 1 to June 15 and August 1 to November 1. In Districts 7 through 9, the planting times shall be March 1 to June 1 and August 1 to November 15. Seeding may be performed outside these dates provided the Contractor guarantees a minimum of 75 percent uniform growth over the entire seeded area(s) after a period of establishment. Inspection dates for the period of establishment will be as follows: Seeding conducted in Districts 1 through 6 between June 16 and July 31 will be inspected after April 15 and seeding conducted between November 2 and March 31 will be inspected after September 15. Seeding conducted in Districts 7 through 9 between June 2 and July 31 will be inspected after April 15 and seeding conducted between November 16 and February 28 will be inspected after September 15. The guarantee shall be submitted to the Engineer in writing prior to performing the work. After the period of establishment, areas not exhibiting 75 percent uniform growth shall be interseeded or reseeded, as determined by the Engineer, at no additional cost to the Department."

Revise the first paragraph of Article 1081.04(a) of the Standard Specifications to read:

"(a) Sampling and Testing. Each lot of seed furnished shall be tested by a State Agriculture Department (including other States) or by land grant college or university agricultural sections or by a Registered Seed Technologist. Germination testing of seed shall be accomplished within the 12 months prior to the seed being installed on the project."

Delete the last sentence of the first paragraph of Article 1081.04(c)(2) of the Standard Specifications.

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

		TA	BLE II			
	Hard		Pure		Secondary *	
	Seed	Purity	Live	Weed	Noxious Weeds	
	%	%	Seed %	%	No. per oz (kg)	
Variety of Seeds	Max.	Min.	Min.	Max.	Max. Permitted	Notes
Alfalfa	20	92	89	0.50	6 (211)	1/

		TA	BLE II			
4	Hard		Pure		Secondary *	
	Seed	Purity	Live	Weed	Noxious Weeds	
	%	% ´	Seed %	%	No. per oz (kg)	
Variety of Seeds	Max.	Min.	Min.	Max.	Max. Permitted	Notes
Clover, Alsike	15	92	87	0.30	6 (211)	2/
Red Fescue, Audubon	0	97	82	0.10	3 (105)	-
Red Fescue, Creeping	-	97	82	1.00	6 (211)	-
Red Fescue, Epic	-	98	83	0.05	1 (35)	-
Red Fescue, Sea Link	_	98	83	0.10	3 (105)	-
Tall Fescue, Blade Runner	_	98	83	0.10	2 (70)	-
rall Fescue, Falcon IV	-	98	83	0.05	1 (35)	-
Fall Fescue, Inferno	0	98	83	0.10	2 (70)	-
Tall Fescue, Tarheel II	-	97	82	1.00	6 (211)	-
Fall Fescue, Quest	0	98	83	0.10	2 (70)	
Fults Salt Grass	0	98	85	0.10	2 (70)	-
Salty Alkaligrass	0	98	85	0.10	2 (70)	-
Kentucky Bluegrass	_	97	80	0.30	7 (247)	4/
Dats	-	92	88	0.50	2 (70)	3/
Redtop	-	90	78	1.80	5 (175)	3/
Ryegrass, Perennial, Annual	-	97	85	0.30	5 (175)	3/
Rye, Grain, Winter	-	92	83	0.50	2 (70)	3/
lard Fescue, Reliant IV	-	98	83	0.05	1 (35)	-
lard Fescue, Rescue 911	0	97	82	0.10	3 (105)	-
lard Fescue, Spartan II	-	98	83	0.10	3 (105)	-
rimothy	-	92	84	0.50	5 (175)	3/
Wheat, hard Red Winter	-	92 .	89	0.50	2 (70)	3/"

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

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

SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004 Revised: July 1, 2010

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

<u>Usage</u>. Self-consolidating concrete may be used for precast concrete products.

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

Mix Design Criteria. The mix design criteria shall be as follows:

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

Mixing Portland Cement Concrete. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer

performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

<u>Placing and Consolidating</u>. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer.

Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

Mix Design Approval. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

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

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

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

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002

Revised: July 1, 2010

Add the following to Article 280.02 of the Standard Specifications to read:

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

"Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer."

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

"The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor's operations, or for the Contractor's convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer's written approval."

Revise Article 280.04(a) of the Standard Specifications to read:

"(a) Temporary Ditch Checks. This system consists of the construction of temporary ditch checks to prevent siltation, erosion, or scour of ditches and drainage ways. Temporary ditch checks shall be constructed with rolled excelsior, products from the Department's approved list, or with aggregate placed on filter fabric when specified. Filter fabric shall be installed according to the requirements of Section 282. Riprap shall be placed according to Article 281.04. Manufactured ditch checks shall be installed according to the manufacturer's specifications. Spacing of ditch checks shall be such that the low point in the center of one ditch check is at the same elevation as the base of the ditch check immediately upstream. Temporary ditch checks shall be sufficiently long enough that the top of the device in the middle of the ditch is lower than the bottom of the terminating ends of the ditch side slopes."

Revise the last sentence of the first paragraph of Article 280.04(g) of the Standard Specifications to read:

"The temporary mulch cover shall be according to either Article 251.03 or 251.04 except for any reference to seeding."

Revise Article 280.07(b) of the Standard Specifications to read:

"(b) Temporary Ditch Checks. This work will be measured for payment along the long axis of the device in place in feet (meters) except for aggregate ditch checks which will be measured for payment in tons (metric tons). Payment will not be made for aggregate in excess of 108 percent of the amount specified by the Engineer."

Revise Article 280.07(f) of the Standard Specifications to read:

"(f) Temporary Mulch. This work will be measured for payment according to Article 251.05(b)."

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

"Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment."

Revise Article 280.08(b) of the Standard Specifications to read:

"(b) Temporary Ditch Checks. This work will be paid for at the contract unit price per foot (meter) for TEMPORARY DITCH CHECKS except for aggregate ditch checks which will be paid for at the contract unit price per ton (metric ton) for AGGREGATE DITCH CHECKS."

Revise Article 280.08(f) of the Standard Specifications to read:

"(f) Temporary Mulch. Temporary Mulch will be paid for according to Article 251.06."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

Revise the second sentence of the first paragraph of Article 1081.15(e) of the Standard Specifications to read:

"The upstream facing of the aggregate ditch check shall be constructed of gradation CA 3. The remainder of the ditch check shall be constructed of gradation RR 3."

TRAINING SPECIAL PROVISIONS (BDE) This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 3. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

<u>BASIS OF PAYMENT</u> This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.



TRUCK MOUNTED/TRAILER MOUNTED ATTENUATORS (BDE)

Effective: January 1, 2010

Revise Article 701.03(k) of the Standard Specifications to read:

Revise Article 701.15(h) of the Standard Specifications to read:

"(h) Truck Mounted/Trailer Mounted Attenuators (TMA). TMA units shall have a roll ahead distance in the event of an impact. The TMA shall be between 100 and 200 ft (30 and 60 m) behind the vehicle ahead or the workers. This distance may be extended by the Engineer.

TMA host vehicles shall have the parking brake engaged when stationary.

The driver and passengers of the TMA host vehicle should exit the vehicle if the TMA is to remain stationary for 15 minutes or more in duration."

Revise Article 1106.02(g) of the Standard Specifications to read:

"(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be a NCHRP 350 approved unit for Test Level 3. Test Level 2 may be used as directed by the Engineer for normal posted speeds less than or equal to 45 mph."

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 140 working days.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

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ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

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

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

- **5.** Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6 and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the DOL, or the contractor's employees or their representatives.
- **6.** Selection of Labor: During the performance of this contract, the contractor shall not:
- a. Discriminate against labor from any other State, possession, or

territory of the United States (except for employment preference for

Appalachian contracts, when applicable, as specified in Attachment

A), or

b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole.

supervised release, or probation.

II. NONDISCRIMINATION

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

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

the Federal Government in carrying out EEO obligations and in their

review of his/her activities under the contract.

 $\mbox{\bf b.}$ The contractor will accept as his operating policy the following

statement: "It is the policy of this Company to assure that applicants

are employed, and that employees are treated during employment,

without regard to their race, religion, sex, color, national origin, age or

disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or

termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship.

and/or on-the-job-training."

- 2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO and who must be assigned adequate authority and responsibility to do so.
- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
 - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - **b.** All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
 - **c.** All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minority group employees.
 - d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees,

- applicants for employment and potential employees.
- **e.** The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.
 - a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.
 - **b.** In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)
 - **c.** The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
 - a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site
 - **b.** The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
 - c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
 - d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

- **a.** The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be

- in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.
- **c.** The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- **d.** The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.
- 7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:
 - **a.** The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
 - **b.** The contractor will use best efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
 - **c.** The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.
 - **d.** In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the SHA.
- 8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
 - **a.** The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
- b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from

and to utilize DBE subcontractors or subcontractors with meaningful $% \left(1\right) =\left(1\right) \left(1\right)$

minority group and female representation among their employees.

Contractors shall obtain lists of DBE construction firms from SHA

personnel.

- c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.
- **9. Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.
- **a.** The records kept by the contractor shall document the following:
- (1) The number of minority and non-minority group members and women employed in each work classification on the project;
 - **(2)** The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women:
- (3) The progress and efforts being made in locating, hiring, training,
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 qualifying, and upgrading minority and female employees; and
- (4) The progress and efforts being made in securing the services of

DBE subcontractors or subcontractors with meaningful minority and

female representation among their employees.

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

III. NONSEGREGATED FACILITIES

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

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

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located

on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

- a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.
- **b.** Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.
- **c.** All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

- **a.** The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.
- **b.** The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:
- (1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;
- (2) the additional classification is utilized in the area by the construction industry;
- (3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and
- **(4)** with respect to helpers, when such a classification prevails in the area in which the work is performed.
- **c.** If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the

contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

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

3. Payment of Fringe Benefits:

 $\mbox{\bf a.}$ Whenever the minimum wage rate prescribed in the contract for a

class of laborers or mechanics includes a fringe benefit which is not

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

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

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

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

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be

the full amount of fringe benefits listed on the wage determination

for the applicable classification. If the Administrator for the Wage

and Hour Division determines that a different practice prevails for

the applicable apprentice classification, fringes shall be paid in accordance with that determination.

- (4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.
- **b**. Trainees:

paid

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

withdraws approval of a training program, the contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

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

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

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

6. Withholding:

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

7. Overtime Requirements:

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

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or

permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

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

V. STATEMENTS AND PAYROLLS

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

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

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

2. Payrolls and Payroll Records:

- a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.
- b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs. c. Each contractor and subcontractor shall furnish, each week
- in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely

all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for submitting payroll copies of all subcontractors.

- **d.** Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
- (1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
- (2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;
- (3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for
- the classification of worked performed, as specified in the applicable
- wage determination incorporated into the contract.
- **e**. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.
- f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.
- g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

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

- required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.
- **2**. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractors' own organization (23 CFR 635).
 - a. "Its own organization" shall be construed to include only workers employed and paid directly by the prime contractor and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the prime contractor.
 - b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the contract.
- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in

surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S. C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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

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

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

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

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

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

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

By submission of this bid or the execution of this contract, or

subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
- 2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
- **3.** That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
- **4.** That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

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

1. Instructions for Certification - Primary Covered Transactions:

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

- a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
 b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit.
- covered transaction. The prospective participant shall submit an an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- **c.** The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is

submitted if any time the prospective primary participant learns that

its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You

may contact the department or agency to which this proposal

is submitted for assistance in obtaining a copy of those regulations.

- f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not

and in all solicitations for lower tier covered transactions.

required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person

in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - **a.** Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and
 - d. Have not within a 3-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2. Where the prospective primary participant is unable to certify

to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

- **a**. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- **b.** The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- **c.** The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred,"
 "suspended," "ineligible," "primary covered transaction,"
 "participant," "person," "principal," "proposal," and
 "voluntarily excluded," as used in this clause, have the
 meanings set out in the Definitions and Coverage sections of
 rules implementing Executive Order 12549. You may contact
 the person to which this proposal is submitted for assistance in
 obtaining a copy of those regulations.
- **e.** The prospective lower tie participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- **g.** A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealing.
- i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

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

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

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XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

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

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

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

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

NOTICE

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

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

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

The instructions for subscribing are at http://www.dot.state.il.us/desenv/subsc.html.

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