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.

75

Proposal Submitted By
r roposar oublinitied by
Name
Name
Address
Address
0.4
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. 64G24
OGLE County
Section (108HVB)M
District 2 Construction Funds
Route FAP 740

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

Prepared by

S

Checked by

(Printed by authority of the State of Illinois)

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

INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond required for Prime Contractors to submit a bid after written **Authorization to Bid** has been issued by IDOT's Central Bureau of Construction. 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 217/782-3413 Preparation and submittal of bids 217/782-7806



District 2 Construction Funds

PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION	
1. Proposal of	
Taxpayer Identification Number (Mandatory)	a
for the improvement identified and advertised for bids in the Invitation for Bids as:	
Contract No. 64G24 OGLE County	
Section (108HVB)M	
Route FAP 740	

This project consists of repairs to the retaining wall and bridge (SN 071-0066) carrying IL Route 251 over the Burlington Northern Santa Fe and Union Pacific railroads and 1st Avenue in Rochelle.

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

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

If a combination bid is submitted,	the proposal gua	ranties which a	accompany the individual	proposals i	making up the	combination v	will be cor	nsidered as
also covering the combination bid.								

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

Attach Cashier's Check or Certified Check Here

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

T	he proposal	guaranty	check will	be found in	the proposal	for:	tem	

Section No.

County

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

-3-

			KETUKN WITH BID						
6.	COMBINATION BIDS. The undersigned further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual proposal comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.								
			combination bid is submitted, the schedule below must being the combination.	e completed in each propos	al				
			te bids are submitted for one or more of the sections con tion bid must be submitted for each alternate.	nprising the combination, a					
			Schedule of Combination Bids						
Со	mbination			Combination	Bid				
	No.		Sections Included in Combination	Dollars	Cents				
7.	schedule of all extensio schedule ar is an error i contract wil contract. T	f prices for ns and some approximation the extone of the made the schedule of the schedule o	ICES. The undersigned bidder submits herewith, in accordance the items of work for which bids are sought. The unit price ummations have been made. The bidder understands that the kimate and are provided for the purpose of obtaining a gross sension of the unit prices, the unit prices shall govern. Payme e only for actual quantities of work performed and accepted of duled quantities of work to be done and materials to be furnishelsewhere in the contract.	s bid are in U.S. dollars and c e quantities appearing in the sum for the comparison of bid nt to the contractor awarded t r materials furnished accordir	ents, and bid s. If there he ng to the				
8.	provides th	at a per	O BUSINESS IN ILLINOIS. Section 20-43 of the Illinois son (other than an individual acting as a sole proprietor) e of Illinois prior to submitting the bid.						
9.	The service	es of a s	subcontractor will or may be used.						
	Check Check		res □ lo □						
			contractors with subcontracts with an annual value of more the lress, and the dollar allocation for each subcontractor.	an \$25,000, the contract shall	include				

State Job # - C-92-154-10 PPS NBR - 2-23400-0100

County Name - OGLE- - Code - 141 - -

District - 2 - -

Project Number	Route	
	FAP 740	

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
XZ193500	BR DK MIC C OVL 2 1/4	SQ YD	3,570.000				
X0323359	WASHING & CLEANING	L SUM	1.000				
X0324126	GALVANIC ANODE	EACH	122.000				
X0326444	SURFACE FILLER SPL	GALLON	4.000				
X5030550	PROTECTIVE COAT SPL	SQ YD	1,286.000				
X7013015	TRAF CONT RD CLOSURE	L SUM	1.000				
Z0001800	APPROACH SL REP (PD)	SQ YD	22.000				
Z0001899	JACK & REM EX BEARING	EACH	10.000				
Z0006204	BR DECK HY-SCAR 1/2	SQ YD	3,570.000				
Z0010700	COLD MILLING	SQ YD	2,591.000				
Z0012754	STR REP CON DP = < 5	SQ FT	1,835.000				
Z0012755	STR REP CON DP OVER 5	SQ FT	155.000				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Z0016001	DECK SLAB REP (FD-T1)	SQ YD	5.000				
Z0016002	DECK SLAB REP (FD-T2)	SQ YD	7.000				
Z0018010	DRAINAGE SCUPPR DS-33	EACH	12.000				

State Job # - C-92-154-10 PPS NBR - 2-23400-0100

County Name - OGLE- - Code - 141 - -

District - 2 - -

Project Number	Route
	FAP 740

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
Z0018800	DRAINAGE SYSTEM	L SUM	1.000				
Z0032300	JACK EXIST SUP-STR	L SUM	1.000				
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0073200	TEMP SHORING & CRIB	EACH	1.000				
20200100	EARTH EXCAVATION	CU YD	378.000				
31100910	SUB GRAN MAT A 12	SQ YD	737.000				
40600200	BIT MATLS PR CT	TON	2.000				
40600300	AGG PR CT	TON	9.000				
40600985		SQ YD	660.000				
40603335		TON	429,000				
42000300		SQ YD	680.000				
44213200		FOOT	814.000				
48101200		TON	48.000				
50102400		CU YD	145.000				
50157300		SQ YD	5,024.000				

State Job # - C-92-154-10 PPS NBR - 2-23400-0100

County Name - OGLE- -

Code - 141 - - District - 2 - -

Project Number	Route
	FAP 740

Item Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
50300225	CONC STRUCT	CU YD	86.100				
50300255	CONC SUP-STR	CU YD	124.400				
50300260	BR DECK GROOVING	SQ YD	3,350.000				
50300300	PROTECTIVE COAT	SQ YD	3,570.000				
50800205	REINF BARS, EPOXY CTD	POUND	31,060.000				
52000110	PREF JT STRIP SEAL	FOOT	175.000				
52100020	ELAST BEARING ASSY T2	EACH	41.000				
52100520	ANCHOR BOLTS 1	EACH	82.000				
58700300	CONCRETE SEALER	SQ FT	1,428.000				
59000200	EPOXY CRACK INJECTION	FOOT	3.000				
60255500	MAN ADJUST	EACH	1.000				
67000400	ENGR FIELD OFFICE A	CAL MO	6.000				
67100100	MOBILIZATION	L SUM	1.000				
70100450		L SUM	1.000				
70300220		FOOT	840.000				

State Job # - C-92-154-10 PPS NBR - 2-23400-0100

OGLE- -

Code - 141 - - District - 2 - -

County Name -

Project Number	Route
	FAP 740

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
70301000	WORK ZONE PAVT MK REM	SQ FT	681.000				
78001100	PT PVT MK LTRS & SYMB	SQ FT	296.000				
78001110	PAINT PVT MK LINE 4	FOOT	3,938.000				
78001140	PAINT PVT MK LINE 8	FOOT	40.000				
78001150	PAINT PVT MK LINE 12	FOOT	60.000				
78001180	PAINT PVT MK LINE 24	FOOT	126.000				
78008200	POLYUREA PM T1 LTR-SY	SQ FT	110.000				
78008210	POLYUREA PM T1 LN 4	FOOT	8,030.000				
78008240	POLYUREA PM T1 LN 8	FOOT	410.000				
78008250	POLYUREA PM T1 LN 12	FOOT	45.000				
78100100	RAISED REFL PAVT MKR	EACH	50.000				
78100200	TEMP RAIS REF PVT MKR	EACH	18.000				
78200520	BAR WALL MKR TYPE B	EACH	45.000				
78300200	RAISED REF PVT MK REM	EACH	18.000				

CONTRACT NUMBER	64G24		
THIS IS THE TOTAL DID		.	
THIS IS THE TOTAL BID		\$	

NOTES:

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

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

I. GENERAL

- **A.** Article 50 of the Illinois Procurement Code establishes the duty of all State chief procurement officers, State purchasing officers, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.
- **B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. 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.

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.

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. Disclosure of Business Operations in Iran

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

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

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

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

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

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

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

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

TO BE RETURNED WITH BID

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

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

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

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

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

M. Lobbyist Disclosure

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

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

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

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

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

		Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.
C)r	
		Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:
		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>

than one question.)

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

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

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.

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

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

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 openended 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.

FOR INDIVIDUAL (type or print information)

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)

NAME:	
ADDRE	ESS
Type of	ownership/distributable income share:
stock	sole proprietorship Partnership other: (explain on separate sheet):
% or \$ v	alue of ownership/distributable income share:
	of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following ct of interest relationships apply. If the answer to any question is "Yes", please attach additional page:
(a) State 6	employment, currently or in the previous 3 years, including contractual employment of services. YesNo
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? YesNo
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.

3	s. 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 salary	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 the age income of your firm, partnership, association or corporation, or (ii) the salary of the Governor?	and your spouse ggregate of the total distributable
	loyment of spouse, father, mother, son, or daughter, including cont vious 2 years.	
If your ans	swer is yes, please answer each of the following questions.	YesNo
1	. Is your spouse or any minor children currently an officer or employ Board or the Illinois State Toll Highway Authority?	yee of the Capitol Development YesNo
	Is your spouse or any minor children currently appointed to or empty of Illinois? If your spouse or minor children is/are currently agency of the State of Illinois, and his/her annual salary excennual salary of the Governor, provide the name of your spouse and of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed and his/her annual salary of the State agency for which he/she is employed annual salary of the salary of	appointed to or employed by any eeds 60% of the l/or minor children, the name
	s. If your spouse or any minor children is/are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the anr as of 7/1/07) are you entitled to receive (i) more than 71/2% of the firm, partnership, association or corporation, or (ii) an amount innual salary of the Governor?	nual salary of the Governor, total distributable income of your
4	. If your spouse or any minor children are currently appointed to or State of Illinois, and his/her annual salary exceeds 60% of the annual and your spouse or minor children entitled to receive (i) more that aggregate of the total distributable income of your firm, partnersh (ii) an amount in excess of 2 times the salary of the Governor?	ual salary of the Governor, are you nan 15 % in the
		YesNo
unit o	ve status; the holding of elective office of the State of Illinois, the gor f local government authorized by the Constitution of the State of Illings currently or in the previous 3 years.	
	ionship to anyone holding elective office currently or in the previous or daughter.	2 years; spouse, father, mother, YesNo
Amer of the	intive office; the holding of any appointive government office of the Sica, or any unit of local government authorized by the Constitution of State of Illinois, which office entitles the holder to compensation in scharge of that office currently or in the previous 3 years.	f the State of Illinois or the statute
	onship to anyone holding appointive office currently or in the previour daughter.	us 2 years; spouse, father, mother, YesNo
(g) Empl	oyment, currently or in the previous 3 years, as or by any registered	lobbyist of the State government. YesNo

RETURN WITH BID/OFFER

(h)	son, or daughter.	YesNo
(i)	Compensated employment, currently or in the previo committee registered with the Secretary of State or a action committee registered with either the Secretary	any county clerk of the State of Illinois, or any political
(j)		or daughter; who was a compensated employee in the committee registered with the Secretary of State or any cion committee registered with either the Secretary of YesNo
2.	Communication Disclosure.	
Se en su	bisclose the name and address of each lobbyist and other dection 2 of this form, who is has communicated, is communicated, is communicated in the bid or offer. This disclosure is upplemented for accuracy throughout the process and the line below:	municating, or may communicate with any State officer or a continuing obligation and must be promptly
	Name and address of person(s):	

findings; and criminal felony supplemented for accuracy identified, enter "None" on the	convictions. This disclosure is a continuing obligation and throughout the procurement process and term of the contra he line below:	must be promptly act. If no person is
Name of person(s):		
Nature of disclosure	o:	
This Disalesses Face A is	APPLICABLE STATEMENT	dana nana Hudan
	submitted on behalf of the INDIVIDUAL named on prevented the contents of this disclosure to be true and accurate	
Completed by:		
	Signature of Individual or Authorized Representative	Date
	NOT APPLICABLE STATEMENT	
	have determined that no individuals associated with to uire the completion of this Form A.	his organization meet
This Disclosure Form A is	submitted on behalf of the CONTRACTOR listed on the	e previous page.
	Signature of Authorized Representative	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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

Contractor Name				
Legal Address				
City, State, Zip				
Telephone Number		Email Address	Fax Number	(if available)
	on shall become pa	art of the publicly availabl		Illinois Procurement Act (30 prm B must be completed for
DISCLOSU	RE OF OTHER CO	NTRACTS AND PROCU	JREMENT RELATED	<u>INFORMATION</u>
pending contracts (including lillinois agency: Ye	ding leases), bids, p s No		ng procurement relatio	dentify whether it has any nship with any other State of this page.
	uch as bid or proje	relationship by showing a ct number (attach addition		
	THE FOLL	OWING STATEMENT MU	JST BE CHECKED	
		Signature of Authorized Repr	esentative	Date

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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



Contract No. 64G24
OGLE County
Section (108HVB)M
Route FAP 740
District 2 Construction Funds

PART I. IDENTIFIC	ATION							ļ	Distr	ici z	OOM	ti detio		unus	•			
Dept. Human Right	s#						_ Dur	ation o	f Proje	ect:								
Name of Bidder: _																		
PART II. WORKFO A. The undersigned which this contract wo projection including a	d bidder h	as analyz e perform	ed mir ed, an	d for the	ne locati	ions fro	m whic	h the b	idder re	cruits	employe	es, and h	ereb	y subm e allocat	its the foll ted to this TABLE	owir con	ng workfo tract:	orce
		TOTA	AL Wo	rkforce	Projec	tion for	Contra	ct						C	CURRENT TO BE		IPLOYEE SIGNED	S
				MING	ORITY I	EMPLO	YEES			TRA	AINEES				TO CO	TNC	RACT	
JOB CATEGORIES		TAL OYEES	BL/	ACK F	HISP.	ANIC F	MIN		APPI TIC		TRA	HE JOB INEES		EMPL	OTAL OYEES			OYEES
OFFICIALS (MANAGERS)	IVI	F	IVI	Г	M	Г	M	F	M	Г	M	F		М	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	oio otio	n for C	`antroat				7			FOR	DE	PARTM	MENT US	E C	DNLY	
EMPLOYEES IN	_	aining Pro TAL OYEES		ACK		PANIC		THER NOR.										
TRAINING	М	F	М	F	М	F	М	F	4									
APPRENTICES]									
ON THE JOB TRAINEES																		

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

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

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

Contract No. 64G24
OGLE County
Section (108HVB)M
Route FAP 740
District 2 Construction Funds

PART II. WORKFORCE PROJECTION - continued

B.		led in "Total Employees" under Table A is the tot the undersigned bidder is awarded this contract		ould be employed in the
	The u	ndersigned bidder projects that: (number)		new hires would be
	recrui	ndersigned bidder projects that: (number)ted from the area in which the contract project is		
	-#:	or base of operation is located.	ıld be recruited from the area in	which the bidder's principal
	onice	or base of operation is located.		
C.		led in "Total Employees" under Table A is a projo signed bidder as well as a projection of numbers		
	The u	ndersigned bidder estimates that (number)		persons will
		ectly employed by the prime contractor and that	(number)	persons will be
	emplo	byed by subcontractors.		
PART	III. AFF	FIRMATIVE ACTION PLAN		
A.	utiliza in any comm (geard utiliza	indersigned bidder understands and agrees that tion projection included under PART II is determined to be category, and in the event that the undersignencement of work, develop and submit a writtened to the completion stages of the contract) when tion are corrected. Such Affirmative Action Planepartment of Human Rights.	nined to be an underutilization of ned bidder is awarded this cont a Affirmative Action Plan includir reby deficiencies in minority and	f minority persons or women ract, he/she will, prior to ng a specific timetable d/or female employee
В.	subm	ndersigned bidder understands and agrees that itted herein, and the goals and timetable include part of the contract specifications.		
Comp	any		Telephone Number	
Addre			-	
riadic			-	
		NOTICE REGAR	RDING SIGNATURE	
		Ider's signature on the Proposal Signature Sheet will o be completed if revisions are required.	constitute the signing of this form.	The following signature block
	Signatu	re: 🗆	Title:	Date:
Instruc	tions:	All tables must include subcontractor personnel in addition	to prime contractor personnel.	
Table A	۱ -	Include both the number of employees that would be hir (Table B) that will be allocated to contract work, and inclu should include all employees including all minorities, appre	de all apprentices and on-the-job traine	ees. The "Total Employees" column
Table E	3 -	Include all employees currently employed that will be alloc currently employed.	ated to the contract work including any	apprentices and on-the-job trainees
Table (C -	Indicate the racial breakdown of the total apprentices and	on-the-job trainees shown in Table A.	
				DO 1000 (D 10/11/00)

BC-1256 (Rev. 12/11/07)

RETURN WITH BID Contract No. 64G24 OGLE County Section (108HVB)M Route FAP 740 District 2 Construction Funds

PROPOSAL SIGNATURE SHEET

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

	Firm Name	
(IF AN INDIVIDUAL)		
	Firm Name	
(IF A CO-PARTNERSHIP)		
,		
		Name and Address of All Members of the Firm:
_		
_		
	Corporate Name	
	Ву	Signature of Authorized Representative
		·
		Typed or printed name and title of Authorized Representative
(IF A CORPORATION)	Attest	
(IF A JOINT VENTURE, USE THIS SECTION		Signature
FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)	Business Address	
	Corporate Name	
	ŕ	Signature of Authorized Representative
		Typed or printed name and title of Authorized Representative
(IF A JOINT VENTURE)	A411	
	Attest	Signature
	Business Address	
If more than two parties are in the joint venture	nlease attach an a	Nditional cignature cheet
ii more man two parties are in the joint venture	, picase allacii ali al	aditional signature sheet.

Return with Bid



Electronic Bid Bond ID#

Division of Highways Proposal Bid Bond

(Effective November 1, 1992)

	Item No.	
	Letting Date	
NOW ALL MEN BY THESE PRESENTS, That W	e	
s PRINCIPAL, and		
		as SURETY, are
n Article 102.09 of the "Standard Specifications for	ATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the a Road and Bridge Construction" in effect on the date of invitation for bids, which if ILLINOIS, for the payment of which we bind ourselves, our heirs, executors	amount specified ever is the lesse
	IGATION IS SUCH, that whereas, the PRINCIPAL has submitted a bid proposa nt of Transportation, for the improvement designated by the Transportation Bulle	
and as specified in the bidding and contract docu fter award by the Department, the PRINCIPAL s including evidence of the required insurance con performance of such contract and for the prompt p if the PRINCIPAL to make the required DBE subroperartment the difference not to exceed the penal	accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the nents, submit a DBE Utilization Plan that is accepted and approved by the De hall enter into a contract in accordance with the terms of the bidding and conterages and providing such bond as specified with good and sufficient surety ayment of labor and material furnished in the prosecution thereof; or if, in the explication or to enter into such contract and to give the specified bond, the PRINC by hereof between the amount specified in the bid proposal and such larger amount the work covered by said bid proposal, then this obligation shall be null and	partment; and if, itract documents y for the faithful rent of the failure IPAL pays to the unt for which the
aragraph, then Surety shall pay the penal sum to ayment within such period of time, the Departme xpenses, including attorney's fees, incurred in an	the PRINCIPAL has failed to comply with any requirement as set forth in the precent the Department within fifteen (15) days of written demand therefor. If Surety don't may bring an action to collect the amount owed. Surety is liable to the Departition in which it prevails either in whole or in part. IPAL and the said SURETY have caused this instrument to be signed by	oes not make ful
heir respective officers this da	y of A.D.,	
PRINCIPAL	SURETY	
(Company Name)	(Company Name)	
dy.	Ву:	
(Signature & Title)	(Signature of Attorney-in-Fact)	
	Notary Certification for Principal and Surety	
STATE OF ILLINOIS,	,	
County of		
	, a Notary Public in and for said County, do hereby cer	tify that
	and	
(Insert names	of individuals signing on behalf of PRINCIPAL & SURETY)	
	ame persons whose names are subscribed to the foregoing instrument on beha son and acknowledged respectively, that they signed and delivered said instrumn set forth.	
Given under my hand and notarial seal this	day of A.D).
My commission expires		
	Notary Public	
narking the check box next to the Signature and T	posal Bid Form, the Principal may file an Electronic Bid Bond. By signing the line below, the Principal is ensuring the identified electronic bid bond has be state of Illinois under the conditions of the bid bond as shown above.	

Company / Bidder Name

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		
Section		Contract DBE Goal		
Project			(Percent)	(Dollar Amount)
County				
Letting I	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 contract award goals and has provided document of the signed participation that the signed participation statements, forms SBE 2 use of each business participating in this plan and assuring that work of the contract. Failed to meet contract award goals and has included good fait provided participation as follows: Disadvantaged Business Participation percent The contract goals should be accordingly modified or waived, support of this request including good faith effort. Also attache required by the Special Provision evidencing availability and us business will perform a commercially useful function in the work	umented participation as for 2025, required by the Special each business will perform the effort documentation to reached is all information do are the signed participates of each business participate of the contract.	ial Provision evident a commercially meet the goals and required by the Spion statements, for pating in this plan a	ncing availability and useful function in the I that my company has ecial Provision in the I sale and assuring that each
Pv.	Company	The "as read" Low Bidder is re		•
By		Submit only one utilization plat submitted in accordance with t		utilization plan shall be
Title		Bureau of Small Business Ente		cal Let Projects

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

(V)	Illinois Department of Transportation	D	BE Participatio	n Statement
Subcontract	or Registration	L	etting	
Participation	n Statement	lt	em No.	
(1) Instructi	ons	C	ontract	
be submitte	ust be completed for each disadvantaged business pad in accordance with the special provision and will be bace is needed complete an additional form for the firm	attached to the Ut		
(2) Work				
Pay Item No.	Description	Quantity	Unit Price	Total
			Total	
· •	Payment Items he are partial pay items, specificall e above items which are partial pay items, specificall	y describe the wo	rk and subcontrac	et dollar
has agreed execute a constatement method that complete	gned certify that the information included herein is tru- to perform a commercially useful function in the work ontract with the prime contractor. The undersigned fu- tacy be made without prior approval from the Department are and accurate information regarding actual work per- wided to the Department.	of the contract iter orther understand t ent's Bureau of Sn formed on this pro	m(s) listed above that no changes to nall Business Entopject and the payn	and to this erprises and
	Signature for Prime Contractor	Sig	nature for DBE Firm	
Title	Tit	le		
Date				
Contact	Co	ontact		
Phone	Pr	one		
Firm Name		m Name		
		ldress		
		ty/State/Zi		

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. 64G24
OGLE County
Section (108HVB)M
Route FAP 740
District 2 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</u> Required Ethical Standards Governing Subcontractors.

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.)
-c"	answer to any of those 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

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR IN	FOR INDIVIDUAL (type or print information)				
N	NAME:				
	;				
1	ADDRESS				
,	ADDITEOU .				
ĺ					
-		rabin/diatributable income above.			
	ype or owne	rship/distributable income share:			
9	stock	sole proprietorship	Partnership	other: (explain on separate sheet):	
_		<u> </u>	rannordinp	other: (explain on separate sheet).	
9	% or \$ value of	f ownership/distributable income share:			
2. Disc	closure of P	Potential Conflicts of Interest. Che	ck "Yes" or "N	o" 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.

 Yes ____No ___

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 ___
- 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.

-c-

salary exceeds 60% of the annual salary of the Governor, are you end (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	, partnership, association or
4. If you are currently appointed to or employed by any agency of the S salary exceeds 60% of the annual salary of the Governor, are you a or minor children entitled to receive (i) more than 15 % in the aggincome of your firm, partnership, association or corporation, or (ii) a the salary of the Governor?	nd your spouse regate of the total distributable
(b) State employment of spouse, father, mother, son, or daughter, including continuous 2 years.	• •
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 employed Board or the Illinois Toll Highway Authority?	e of the Capitol Development YesNo
2. Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently ap agency of the State of Illinois, and his/her annual salary exceed annual salary of the Governor, provide the name of your spouse and of the State agency for which he/she is employed and his/her annual minor children is/her annual salary of the Governor, provide the name of your spouse and of the State agency for which he/she is employed and his/her annual minor children currently appointed to or employed agency.	pointed to or employed by any ds 60% of the d/or minor children, the name
3. If your spouse or any minor children is/are currently appointed to or State of Illinois, and his/her annual salary exceeds 60% of the annual as of 7/1/07) are you entitled to receive (i) more then 7 1/2% of the tirm, partnership, association or corporation, or (ii) an amount in annual salary of the Governor?	al salary of the Governor, otal distributable income of your
4. If your spouse or any minor children are currently appointed to or e State of Illinois, and his/her annual salary exceeds 60% of the annual are you and your spouse or minor children entitled to receive (i) raggregate of the total distributable income of your firm, partnership (ii) an amount in excess of two times the annual salary of the Govern	Il salary of the Governor, more than 15 % in the , association or corporation, or
(c) Elective status; the holding of elective office of the State of Illinois, the gove unit of local government authorized by the Constitution of the State of Illinois currently or in the previous 3 years.	rnment of the United States, any
(d) Relationship to anyone holding elective office currently or in the previous 2 son, or daughter.	years; spouse, father, mother, YesNo
(e) Appointive office; the holding of any appointive government office of the State America, or any unit of local government authorized by the Constitution of to of the State of Illinois, which office entitles the holder to compensation in extended the discharge of that office currently or in the previous 3 years.	he State of Illinois or the statutes
(f) Relationship to anyone holding appointive office currently or in the previous son, or daughter.	2 years; spouse, father, mother, YesNo
(g) Employment, currently or in the previous 3 years, as or by any registered lo	bbyist of the State government. YesNo

(h)	Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. YesNo
(i)	Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. YesNo
(j)	Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.
	Yes No
3.	Communication Disclosure.
Se en su	close 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	n 50-35 of the Illinois Procurement Act (30 ct 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 & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes No If "No" is checked, the subcontractor only needs to complete the signature box on the bottom of this page.			
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:			
THE FOLLOWING STATEMENT MUST BE CHECKED			
	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. 64G24
OGLE County
Section (108HVB)M
Route FAP 740
District 2 Construction Funds

This project consists of repairs to the retaining wall and bridge (SN 071-0066) carrying IL Route 251 over the Burlington Northern Santa Fe and Union Pacific railroads and 1st Avenue in Rochelle.

- 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 Standard Specifications for Road and Bridge Construction (Adopted 1-1-07) (Revised 1-1-10)

SUPPLEMENTAL SPECIFICATIONS

Std. Sp	<u>pec. Sec.</u> P	Page No.
201	Clearing, Tree Removal and Protection	1
205	Embankment	2
251	Mulch	3
253	Planting Woody Plants	4
280	Temporary Erosion Control	6
406	Hot-Mix Asphalt Binder and Surface Course	7
443	Reflective Crack Control Treatment	12
502	Excavation for Structures	15
503	Concrete Structures	16
504	Precast Concrete Structures	
505	Steel Structures	18
540	Box Culverts	19
581	Waterproofing Membrane System	20
630	Steel Plate Beam Guardrail	
633	Removing and Reerecting Guardrail and Terminals	22
637	Concrete Barrier	
669	Removal and Disposal of Regulated Substances	24
672	Sealing Abandoned Water Wells	25
701	Work Zone Traffic Control and Protection	26
720	Sign Panels and Appurtenances	27
721	Sign Panel Overlay	
722	Demountable Sign Legend Characters and Arrows	
726	Mile Post Marker Assembly	
733	Overhead Sign Structures	
783	Pavement Marking and Marker Removal	32
801	Electrical Requirements	
805	Electrical Service Installation – Traffic Signals	34
836	Pole Foundation	35
838	Breakaway Devices	
862	Uninterruptable Power Supply	
873	Electric Cable	
878	Traffic Signal Concrete Foundation	
1003	Fine Aggregates	
1004	Coarse Aggregates	
1005	Stone and Broken Concrete	44
1006	Metals	
1008	Structural Steel Coatings	
1010	Finely Divided Materials	
1020	Portland Cement Concrete	
1022	Concrete Curing Materials	
1024	Nonshrink Grout	59

1030	Hot-Mix Asphalt	60
1032	Bituminous Materials	65
1042	Precast Concrete Products	68
1062	Reflective Crack Control System	70
1069	Pole and Tower	72
1074	Control Equipment	75
1076	Wire and Cable	80
1080	Fabric Materials	
1081	Materials for Planting	82
1083	Elastomeric Bearings	84
1090	Sign Base	
1091	Sign Face	87
1092	Sign Legend and Supplemental Panels	
1093	Sign Supports	96
1094	Overhead Sign Structures	98
1095	Pavement Markings	
1101	General Equipment	106
1102	Hot-Mix Asphalt Equipment	107
1103	Portland Cement Concrete Equipment	109
1106	Work Zone Traffic Control Devices	110

RECURRING SPECIAL PROVISIONS

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

CHE	CK S	SHEET#	<u>PAGE NO.</u>
1		Additional State Requirements For Federal-Aid Construction Contracts	
		(Eff. 2-1-69) (Rev. 1-1-10)	
2		Subletting of Contracts (Federal-Aid Contracts) (Eff. 1-1-88) (Rev. 5-1-93)	114
3	Χ	EEO (Eff. 7-21-78) (Rev. 11-18-80)	115
4	Χ	Specific Equal Employment Opportunity Responsibilities	
		Non Federal-Aid Contracts (Eff. 3-20-69) (Rev. 1-1-94)	125
5	Χ	Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 1-1-10)	
6		Reserved	135
7		Reserved	136
8		Haul Road Stream Crossings, Other Temporary Stream Crossings, and	
		In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98)	137
9		Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-07)	138
10		Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-07)	141
11		Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-07)	144
12		Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 1-1-07)	146
13		Hot-Mix Asphalt Surface Correction (Eff. 11-1-87) (Rev. 1-1-09)	
14		Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-09)	
15		PCC Partial Depth Hot-Mix Asphalt Patching (Eff. 1-1-98) (Rev. 1-1-07)	153
16		Patching with Hot-Mix Asphalt Overlay Removal (Eff. 10-1-95) (Rev. 1-1-07)	
17		Polymer Concrete (Eff. 8-1-95) (Rev. 1-1-08)	156
18		PVC Pipeliner (Eff. 4-1-04) (Rev. 1-1-07)	
19		Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-07)	
20	Χ	Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-97)	
21		Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-07)	
22		Temporary Modular Glare Screen System (Eff. 1-1-00) (Rev. 1-1-07)	
23		Temporary Portable Bridge Traffic Signals (Eff. 8-1-03) (Rev. 1-1-07)	168
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)	171
26		English Substitution of Metric Bolts (Eff. 7-1-96)	172
27		English Substitution of Metric Reinforcement Bars (Eff. 4-1-96) (Rev. 1-1-03)	173
28		Calcium Chloride Accelerator for Portland Cement Concrete (Eff. 1-1-01)	
29		Reserved	175
30		Quality Control of Concrete Mixtures at the Plant	
		(Eff. 8-1-00) (Rev. 1-1-09)	176
31	Χ	Quality Control/Quality Assurance of Concrete Mixtures	
		(Eff. 4-1-92) (Rev. 1-1-09)	184
32		Asbestos Bearing Pad Removal (Eff. 11-1-03)	
33		Ashestos Hot-Mix Asphalt Surface Removal (Fff. 6-1-89) (Rev. 1-1-09)	197

TABLE OF CONTENTS

LOCATION OF PROJECT	1
DESCRIPTION OF PROJECT	1
START DATE	1
COMPLETION DATE PLUS WORKING DAYS	1
COLD MILLING	1
TRAFFIC CONTROL PLAN	2
WORK ZONE PAVEMENT MARKING AND REMOVAL	5
RAILROAD PROTECTIVE LIABILITY INSURANCE (5 AND 10) (BDE)	5
UNION PACIFIC RAILROAD MINIMUM REQUIREMENTS (FOR INFORMATION ONLY)	7
BNSF / CONTRACTOR AGREEMENT	20
ENGINEER'S FIELD OFFICE TYPE A	27
PROTECTIVE COAT (SPECIAL)	28
REMOVAL OF EXISTING BEARINGS	30
APPROACH SLAB REPAIR	30
WASHING AND CLEANING	34
GALVANIC ANODE	35
SURFACE FILLER (SPECIAL)	36
TEMPORARY SHORING AND CRIBBING	37
DRAINAGE SYSTEM	37
JACK AND REMOVE EXISTING BEARINGS	38
JACKING EXISTING SUPERSTRUCTURE	39
DECK SLAB REPAIR	41
BRIDGE DECK MICROSILICA CONCRETE OVERLAY	46
STRUCTURAL REPAIR OF CONCRETE	57
ALKALI-SILICA REACTION FOR CAST-IN-PLACE CONCRETE (BDE)	65
APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS (BDE)	68
CEMENT (BDE)	68
CERTIFICATION OF METAL FABRICATOR (BDE)	71
CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)	71
CONSTRUCTION AIR QUALITY - IDLING RESTRICTIONS (BDE)	72
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)	73
EQUIPMENT RENTAL RATES (BDE)	81
HOT-MIX ASPHALT – ANTI-STRIPPING ADDITIVE (BDE)	82
HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)	82
HOT-MIX ASPHALT - FINE AGGREGATE (BDE)	
HOT-MIX ASPHALT – PLANT TEST FREQUENCY (BDE)	84
HOT-MIX ASPHALT – QC/QA ACCEPTANCE CRITERIA (BDE)	85
HOT-MIX ASPHALT – TRANSPORTATION (BDE)	

LIQUIDATED DAMAGES (BDE)	86
METAL HARDWARE CAST INTO CONCRETE (BDE)	86
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND	SEDIMENT
CONTROL DEFICIENCY DEDUCTION (BDE)	87
PAYMENTS TO SUBCONTRACTORS (BDE)	88
PERSONAL PROTECTIVE EQUIPMENT (BDE)	89
POLYUREA PAVEMENT MARKING (BDE)	89
REFLECTIVE SHEETING ON CHANNELIZING DEVICES (BDE)	95
REINFORCEMENT BARS - STORAGE AND PROTECTION (BDE)	96
SELECTION OF LABOR (BDE)	97
SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)	97
TRUCK MOUNTED/TRAILER MOUNTED ATTENUATORS (BDE)	98
STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)	98

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted January 1, 2007, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the bridge and retaining wall rehabilitation of FAP 740 (IL 251), Section: (108HVB)M, Ogle County, Contract 64G24 and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

This project begins at a point on the centerline of IL Route 251, south of its intersection with 4th Ave., and extends in a southerly direction along the centerline of IL Route 251 a distance of approximately 1,800 feet to the intersection with Washington Avenue. The project is located in Ogle County in the City of Rochelle.

DESCRIPTION OF PROJECT

This project consists of Bridge and Retaining Wall Rehabilitation and all incidental and collateral work necessary to complete the project as shown on the plans and as described herein.

START DATE

No work shall be started on this project until April 4, 2011.

COMPLETION DATE PLUS WORKING DAYS

Effective: December 29, 2006

The Contractor shall perform his work in such a manner that the PROJECT is complete on or prior to June 29, 2011. The PROJECT shall have everything finished except the wall cleaning, cold milling and resurfacing of 15th Street at the intersection of IL 38/ 1ST Avenue for the PROJECT to be considered complete.

The Contractor will be allowed 5 working days, after the June 29, 2011 completion date to complete wall cleaning, cold milling and resurfacing of 15th Street at the intersection of IL 38/ 1ST Avenue.

COLD MILLING

DESCRIPTION. This work consists of removal of the existing pavement surface to a depth of 1 ³/₄" in preparation for subsequent HMA overlay.

The work will be performed in accordance Section 440 of the Standard Specifications and with the detail shown in the plans.

METHOD OF MEASUREMENT. COLD MILLING for subsequent resurfacing will be measured for payment in place and the area computed in square yards.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per square yard for COLD MILLING

TRAFFIC CONTROL PLAN

Effective January 14, 1999

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

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications for Road and Bridge Construction and the following Highway Standards relating to traffic control.

Standards:

<u>701006</u> <u>701201</u> <u>701301</u> <u>701311</u> <u>701701</u> <u>701901</u>

Details:

Detour Routing Plans on Sheet No's. 5 - 7.

Traffic Control for Road Closure District Standard No. 40.1

Road Closed to Oversized Loads – District Standard No. 40.4

NO ACCESS TO IL 38 Sign Detail

NO ACCESS TO IL 251 South Sign Detail

General:

Where construction activities involve sidewalks on both sides of the street, the work shall be staged so that both sidewalks are not out of service at the same time.

Signs:

No bracing shall be allowed on post-mounted signs.

Post-mounted signs shall be installed using standard 720011, 728001, 729001, on 4"x4" wood posts, or on any other "break away" connection if accepted by the FHWA and corresponding letter is provided to the resident.

All signs are required on both sides of the road when the median is greater than 10 feet and on one way roadways.

When covering existing Department signs, no tape shall be used on the reflective portion of the sign. Contact the District sign shop for covering techniques.

All regulatory signs shall be maintained at a 5 foot minimum bottom (rural), 7 foot minimum (urban).

Devices:

A minimum of 3 drums spaced at 1.2 meters (4 feet) shall be placed at each return when the sideroad is open.

Vertical barricades shall not be used in weaves, and in the gore areas on Highway Standard 701411.

Lights:

Steady burn mono-directional lights are required on devices delineating a widening trench.

Flaggers:

Flaggers shall comply with all requirements contained in the Department's "Flagger Handbook" with the following exception: The ANSII Class 2 vest will not be supplied by the Department.

When the road is closed to through traffic and it is necessary to provide access for local traffic, all flaggers as shown on the applicable standards will be required. No reduction in the number of flaggers shall be allowed.

Pavement Marking:

All temporary pavement markings that will be operational during the winter months (December through March) shall be paint.

District Standards Application

<u>Traffic Control and Protection, Standard 701701</u>: This work shall be done according to Section 701 of the Standard Specifications and the Typical Applications of Traffic Control Devices for Highway Construction, Standard 701701, and as specified herein.

The "left" leg of the intersection shown on this standard also applies when the right turn lane is closed. When the right turn lane is closed, "RIGHT TURN LANE CLOSED AHEAD" shall be substituted for the "LEFT TURN LANE CLOSED AHEAD" and the set up would be a mirror image to what is shown.

This work shall be included in the contract unit price per Lump Sum for Traffic Control for Road Closure.

<u>Traffic Control For Road Closure</u>: This work shall be done according to the Road Closure Standard, the Detour Sheet, Road Closure Detail Sheet and Section 701 Of The Standard Specifications.

The contractor shall provide an information warning signs for oversized loads regarding the road closure. These signs shall be 4' x 8" as shown on the sign design and shall read "NO OVERSIZE – OVERWEIGHT LOADS 11 MILES AHEAD" near the intersection of Illinois Route 251 at US Route 30.

The material of these signs shall be (0.125 in) thick aluminium, Type AA, AP Fluorescent orange reflective sheeting and 7 inch D Series lettering meeting the requirements of Section 1090 and Article 1091 of the Standard Specification for Road and Bridge Construction.

"ROAD CLOSED 1 MILE" (W20-3(O)-48) with "NO ACCESS TO IL 38" plate mounted below the sign shall be required at Illinois Route 251 at Intermodal Drive.

"ROAD CLOSED ½ MILE" (W20-3(O)-48) with "NO ACCESS TO IL 38" plate mounted below the sign shall be required at Illinois Route 251 at Veterans's Parkway

"ROAD CLOSED ½ MILE" (W20-3(O)-48) with "NO ACCESS TO IL 251 SOUTH" plate mounted below the sign shall be required on ILL RTE. 38 West of 15th St. (as shown on plans)

"ROAD CLOSED 1 MILE" (W20-3(O)-48) with NORTH (M3-1-30x15) and an ILLINOIS 251 (MI-1100 – 30x24) shield mounted below shall be installed at Caron and Creston.

"ROAD CLOSED ½ MILE" (W20-3(O)-48) with NORTH (M3-1-30x15) and an ILLINOIS 251 (MI-1100 – 30x24) shield mounted below shall be installed at First and Washington and at First and Main St.

"ROAD CLOSED AHEAD" (W20-3(O)-48) with flasher and the appropriate arrow plate (W1-6(O)-36x18 or W1-7(O)-36x18) shall be required on all side roads within the limits of the mainline "ROAD CLOSED AHEAD" signs.

All signing and devices shown on the Road Closure Detail sheet to close the turn bay on Washington Street to weave traffic into turn lanes on IL 251 and all additional regulatory signs shall be included in the cost of Traffic Control for Road Closure.

<u>IL 38 Eastbound</u> shall be considered Condition I Major sideroad closures for signing as shown on the District Standard Traffic Control for Road Closure Detail.

The Contractor shall notify the Traffic Operations Section of the Bureau of Operations by fax (815/284-5489) and the Bureau of Project Implementation (815/284-5348) in writing by means of fax (to the numbers provided) and also by letter to the District Office. This request shall be submitted a minimum of three weeks (21 days) and no earlier than four weeks (28 days) prior to the anticipated closure date to allow the State adequate time to set the detour route.

Signing and devices required to close the road, according to the Traffic Control for Road Closure detail and contained herein, shall be the responsibility of the Contractor. Detour signing required to detour traffic to alternate routes shall be the responsibility of the Department. The day the detour signing begins, the detour will be in effect at 2:00 p.m or when the Traffic Operations Section has notified the Resident Engineer or personnel on the project. No detour shall be erected on Friday, Saturday or Sunday.

This work shall be paid for at the contract unit price per Lump Sum for Traffic Control for Road Closure.

<u>Maintenance of Traffic</u>: The traffic shall be maintained using run-arounds as shown on the plans using Traffic Control and Protection Standard 701701.

The mainline shall be kept open to one-way traffic at all times during working hours and two-way traffic during non-working hours.

The Contractor shall be required to notify the Ogle County Highway Department, the corresponding Township Commissioner, emergency response agencies (i.e.: fire, ambulance, police), school bus companies and the Department of Transportation (Bureau of Project Implementation) regarding any changes in traffic control.

The Contractor shall be required to notify the Ogle County Highway Department and/or corresponding Township Commissioner for any sideroad closure or opening.

The mainline shall be closed for reconstruction using the details in the Plans and Traffic Control for Road Closure.

Placing and removing pavement marking shall be completed using Traffic Control and Protection Standard 701306, 701311 or 701701.

The right turn lane on Washington Street shall be closed using Traffic Control & Protection Standard 701701 and Road Closure Detail.

WORK ZONE PAVEMENT MARKING AND REMOVAL

Effective: December 29, 2008

This work shall consist of installing and removing temporary pavement marking according to Section 703 of the Standard Specifications and the following:

Paint pavement marking shall be used on the final wearing surface when the temporary pavement marking will conflict with the permanent pavement marking such as on tapers, crossovers and lane shifts.

All temporary paint on the final wearing surface shall be removed according to Article 1101.12 Water Blaster with Vacuum Recovery and the applicable portions of Section 703 of the Standard Specifications and as described herein.

Add the following paragraph to Article 1101.12 of the Standard Specifications.

For the high pressure water spray, the pressure at the nozzle shall be approximately 25,000 psi (172,000 kPa) with maximum flow rate of 15 gal/min (56 L/min). The nozzle shall be in close proximity to the pavement surface.

RAILROAD PROTECTIVE LIABILITY INSURANCE (5 AND 10) (BDE)

Effective: January 1, 2006

<u>Description</u>. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications, except the limits shall be a minimum of \$5,000,000 combined single limit per occurrence for bodily injury liability and property damage liability with an aggregate limit of \$10,000,000 over the life of the policy. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
Union Pacific (UP) Railroad 301 West Lake Street North Lake, Illinois 60164	0	55 Per Day at 40 MPH

Mr. John Venice, Manager of Public Projects

DOT/AAR No.: 175121G RR Mile Post: 74.98 RR Division: Chicago RR Sub-Division: Geneva

For Freight/Passenger Information Contact: Tom Haseltine Phone: 815-758-7139 For Insurance Information Contact: John Venice Phone: 708-649-5210

BNSF Railway 0 35 Per Day at 45 MPH

80-44th Avenue N.E.

Minneapolis, Minnesota 55421

Mr. Chad Scherwinski, Manager of Public Projects

DOT/AAR No.: 069800F RR Mile Post: 83.43 RR Division: Chicago RR Sub-Division: Aurora

For Freight/Passenger Information Contact: Greg Goy Phone: 815-289-1549 For Insurance Information Contact: Jamie Johnson Phone: 817-352-3485

Comments: Railroad Flaggers are required if working within 25 feet of the Railroad tracks.

<u>Approval of Insurance</u>. The original and one certified copy of each required policy shall be submitted to the following address for approval:

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

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

<u>Basis of Payment</u>. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

UNION PACIFIC RAILROAD MINIMUM REQUIREMENTS (FOR INFORMATION ONLY)

PART 1 – GENERAL

DESCRIPTION

This project includes construction work within the Right-of-Way and/or properties of the Union Pacific Railroad Company "UPRR" and adjacent to tracks, wire lines and other facilities. This section describes the special requirements for coordination with UPRR when work by the Contractor will be performed upon, over or under the UPRR Right-of-Way or may impact current or future UPRR operations. The Contractor will coordinate with UPRR while performing the work outlined in this Contract, and shall afford the same cooperation with UPRR as it does with the Agency. All submittals and work shall be completed in accordance with UPRR Guidelines and AREMA recommendations as modified by these minimum special requirements or as directed in writing by the UPRR Designated Representative.

For purposes of this project, the UPRR Designated Representative shall be the person or persons designated by the UPRR Manager of Industry and Public Projects to handle specific tasks related to the project.

DEFINITION OF AGENCY AND CONTRACTOR

As used in these UPRR requirements, the term "Agency" shall mean the Insert name of Political Entity.

As used in these UPRR requirements, the term "Contractor" shall mean the contractor or contractor's hired by the Agency to perform any project work on any portion of UPRR's property and shall also include the contractor's subcontractors and the contractor's and subcontractor's respective officer, agents and employees, and others acting under its or their authority.

UPRR CONTACTS

The primary UPRR point of contact for this project is:

Name

Manager Industry and Public Projects
Union Pacific Railroad Company
Address

Phone:

Fax:

For UPRR flagging services and track work, contact:

Name

Manager Track Maintenance
Union Pacific Railroad Company
Address

Phone:

Fax:

REQUEST FOR INFORMATION / CLARIFICATION

All Requests for Information ("RFI") involving work within any UPRR Right-Of-Way shall be in accordance with the procedures listed elsewhere in these bid documents. All RFI's shall be submitted to the Engineer of Record. The Engineer of Record will submit the RFI to the UPRR Designated Representative for review and approval for corresponding to work within the UPRR Right-Of-Way. The Contractor shall allow four (4) weeks for the review and approval process by UPRR.

PLANS / SPECIFICATIONS

The plans and specifications for this project, affecting the UPRR, are subject to the written approval by the UPRR and changes in the plans may be required after award of the Contract. Such changes are subject to the approval of the Agency and the UPRR.

PART 2 – UTILITIES AND FIBER OPTIC

All installations shall be constructed in accordance with current AREMA recommendations and UPRR specifications and requirements. UPRR general guidelines and the required application forms for utility installations can be found on the UPRR website at www.uprr.com.

GENERAL

Contractor shall perform all work in compliance with all applicable UPRR and FRA rules and regulations. Contractor shall arrange and conduct all work in such manner and at such times as shall not endanger or interfere with the safe operation of the tracks and property of UPRR and the traffic moving on such tracks, or the wires, signals and other property of UPRR, its tenants or licensees, at or in the vicinity of the work. UPRR shall be reimbursed by Contractor or Agency for train delay costs and lost revenue claims due to any delays or interruption of train operations resulting from Contractor's construction work or other activities.

Construction activities will be permitted within 12 feet of the centerline of operational tracks only if absolutely necessary and UPRR's Designated Representative grants approval. Construction activities within 12 feet of the operational track(s) must allow the tracks to stay operational.

Track protection is required for all work equipment (including rubber tired equipment) operating within 25 feet from nearest rail.

The Contractor is also advised that new railroad facilities within the project may be built by UPRR and that certain Contractor's activities cannot proceed until that work is completed.

The Contractor shall be aware of the limits of responsibilities and allow sufficient time in the schedule for that work to be accomplished and shall coordinate its efforts with the UPRR.

RAILROAD OPERATIONS

The Contractor shall be advised that trains and/or equipment are expected on any track, at any time, in either direction. Contractor shall become familiar with the train schedules in this location and structure its bid assuming intermittent track windows in this period, as defined in Paragraph B below.

All railroad tracks within and adjacent to the Contract Site are active, and rail traffic over these facilities shall be maintained throughout the Project. Activities may include both through moves and switching moves to local customers. Railroad traffic and operations will occur continuously throughout the day and night on these tracks and shall be maintained at all times as defined herein. The Contractor shall coordinate and schedule the work so that construction activities do not interfere with railroad operations.

Work windows for this Contract shall be coordinated with the Agency's and the UPRR's Designated Representatives. Types of work windows include Conditional Work Windows and Absolute Work Windows, as defined below:

Conditional Work Window: A Conditional Work Window is a period of time that railroad operations have priority over construction activities. When construction activities may occur on and adjacent to the railroad tracks within 25 feet of the nearest track, a UPRR flag person will be required. At the direction of the UPRR flag person, upon approach of a train, and when trains are present on the tracks, the tracks must be cleared (i.e., no construction equipment, materials or personnel within 25 feet, or as directed by the UPRR Designated Representative, from the tracks). Conditional Work Windows are available for the Project.

Absolute Work Window: An Absolute Work Window is a period of time that construction activities are given priority over railroad operations. During this time frame the designated railroad track(s) will be inactive for train movements and may be fouled by the Contractor. At the end of an Absolute Work Window the railroad tracks and/or signals must be completely operational for train operations and all UPRR, Public Utilities Commission (PUC) and Federal Railroad Administration (FRA) requirements, codes and regulations for operational tracks must be complied with. In the situation where the operating tracks and/or signals have been affected, the UPRR will perform inspections of the work prior to placing that track back into service. UPRR flag persons will be required for construction activities requiring an Absolute Work Window. Absolute Work Windows will not generally be granted. Any request will require a detailed explanation for UPRR review.

RIGHT OF ENTRY, ADVANCE NOTICE AND WORK STOPPAGES

A. Prior to beginning any work on or over the property of, or affecting the facilities of, the UPRR, the Contractor shall notify the primary railroad representative at least ten (10) working days in advance of such work and at least ten (10) working days in advance of proposed performance of any work by contractor in which any person or equipment will be within twenty-five (25) feet of any track or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach within twenty-five (25) feet of any track.

If the contractor will be on UPRR property outside the limits of the State's easements, Contractor shall enter into an agreement with the UPRR in the form of the "Contractor's Right of Entry Agreement", attached as Appendix, or latest version thereof provided by the UPRR. There is a fee for processing of the agreement. This cost shall be borne by the Contractor. Contractor shall submit a copy of the executed agreement and the insurance policies, binders, certificates and endorsements set forth therein to the Agency prior to commencing work on UPRR property. The right of entry agreement shall specify working time frames, flagging and inspection requirements, and any other items specified by the UPRR.

The Contractor shall give the advance notice to the UPRR as required above before commencing work in connection with construction upon or over UPRR's Right-of-Way and shall observe UPRR's rules and regulations with respect thereto.

All work upon UPRR's Right-of-Way shall be done at such times and in such manner so as not to interfere with or endanger the operations of UPRR. Whenever work may affect the operations or safety of trains, the method of doing such work shall first be submitted to UPRR's Designated Representative for approval, but such approval shall not relieve the Contractor from liability. Any work to be performed by the Contractor, which requires flagging and/or inspection service, shall be deferred until the flagging protection required by UPRR is available at the job site. See Section 3.18 for railroad flagging requirements.

The Contractor shall make requests in writing for both Absolute and Conditional Work Windows, at least two weeks in advance of any work. The written request must include:

Exactly what the work entails.

The days and hours that work will be performed.

The exact location of work, and proximity to the tracks.

The type of window requested and the amount of time requested.

The designated contact person.

The Contractor shall provide a written confirmation notice to the UPRR at least 48 hours before commencing work in connection with approved work windows when work will be performed within 25 feet of any track center line. All work shall be performed in accordance with previously approved work plans.

Should a condition arising from, or in connection with the work, require that immediate and unusual provisions be made to protect operations and property of UPRR, the Contractor shall make such provisions. If in the judgment of UPRR's Designated Representative such provisions are insufficient, the UPRR's Designated Representative may require or provide such provisions as deemed necessary. In any event, such provisions shall be at the Contractor's expense and without cost to the UPRR. UPRR or the Agency shall have the right to order Contractor to temporarily cease operations in the event of an emergency or, if in the opinion of the UPRR's Designated Representative, the Contractor's operations could endanger UPRR's operations. In the event such an order is given, Contractor shall immediately notify the Agency of the order.

INSURANCE

Contractor shall not begin work upon or over UPRR's Right-of-Way until UPRR has been furnished the insurance policies, binders, certificates and endorsements as defined in Section 3.20 below and UPRR's Designated Representative has advised the Agency that such insurance is in accordance with the Agreement.

The required insurance shall be kept in full force and effect during the performance of work and thereafter until Contractor removes all tools, equipment, and material from UPRR's property and cleans the premises in a manner reasonably satisfactory to UPRR. For the benefit of the Contractor and the Insurer(s), the current railroad traffic in the project area is estimated at train movements per day at a maximum speed of MPH.

RAILROAD SAFETY ORIENTATION

All personnel employed by the Contractor and all subcontractors must complete the UPRR course "Orientation for Contractor's Safety", and be registered prior to working on UPRR property. This orientation is available at www.contractororientation.com. This course is required to be completed annually.

COOPERATION

UPRR will cooperate with Contractor so that work may be conducted in an efficient manner, and will cooperate with Contractor in enabling use of UPRR's right-of-way in performing the work.

MINIMUM CONSTRUCTION CLEARANCES FOR FALSEWORK AND OTHER TEMPORARY STRUCTURES

The Contractor shall abide by the following minimum temporary clearances during the course of construction:

12' – 0" horizontal from centerline of track

21' – 6" vertically above top of rail.

For construction clearance less than listed above, local Operating Unit review and approval is required.

APPROVAL OF REDUCED CLEARANCES

The minimum track clearances to be maintained by the Contractor during construction are specified in Section 3.07 herein.

Any proposed infringement on the specified minimum clearances due to the Contractor's operations shall be submitted to UPRR's Designated Representative through the Agency at least 30 days in advance of the work and shall not be undertaken until approved in writing by the UPRR's Designated Representative.

No work shall commence until the Contractor receives in writing assurance from UPRR's Designated Representative that arrangements have been made for flagging service, as may be necessary and receives permission from UPRR's Designated Representative to proceed with the work.

CONSTRUCTION AND AS-BUILT SUBMITTALS

Submittals are required for construction materials and procedures as outlined below. The submittals shall include all review comments from the Agency and the Engineer of Record. All design submittals shall be stamped and signed by a Professional Engineer registered in the State of Illinois.

The tables below provide UPRR's minimum submittal requirements for the construction items noted. Submittal requirements are in addition to those specified elsewhere in these bid documents. The minimum review times indicated below represent UPRR's requirements only. The Contractor shall allow additional time for the Agency's review time as stated elsewhere in these bid documents.

Submittals shall be made by the Agency to the UPRR Manager of Industry and Public Projects unless otherwise directed by the Railroad. Items in Table 1 shall be submitted for both railroad overpass and underpass projects, as applicable. Items in Table 2 shall be submitted for railroad underpass projects only.

TABLE 1

ITEM DESCRIPTION		SETS	UPRR's Minimum
I I LIVI	TIEW DESCRIPTION	REQD.	Review Time
1	Shoring design and details	4	4 weeks
2	Falsework design and details	4	4 weeks
3	Drainage design provisions	4	4 weeks
4	Erection diagrams and sequence	4	4 weeks
5	Demolition diagram and sequence	4	4 weeks

Prior to or during construction of railroad underpass structures, the UPRR requires the review of drawings, reports, test data and material data sheets to determine compliance with the specifications. Product information for items noted in Table 2 be submitted to UPRR's Designated Representative through the Agency for their own review and approval of the material. The <u>signed</u> submittal and the Agency's review comments will be reviewed by UPRR or their consultant. If a consultant performs the reviews, the consultant may reply directly to the Agency or its Designated Representative after consultation with UPRR. Review of the submittals will not be conducted until after review by the Agency or its Designated Representative. Review of the submittal items will require a minimum of four (4) weeks after receipt from the Agency.

TABLE 2

ITEM	DESCRIPTION	SETS REQD.	NOTES	
1	Shop drawings	4	Steel and Concrete members	
2	Bearings	4	For entire structures	
3	Concrete Mix Designs	4	For entire structures	
4	Rebar & Strand certifications	4	For superstructure only	
5	28 day concrete strength	4	For superstructure only	
6	Waterproofing material certifications and installation procedure	4	Waterproofing & protective boards	
7	Structural steel certifications	4	All fracture critical members & other members requiring improved notch toughness	
8	Fabrication and Test reports	4	All fracture critical members & other members requiring improved notch toughness	
9	Welding Procedures and Welder Certification	4	AWS requirements	

10	Foundation Construction Reports	4	Pile driving, drilled shaft construction, bearing pressure test reports for spread footings
11	Compaction testing reports for backfill at abutments	4	Must meet 95% maximum dry density, Modified Proctor ASTM D1557

As-Built Records shall be submitted to the UPRR within 60 days of completion of the structures. These records shall consist of the following items:

Overpass Projects

Electronic files of all structure design drawings with as-constructed modifications shown, in Microstation J or Acrobat .PDF format.

Hard copies of all structure design drawings with as-constructed modifications shown.

Underpass Projects

Electronic files of all structure design drawings with as-constructed modifications shown, in Microstation J or Acrobat .PDF format.

Hard copies of all structure design drawings with as-constructed modifications shown.

Final approved copies of shop drawings for concrete and steel members.

Foundation Construction Reports

Compaction testing reports for backfill at abutments

APPROVAL OF DETAILS

The details of the construction affecting the UPRR tracks and property not already included in the Contract Plans shall be submitted to UPRR's Designated Representative through the Agency for UPRR's review and written approval before such work is undertaken. Review and approval of these submittals will require a minimum of four (4) weeks in addition to the Agency's review time as stated elsewhere in these bid documents.

MAINTENANCE OF RAILROAD FACILITIES

- A. The Contractor shall be required to maintain all ditches and drainage structures free of silt or other obstructions which may result from Contractor's operations; to promptly repair eroded areas within UPRR's right of way and to repair any other damage to the property of UPRR, or its tenants.
- B. All such maintenance and repair of damages due to the Contractor's operations shall be done at the Contractor's expense.
- C. The Contractor must submit a proposed method of erosion control and have the method reviewed by the UPRR prior to beginning any grading on the Project Site. Erosion control methods must comply with all applicable local, state and federal regulations.

SITE INSPECTIONS BY UPRR'S DESIGNATED REPRESENTATIVE

A. In addition to the office reviews of construction submittals, site inspections may be performed by UPRR's Designated Representative at significant points during construction, including but not limited to the following:

Preconstruction meetings.

Pile driving, drilling of caissons or drilled shafts.

Reinforcement and concrete placement for railroad bridge substructure and/or superstructure.

Erection of precast concrete or steel bridge superstructure.

Placement of waterproofing (prior to placing ballast on bridge deck).

Completion of the bridge structure.

- B. Site inspection is not limited to the milestone events listed above. Site visits to check progress of the work may be performed at any time throughout the construction as deemed necessary by UPRR.
- C. A detailed construction schedule, including the proposed temporary horizontal and vertical clearances and construction sequence for all work to be performed, shall be provided to the Agency for submittal to UPRR's Designated Representative for review prior to commencement of work. This schedule shall also include the anticipated dates when the above listed events will occur. This schedule shall be updated for the above listed events as necessary, but at least monthly so that site visits may be scheduled.

UPRR REPRESENTATIVES

A. UPRR representatives, conductors, flag person or watch person will be provided by UPRR at expense of the Agency or Contractor (as stated elsewhere in these bid documents) to protect UPRR facilities, property and movements of its trains or engines. In general, UPRR will furnish such personnel or other protective services as follows:

When any part of any equipment is standing or being operated within 25 feet, measured horizontally, from centerline of any track on which trains may operate, or when any object is off the ground and any dimension thereof could extend inside the 25 foot limit, or when any erection or construction activities are in progress within such limits, regardless of elevation above or below track.

For any excavation below elevation of track subgrade if, in the opinion of UPRR's Designated Representative, track or other UPRR facilities may be subject to settlement or movement.

During any clearing, grubbing, excavation or grading in proximity to UPRR facilities, which, in the opinion of UPRR's Designated Representative, may endanger UPRR facilities or operations.

During any contractor's operations when, in the opinion of UPRR's Designated Representative, UPRR facilities, including, but not limited to, tracks, buildings, signals, wire lines, or pipe lines, may be endangered.

The Contractor shall arrange with the UPRR Designated Representative to provide the adequate number of flag persons to accomplish the work.

WALKWAYS REQUIRED

Along the outer side of each exterior track of multiple operated track, and on each side of single operated track, an unobstructed continuous space suitable for trainman's use in walking along trains, extending to a line not less than twelve feet (12') from centerline of track, shall be maintained. Any temporary impediments to walkways and track drainage encroachments or obstructions allowed during work hours while UPRR's flagman service is provided shall be removed before the close of each work day. Walkways with railings shall be constructed by Contractor over open excavation areas when in close proximity of track, and railings shall not be closer than 8' - 6" horizontally from center line of tangent track or 9' - 6" horizontally from centerline of curved track.

COMMUNICATIONS AND SIGNAL LINES

If required, UPRR will rearrange its communications and signal lines, its grade crossing warning devices, train signals and tracks, and facilities that are in use and maintained by UPRR's forces in connection with its operation at expense of the Agency. This work by UPRR will be done by its own forces and it is not a part of the Work under this Contract.

TRAFFIC CONTROL

Contractor's operations that control traffic across or around UPRR facilities shall be coordinated with and approved by the UPRR's Designated Representative.

CONSTRUCTION EXCAVATIONS

The Contractor shall be required to take special precaution and care in connection with excavating and shoring. Excavations for construction of footings, piers, columns, walls or other facilities that require shoring shall comply with requirements of OSHA, AREMA and UPRR "Guidelines for Temporary Shoring".

B. The Contractor shall contact UPRR's "Call Before Your Dig" at least 48 hours prior to commencing work at 1-800-336-9193 during normal business hours (6:30 a.m. to 8:00 p.m. central time, Monday through Friday, except holidays - also a 24 hour, 7 day a week number for emergency calls) to determine location of fiber optics. If a telecommunications system is buried anywhere on or near UPRR property, the Contractor will co-ordinate with UPRR and the Telecommunication Company(ies) to arrange for relocation or other protection of the system prior to beginning any work on or near UPRR property.

RAILROAD FLAGGING

A. Performance of any work by the Contractor in which person(s) or equipment will be within twenty-five (25) feet of any track, or will be near enough to any track that any equipment extension (such as, but not limited to, a crane boom) will reach within twenty-five (25) feet of any track, may require railroad flagging services or other protective measures. Contractor shall give the advance notice to the UPRR as required in Section 3.03 above before commencing any such work, so that the UPRR may determine the need for flagging or other protective measures to ensure the safety of the railroad's operations.

Contractor shall comply with all other requirements regarding flagging as specified by Union Pacific. Any costs associated with failure to abide by these requirements will be borne by the Contractor.

Reimbursement to Railroad will be required covering the full eight-hour day during which any flagman is furnished, unless the flagman can be assigned to other Railroad work during a portion of such day, in which event reimbursement will not be required for the portion of the day during which the flagman is engaged in other Railroad work. Reimbursement will also be required for any day not actually worked by the flagman following the flagman's assignment to work on the project for which Railroad is required to pay the flagman and which could not reasonably be avoided by Railroad by assignment of such flagman to other work, even though Contractor may not be working during such time. When it becomes necessary for Railroad to bulletin and assign an employee to a flagging position in compliance with union collective bargaining agreements, Contractor must provide Railroad a minimum of five (5) days notice prior to the cessation of the need for a flagman. If five (5) days notice of cessation is not given, Contractor will still be required to pay flagging charges for the five (5) day notice period required by union agreement to be given to the employee, even though flagging is not required for that period. An additional ten (10) days notice must then be given to Railroad if flagging services are needed again after such five day cessation notice has been given to Railroad. The estimated pay rate for each flag person is \$ per day for an 8 hour work day with time and one-half for overtime, Saturdays, Sundays; double time and one-half for holidays. Flagging rates are set by the UPRR and are subject to change.

CLEANING OF RIGHT-OF-WAY

Contractor shall, upon completion of the work to be performed by Contractor upon the premises, over or beneath the tracks of UPRR, promptly remove from the Right-of-Way of UPRR all of Contractor's tools, implements, and other materials whether brought upon the Right-of-Way by Contractor or any subcontractors, employee or agent of Contractor or of any subcontractor, and leave the Right-of-Way in a clean and presentable condition to satisfaction of UPRR.

INSURANCE PROVISIONS

Contractor shall, at its sole cost and expense, procure and maintain during the course of the Project and until all Project work on Railroad's property has been completed and the Contractor has removed all equipment and materials from the Railroad's property and has cleaned and restored Railroad's property to Railroad's satisfaction, the following insurance coverage:

A. <u>Commercial General Liability</u> insurance. Commercial general liability (CGL) with a limit of not less than \$5,000,000 each occurrence and an aggregate limit of not less than \$10,000,000. CGL insurance must be written on ISO occurrence form CG 00 01 12 04 (or a substitute form providing equivalent coverage).

The policy must also contain the following endorsement, which must be stated on the certificate of insurance:

Contractual Liability Railroads ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage) showing "Union Pacific Railroad Company Property" as the Designated Job Site.

B. <u>Business Automobile Coverage</u> insurance. Business auto coverage written on ISO form CA 00 01 (or a substitute form providing equivalent liability coverage) with a combined single limit of not less \$5,000,00 for each accident.

The policy must contain the following endorsements, which must be stated on the certificate of insurance:

Coverage For Certain Operations In Connection With Railroads ISO form CA 20 70 10 01 (or substitute form providing equivalent coverage) showing "Union Pacific Property" as the Designated Job Site.

Motor Carrier Act Endorsement – Hazardous materials clean up (MCS-90) if required by law.

C. <u>Workers Compensation and Employers Liability</u> insurance. Coverage must include but not be limited to:

Contractor's statutory liability under the workers' compensation laws of the state(s) affected by this Agreement.

Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 disease policy limit \$500,000 each employee.

If Contractor is self-insured, evidence of state approval and excel workers compensation coverage must be provided. Coverage must include liability arising out of the U.S. Longshoremen's and Harbor Workers' Act, the Jones Act, and the Outer Continental Shelf Land Act, if applicable.

The policy must contain the following endorsement, which must be stated on the certificate of insurance:

Alternate Employer endorsement ISO form WC 00 03 01 A (or a substitute form providing equivalent coverage) showing Railroad in the schedule as the alternate employer (or a substitute form providing equivalent coverage).

- D. <u>Railroad Protective Liability</u> insurance. Contractor must maintain Railroad Protective Liability insurance written on ISO occurrence form CG 00 35 12 04 (or a substitute form providing equivalent coverage) on behalf of Railroad as named insured, with a limit of not less than \$5,000,000 per occurrence and an aggregate of \$10,000,000. A binder stating the policy is in place must be submitted to Railroad before the work may be commenced and until the original policy is forwarded to Railroad.
- E. <u>Umbrella or Excess</u> insurance. If Contractor utilizes umbrella or excess policies, these policies must "follow form" and afford no less coverage than the primary policy.
- F. <u>Pollution Liability</u> insurance. Pollution liability coverage must be written on ISO form Pollution Liability Coverage Form Designated Sites CG 00 39 12 04 (or a substitute form providing equivalent liability coverage), with limits of at least \$5,000,000 per occurrence and an aggregate limit of \$10,000,000.

If the scope of work as defined in this Agreement includes the disposal of any hazardous or non-hazardous materials from the job site, Contractor must furnish to Railroad evidence of pollution legal liability insurance maintained by the disposal site operator for losses arising form the insured facility accepting the materials, with coverage in minimum amounts of \$1,000,000 per loss, and an annual aggregate of \$2,000,000.

Other Requirements

- G. All policy(ies) required above (except worker's compensation and employers liability) must include Railroad as "Additional Insured" using ISO Additional Insured Endorsements CG 20 26, and CA 20 48 (or substitute forms providing equivalent coverage). The coverage provided to Railroad as additional insured shall, to the extent provided under ISO Additional Insured Endorsement CG 20 26, and CA 20 48 provide coverage for Railroad's negligence whether sole or partial, active or passive, and shall not be limited by Contractor's liability under the indemnity provisions of this Agreement.
- H. Punitive damages exclusion, if any, must be deleted (and the deletion indicated on the certificate of insurance), unless the law governing this Agreement prohibits all punitive damages that might arise under this Agreement.
- I. Contractor waives all rights of recovery, and its insurers also waive all rights of subrogation of damages against Railroad and its agents, officers, directors and employees. This waiver must be stated on the certificate of insurance.
- J. Prior to commencing the work, Contractor shall furnish Railroad with a certificate(s) of insurance, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements in this Agreement.
- K. All insurance policies must be written by a reputable insurance company acceptable to Railroad or with a current Best's Insurance Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the work is to be performed.
- L. The fact that insurance is obtained by Contractor or by Railroad on behalf of Contractor will not be deemed to release or diminish the liability of Contractor, including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad from Contractor or any third party will not be limited by the amount of the required insurance coverage.

END OF SECTION

BNSF / CONTRACTOR AGREEMENT

LAW DEPARTMENT APPROVED

EXHIBIT A

Railway File:

C-1

Agreement
Between
BNSF RAILWAY COMPANY
and the
CONTRACTOR

BNSF RAILWAY COMPANY Attention: Manager Public Projects

Agency Project:
Gentlemen:
The undersigned (hereinafter called, the "Contractor"), has entered into a contract (the "Contract")dated, 200_, [***Drafter's Note: insert the date of the contract between the Agency and the Contractor here] with
between the Agency and the Contractor here] with [Drafter's Note: insert the name of the Agency here] for the performance of certain work in connection
with the following project Performance of such work will
necessarily require contractor to enter BNSF RAILWAY COMPANY ("Railway") right of way and
property ("Railway Property"). The Contract provides that no work will be commenced within
Railway Property until the Contractor employed in connection with said work for
[insert Agency name here] (i) executes and delivers to Railway an
Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in
such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the
Owner, General Partner, President or Vice President of Contractor, Contractor must furnish
evidence to Railway certifying that the signatory is empowered to execute this Agreement on
behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Contract, has agreed and does hereby agree with Railway as follows:

Section 1. RELEASE OF LIABILITY AND INDEMNITY

Contractor hereby waives, releases, indemnifies, defends and holds harmless Railway for all judgments, awards, claims, demands, and expenses (including attorneys' fees), for injury or death to all persons, including Railway's and Contractor's officers and employees, and for loss and damage to property belonging to any person, arising in any manner from Contractor's or any of Contractor's subcontractors' acts or omissions or any work performed on or about Railway's property or right-of-way. THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT THE DESTRUCTION, DAMAGE, DEATH, OR INJURY WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, EXCEPT TO THE EXTENT THAT SUCH CLAIMS ARE PROXIMATELY CAUSED BY THE INTENTIONAL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY. [Note to Drafter: Check with appropriate local counsel to ensure that the indemnity language is enforceable. In California, replace the word "INTENTIONAL" in the last sentence with the word "WILLFUL". Further, replace the word "GROSS" in the last sentence with the word "SOLE".]

THE INDEMNIFICATION OBLIGATION ASSUMED BY CONTRACTOR INCLUDES ANY CLAIMS, SUITS OR JUDGMENTS BROUGHT AGAINST RAILWAY UNDER THE FEDERAL EMPLOYEE'S LIABILITY ACT, INCLUDING CLAIMS FOR STRICT LIABILITY UNDER THE SAFETY APPLIANCE ACT OR THE BOILER INSPECTION ACT, WHENEVER SO CLAIMED.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all claims made against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising or growing out of or in any manner connected with any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all damages, judgments, decrees, attorney's fees, costs, and expenses growing out of or resulting from or incident to any such claims or suits.

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

Section 2. TERM

This Agreement is effective from the date of the Contract until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

Section 3. INSURANCE

Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

Commercial General Liability insurance. This insurance must contain broad form contractual liability with a combined single limit of a minimum of \$2,000,000 each occurrence and an aggregate limit of at least \$4,000,000. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limit to the following:

Bodily Injury and Property Damage Personal Injury and Advertising Injury Fire legal liability Products and completed operations

This policy must also contain the following endorsements, which must be indicated on the certificate of insurance:

It is agreed that any workers' compensation exclusion does not apply to *Railroad* payments related to the Federal Employers Liability Act or a *Railroad* Wage Continuation Program or similar programs and any payments made are deemed not to be either payments made or obligations assumed under any Workers Compensation, disability benefits, or unemployment compensation law or similar law.

The definition of insured contract must be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.

Any exclusions related to the explosion, collapse and underground hazards must be removed.

No other endorsements limiting coverage as respects obligations under this_Agreement may be included on the policy.

B. Business Automobile Insurance. This insurance must contain a combined single limit of at least \$1,000,000 per occurrence, and include coverage for, but not limited to the following:

Bodily injury and property damage Any and all vehicles owned, used or hired

C. Workers Compensation and Employers Liability insurance including coverage for, but not limited to:

______'s statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.

Employers' Liability (Part B) with limits of at least \$500,000 each accident, \$500,000 by disease policy limit, \$500,000 by disease each employee.

Railroad Protective Liability insurance naming only the *Railroad* as the Insured with coverage of at least \$2,000,000 per occurrence and \$6,000,000 in the aggregate. The policy Must be issued on a standard ISO form CG 00 35 10 93 and include the following:

Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)

Endorsed to include the Limited Seepage and Pollution Endorsement.

Endorsed to remove any exclusion for punitive damages.

No other endorsements restricting coverage may be added.

The original policy must be provided to the *Railroad* prior to performing any work or services under this Agreement

Other Requirements:

All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.

Contractor agrees to waive its right of recovery against *Railroad* for all claims and suits against *Railroad*. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against *Railroad* for all claims and suits. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against *Railroad* for loss of its owned or leased property or property under contractor's care, custody or control.

Contractor's insurance policies through policy endorsement, must include wording which states that the policy is primary and non-contributing with respect to any insurance carried by *Railroad*. The certificate of insurance must reflect that the above wording is included in evidenced policies.

All policy(ies) required above (excluding Workers Compensation and if applicable, Railroad Protective) must include a severability of interest endorsement and *Railroad* must be named as an additional insured with respect to work performed under this agreement. Severability of interest and naming *Railroad* as additional insured must be indicated on the certificate of insurance.

Contractor is not allowed to self-insure without the prior written consent of *Railroad*. If granted by *Railroad*, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by contractor in lieu of insurance. Any and all *Railroad* liabilities that would otherwise, in accordance with the provisions of this *Agreement*, be covered by contractor's insurance will be covered as if contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing the Work, contractor must furnish to *Railroad* an acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments and referencing the contract audit/folder number if available. The policy(ies) must contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify *Railroad* in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision must be indicated on the certificate of insurance. Upon request from *Railroad*, a certified duplicate original of any required policy must be furnished. Contractor should send the certificate(s) to the following address:

BNSF RAILWAY COMPANY
P.O. Box 12010-BN
Hemet, California 92546-8010
Fax: 909-766-2299

Any insurance policy must be written by a reputable insurance company acceptable to **Railroad** or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provide.

Contractor represents that this *Agreement* has been thoroughly reviewed by contractor's insurance agent(s)/broker(s), who have been instructed by contractor to procure the insurance coverage required by this *Agreement*. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, *Railroad* may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by contractor, contractor must require that the subcontractor provide and maintain the insurance coverages set forth herein, naming *Railroad* as an additional insured, and requiring that the subcontractor release, defend and indemnify *Railroad* to the same extent and under the same terms and conditions as contractor is required to release, defend and indemnify *Railroad* herein.

Failure to provide evidence as required by this section will entitle, but not require, *Railroad* to terminate this *Agreement* immediately. Acceptance of a certificate that does not comply with this section will not operate as a waiver of contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by contractor will not be deemed to release or diminish the liability of contractor including, without limitation, liability under the indemnity provisions of this **Agreement**. Damages recoverable by **Railroad** will not be limited by the amount of the required insurance coverage.

For purposes of this section, *Railroad* means "Burlington Northern Santa Fe Corporation", "BNSF RAILWAY COMPANY" and the subsidiaries, successors, assigns and affiliates of each.

Section 4. EXHIBIT "C" CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Contract, and the Contractor Requirements set forth on Exhibit "C" attached to the Contract and this Agreement, , including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site.

Section 5. TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. Damages for train delay for certain trains may be as high as \$50,000.00 per incident.

Contractor and its subcontractors must give Railway's representative (_____) ____ weeks advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

Kindly acknowledge receipt of this letter by signing and returning to the Railway two original copies of this letter, which, upon execution by Railway, will constitute an Agreement between us.

(Contractor)	BNSF Railway Co	mpany	-
By: By: Printed			 Name:
Name: Title:			
	on:	•	ed and effective thisday of 20
City:	State:	Zip:	
Fax:			
Phone:			
E-mail:			

ENGINEER'S FIELD OFFICE TYPE A

Effective: June 1, 2009

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 x 72 in. (1.2 x 1.8 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) Two 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. Two separate telephone lines, one to be set up for the exclusive use of the State supplied fax machine.
- (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 telephone, with touch tone, where available, and a digital telephone answering machine, for exclusive use by the Engineer.
- (I) Cellular phone with a minimum of 500 anytime calling minutes per month for use by the site resident engineer/technician.
- (m) One electric water cooler dispenser.
- (n) One first-aid cabinet fully equipped.
- (o) One post mounted rain gauge, located on the project site for each 5 miles (8 km) of project length."

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."

PROTECTIVE COAT (SPECIAL)

This work consists of applying a protective coat system as specified herein, on concrete parapet surfaces as shown on the plans and as directed by the Engineer.

<u>Materials</u>. The concrete coating shall meet the following material requirements:

Color – Grev

Texture – Smooth

Type – One-component, elastomeric, crack-bridging, anti-carbonation, water vapor permeable, acrylic protective coating.

Weather Resistance – The product shall be intended for exterior applications.

Acceptance of the product will be based on the Manufacturer's Technical data Sheet or a letter from the Manufacturer stating the product meets the Department's material specifications.

- A. Properties of the elastomeric acrylic coating:
 - 1. Pot Life. Indefinite
 - 2. Moisture Vapor permeability (ASTM E96) 14.5 perms.
 - 3. Tensile Properties (ASTM D-412 Modified) Elongation at break 700% min. at 73°F (23°C) 300% min. at 0°F (-18°C)
 - 4. Resistance to wind-driven rain (TT-C-555B): No passage of water through coating.
 - 5. Weathering (ASTM G-23) 10,000 hours excellent, no chalking or cracking.

Construction. The concrete surface to be coated shall be sound, dry and clean of any foreign material. Surface Preparation shall be according to the Manufacturer's specifications, except blast cleaning or power washing (3,000 psi min.) will be required. If the surface becomes soiled as determined by the Engineer, after either the initial cleaning or after the first coating, the Contractor shall clean the surface at no additional cost to the Department. Crack and surface defect repairs to the existing concrete parapet shall be performed prior to coating according to the Special Provision for "Surface Filler (Special)". Mixing, application, and curing of the coating shall be according to the manufacturer's specifications, except application by spraying will not be allowed. A manufacturer's technical representative shall be present on the first day of the surface preparation operations and the first day of coating operations to ensure correct interpretation of the Manufacturer's specifications.

Do not apply material if it is raining or snowing, or if such conditions are imminent. Minimum application temperature 40°F (5°C) and rising.

The protective coat shall be applied in two coats. The application rate per coat shall produce a dry film thickness between 200-280 microns (8-11 mils). The final dry film thickness of protective coat system shall be between 400-560 microns (16 and 22 mils). Any additional coatings or removal of coatings to stay within the total system range shall be the Contractor's responsibility and shall be accomplished at no additional cost to the Department.

The Contractor shall protect pedestrian, vehicular, watercraft, or other traffic upon or underneath the structure and/or roadway and also all portions of the structure and/or roadway against damage or disfigurement during surface preparation and protective coat operations. When doing surface preparation or applying the protective coat over waterways, the Contractor shall implement such controls as are necessary to avoid contamination of the water, spills into the water, or films from collecting on the water surface during operations. If the Engineer determines that the protection methods are not effective, the Engineer will withdraw approval of operations until such time when protective measures are approved.

Method of Measurements. This work will be measured for payment and the area computed in square meters (square yards) of parapet wall surface covered, complete in place.

Basis of Payment. The protective coat will be paid for at the contract unit price per square yard for PROTECTIVE COAT (SPECIAL), which price shall include the furnishing of all materials, surface preparation, and the application of the protective coat as specified.

REMOVAL OF EXISTING BEARINGS

<u>Description</u>: This work consists of furnishing all labor, tools and equipment for removing bearing assemblies. The Contractor shall furnish all materials and equipment necessary for safe and proper execution of the work. The Contractor shall remove and dispose of the bearings according to Article 501.05 of the Standard Specifications.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price each for REMOVAL OF EXISTING BEARINGS.

APPROACH SLAB REPAIR

<u>Description</u>. This work shall consist of hot-mix asphalt surface removal, when required, the removal and disposal of all loose and deteriorated concrete and the replacement with new concrete to the original top of approach slab. The work shall be done according to the applicable requirements of Sections 501, 503 and 1020 of the Standard Specifications and this Special Provision.

All reference to Approach Slab Repair shall also mean Approach Pavement Repair.

Approach slab repairs will be classified as follows:

- (a) Partial-Depth. Partial-depth repairs shall consist of removing the loose and unsound approach slab concrete, disposing of the concrete removed and replacing with new concrete. The removal may be performed by chipping with power driven hand tools or by hydro-equipment. The depth shall be measured from the original concrete surface, at least 3/4 inch (20 mm) but not more than 5 1/2 inches (140 mm) unless otherwise specified on the plans.
- (b) Full-Depth. Full-depth repairs shall consist of removing concrete full-depth of the slab, disposing of the concrete removed, and replacing with new concrete to the original approach slab surface. The removal may be performed with power driven hand tools or by hydro-equipment.

Materials. All materials shall be according to Article 1020.02.

Portland cement concrete for partial and full-depth repairs shall be according to Section 1020. Class PP-1, PP-2, PP-3, or PP-4 concrete shall be used at the Contractor's option.

Grout. The grout for bonding new concrete to old concrete shall be proportioned by mass (weight) and mixed at the job site, or it may be ready-mixed if agitated while at the job site. The bonding grout shall consist of one part portland cement_and one part_sand, mixed with sufficient water to form a slurry. The bonding grout shall have a consistency allowing it to be scrubbed onto the prepared surface with a stiff brush or broom leaving a thin, uniform coating that will not run or puddle in low spots. Grout that can not be easily and evenly applied or has lost its consistency may be rejected by the Engineer. Grout that is more than two hours old shall not be used.

<u>Equipment</u>. The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

- (a) Surface Preparation Equipment. Surface preparation and concrete removal equipment shall comply with the applicable portions of Section 1100 of the Standard Specifications and the following:
 - (1) Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
 - (2) Blast Cleaning Equipment. The blast cleaning may be performed by wet sandblasting, high-pressure waterblasting, abrasive blasting, or other methods approved by the Engineer. Blast cleaning equipment shall be capable of removing rust and old concrete from exposed reinforcement bars. Oil traps will be required.
 - (3) Power-Driven Hand Tools. Power-driven hand tools will be permitted including jackhammers lighter than the nominal 45 pound (20 kg.) class. Chipping hammers heavier than a nominal 15 pound (6.8 kg.) class shall not be used for removing concrete from below any reinforcing bar for partial depth repairs or final removal at the boundary of full-depth repairs. Jackhammers or chipping hammers shall not be operated at an angle in excess of 45 degrees measured from the surface of the slab.
 - (4) Hydro-Scarification Systems. The hydro-scarification equipment shall consist of filtering and pumping units operating with a remote-controlled robotic device. The equipment may use river, stream or lake water. Operation of the equipment shall be performed and supervised by qualified personnel certified by the equipment manufacturer. Evidence of certification shall be presented to the Engineer. The equipment shall be capable of removing concrete to the specified depth and removing rust and concrete particles from exposed reinforcing bars. Hydro-scarification equipment shall be calibrated before being used and shall operate at a minimum of 18,000 psi (124 MPa).
- (b) Concrete Equipment: Equipment for proportioning and mixing the concrete shall comply with the applicable requirements of Section 1103 of the Standard Specifications.
- (c) Placing and Finishing Equipment: Placing and finishing equipment shall be according to Article 1103.17 of the Standard Specifications. Adequate hand tools will be permitted for placing and consolidating concrete in the patch areas and for finishing small patches.

<u>Construction Requirements</u>. Sidewalks, curbs, drains, reinforcement and/or existing transverse and longitudinal joints which are to remain in place shall be protected from damage during removal and cleaning operations. All damage caused by the Contractor shall be corrected, at the Contractor's expense, to the satisfaction of the Engineer.

The Contractor shall control the runoff water generated by the various construction activities in such a manner as to minimize, to the maximum extent practicable, the discharge of construction debris into adjacent waters, and shall properly dispose of the solids generated according to Article 202.03. Runoff water will not be allowed to constitute a hazard on adjacent or underlying roadways, waterways, drainage areas or railroads nor be allowed to erode existing slopes.

(a) Hot-Mix Asphalt Surface Removal.

The hot-mix asphalt surface course shall be removed and disposed of according to applicable portions of Articles 440.04 and 440.06 of the Standard Specifications. If the overlay contains asbestos fibers, removal shall be according to the Special Provision for "Asbestos Waterproofing Membrane or Asbestos Bituminous Concrete Surface Removal". Removal of the hot-mix asphalt surface by the use of radiant or direct heat will not be permitted.

(b) Surface Preparation:

All loose, disintegrated and unsound concrete shall be removed from portions of the approach slab shown on the plans or as designated by the Engineer. The Engineer will determine the limits of removal as the work progresses.

The Contractor shall take care not to damage reinforcement bars or expansion joints which are to remain in place. Any damage to reinforcement bars or expansion joints shall be corrected at the Contractor's expense. All loose reinforcement bars, as determined by the Engineer, shall be retied at the Contractor's expense.

(1) Partial-Depth. Areas to be repaired will be determined and marked by the Engineer. A concrete saw shall be used to provide vertical edges approximately 3/4 inch (20 mm) deep around the perimeter of the area to be patched when an overlay is not specified. Where high steel is present, the depth may be reduced as directed by the Engineer. A saw cut will not be required on those boundaries along the face of the curb, parapet or joint or when sharp vertical edges are provided by hydroscarification.

The loose and unsound concrete shall be removed by chipping, with power driven hand tools or by hydro-equipment. All exposed reinforcing bars and newly exposed concrete shall be thoroughly blast cleaned. Where, in the judgment of the Engineer, the bond between existing concrete and reinforcement steel within the patch area has been destroyed, the concrete adjacent to the bar shall be removed to a depth that will permit new concrete to bond to the entire periphery of the exposed bar. A minimum of 1 inch (25 mm) clearance will be required. The Engineer may require enlarging a designated removal area should inspection indicate deterioration beyond the limits previously designated. In this event, a new saw cut shall be made around the extended area before additional removal is begun. The removal area shall not be enlarged solely to correct debonded reinforcement or deficient lap lengths.

(2) Full-Depth. Concrete shall be removed as determined by the Engineer within all areas designated for full-depth repair and in all designated areas of partial depth repair in which unsound concrete is found to extend below a depth of 5 1/2 inches (140 mm) unless otherwise specified on the plans. Full depth removal shall be performed according to Article 501.05 of the Standard Specifications. A concrete saw shall be used to provide vertical edges approximately 3/4 inch (20 mm) deep around the perimeter of the area to be patched when an overlay is not specified. A saw cut will not be required on those boundaries along the face of the curb, parapet or joint or when sharp vertical edges are provided by hydro-scarification. The saw cut may be omitted if the deck is to receive an overlay.

All voids under full depth repair areas shall be filled with a suitable material that meets the approval of the Engineer.

- (3) Reinforcement Treatment. Care shall be exercised during concrete removal to protect the reinforcement bars from damage. Any damage to the reinforcement bars to remain in place shall be repaired or replaced to the satisfaction of the Engineer at the Contractor's expense. All existing reinforcement bars shall remain in place except as herein provided for corroded bars. Tying of loose bars will be required. Any existing reinforcement bars which have a loss of more than 25% of their cross section through corrosion shall be replaced in kind with new steel as directed by the Engineer. No welding of bars will be permitted and new bars shall be lapped a minimum of 32 bar diameters to existing bars. An approved "squeeze type" mechanical bar splicer capable of developing in tension at least 125 percent of the yield strength of the existing bar shall be used when it is not feasible to provide the minimum bar lap.
- (4) Cleaning. Immediately after completion of the concrete removal and reinforcement repairs, the repair areas shall be cleaned of dust and debris. Once the initial cleaning is completed, the repair areas shall be thoroughly blast cleaned to a roughened appearance free from all foreign matter. Particular attention shall be given to removal of concrete fines. Any method of cleaning which does not consistently produce satisfactory results shall be discontinued and replaced by an acceptable method. All debris, including water, resulting from the blast cleaning shall be confined and shall be immediately and thoroughly removed from all areas of accumulation. If concrete placement does not follow immediately after the final cleaning, the area shall be carefully protected with well-anchored polyethylene sheeting.

Exposed reinforcement bars shall be free of dirt, detrimental scale, paint, oil, or other foreign substances which may reduce bond with the concrete. A tight non-scaling coating of rust is not considered objectionable. Loose, scaling rust shall be removed by rubbing with burlap, wire brushing, blast cleaning or other methods approved by the Engineer.

(c) Placement & Finishing of Concrete Repair:

(1) Grout Placement. After the repair areas have been cleaned and immediately prior to concrete placement, the grout shall be applied to a dampened surface. A thin layer of grout shall be thoroughly scrubbed into the deck surface. All vertical as well as horizontal surfaces shall receive a thorough, even coating. The rate of grout placement shall be limited so the brushed grout does not dry out before it is covered with concrete. Grout that has become dry and chalky shall be blast cleaned and replaced at the Contractor's expense. No concrete shall be placed over dry grout.

(2) Concrete Placement.

The concrete shall be placed and compacted according to Article 503.07 of the Standard Specifications and as herein specified. Article 1020.14 shall apply, except for the requirement to use an approved retarding admixture when the plastic concrete reaches 85 $^{\circ}$ F (30 $^{\circ}$ C).

When an overlay system is not specified, the patches shall be finished according to Article 503.16 of the Standard Specifications, followed by a light brooming.

(d) Curing.

Concrete patches shall be cured by the Wetted Burlap Method according to Article 1020.13 (a)(3), and the curing period shall be 72 hours. In addition to Article 1020.13, when the air temperature is less than 55 °F (13 °C), the Contractor shall cover the patch with minimum R12 insulation. Insulation is optional when the air temperature is 55 °F – 90 °F (13 °C – 32 °C). Insulation shall not be placed when the air temperature is greater than 90 °F (32 °C). A 72-hour minimum drying period shall be required before placing waterproofing or hot-mix asphalt surfacing.

(e) Opening to Traffic.

No traffic or construction equipment will be permitted on the repairs until after the specified cure period and the concrete has obtained a minimum compressive strength of 4000 psi (27.6 MPa) or flexural strength of 675 psi (4.65 MPa) unless permitted by the Engineer.

Construction equipment will be permitted on a patch during the cure period if the concrete has obtained the minimum required strength. In this instance, the strength specimens shall be cured with the patch.

<u>Method of Measurement</u>. When specified, hot-mix asphalt surface removal and full or partial depth repairs will be measured for payment and computed in square yards (square meters).

<u>Basis of Payment</u>. The hot-mix asphalt surface removal will be paid for at the contract unit price per square yard (square meter) for HOT-MIX ASPHALT SURFACE REMOVAL (DECK). Areas removed and replaced up to and including a depth of 5 1/2 inches (140 mm) or as specified will be paid for at the contract unit price per square yard (square meter) for APPROACH SLAB REPAIR (PARTIAL DEPTH). Areas requiring removal greater than a depth of 5 1/2 inches (140 mm) shall be removed and replaced full depth and will be paid for at the contract unit price per square yard (square meter) for APPROACH SLAB REPAIR (FULL DEPTH).

When corroded reinforcement bars are encountered in the performance of this work and replacement is required, the Contractor will be paid according to Article 109.04 of the Standard Specifications.

No payment will be allowed for removal and replacement of reinforcement bars damaged by the Contractor in the performance of his/her work or for any increases in dimensions needed to provide splices for these replacement bars.

Removal and disposal of asbestos waterproofing and/or asbestos hot-mix asphalt will be paid for as specified in the Special Provision for "Asbestos Waterproofing Membrane or Asbestos Bituminous Concrete Surface Removal".

WASHING AND CLEANING

<u>Description</u>. This work shall consist of power washing concrete surfaces with water and solvents as necessary to restore water-stained discolored concrete to like-new appearance.

Materials. Water shall be according to Section 1002 of the Standard Specifications.

The solvents used shall conform with air and water pollution regulations applicable to the jurisdiction where the work site is located and also conform to applicable safety and health regulations. Additives might include detergents and/or sodium bicarbonate, etc. provided they conform to safety requirements specified herein.

<u>Equipment.</u> All equipment shall be according to the applicable requirements of Section 592 of the Standard Specifications except as modified herein.

<u>Construction Requirements.</u> All work, including traffic control and worker safety, shall be according to the applicable requirements of Section 592 of the Standard Specifications except as modified herein.

Discolored areas may be cleaned by watersetting, water cleaning, methods in accordance with N.A.C.E. No. 6/5 SPC SP. 13 with additives, or by another method agreed upon by the Engineer.

In no case shall the force of cleaning be strong enough to remove any concrete.

<u>Method of Measurement.</u> This work will be measured for payment for the actual area cleaned in square yards (square meters). If any areas require multiple applications the area shall not be counted more than once. All materials, safety preparations and traffic protection are included with WASHING AND CLEANING.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per square yard (square meter) for WASHING AND CLEANING.

GALVANIC ANODE

Effective: May 11, 2009

<u>Description.</u> This work shall consist of furnishing and installing embedded galvanic anodes as shown on the plans.

<u>Material.</u> The embedded galvanic anodes shall be puck-shaped, approximately 2.5 inches in diameter by 1 inch high, pre-manufactured, and consist of zinc cast around a pair of steel tie wires and encased in a highly alkaline cementitious shell with a pH of 14 or greater. The cementitious shell shall contain no chlorides or other corrosive constituents. Embedded galvanic anodes shall be Galvashield XP4 available from Vector Corrosion Technologies or approved equal.

<u>Cleaning and Repair of Reinforcing Steel.</u> Clean exposed reinforcing steel of rust, mortar, etc. to provide sufficient electrical connection and mechanical bond. If significant reduction in the cross section of the reinforcing steel has occurred, replace or install supplemental reinforcement as directed by the Engineer. Secure loose reinforcing steel by tying tightly to other bars with steel tie wires.

<u>Installation.</u> At the locations shown on the plans, galvanic anodes shall be installed within the limits of the web to be repaired using Structural Repair of Concrete with spacing as shown on the plans.

The Contractor shall provide 1 inch clearance between anode and existing concrete below or behind anode to allow replacement material to encase anode. The anode tie wires shall be wrapped around the cleaned reinforcement bars and twisted tight to allow little or no free movement.

The electrical connection between anode tie wire and reinforcement bars shall be confirmed by measuring DC resistance with a multi-meter. The electrical continuity of the exposed reinforcement bars within the repair area shall be confirmed similarly. If necessary, electrical continuity shall be established with uncoated steel tie wire. Electrical continuity is acceptable if the DC resistance measured with multi-meter is less than 5 ohms.

The remainder of the repair work shall not proceed until the Engineer has verified the proper installation of the galvanic anodes.

All galvanic anodes shall be delivered, stored, handled and installed according to guidelines and procedures recommended by the manufacturer or supplier of the material.

Basis of Payment. This work will be paid for at the contract unit price each for GALVANIC ANODE.

The concrete removal and placement of new concrete associated with this work shall not be included in this item but shall be paid for as specified elsewhere in these Special Provisions.

SURFACE FILLER (SPECIAL)

This work shall consist of filling cracks over 1/32" and other surface defects such as pop-outs with a gun-grade elastomeric sealant prior to overcoating with "Protective Coat (Special)".

<u>Material</u>. The material shall be a 1-component, polyurethane-based, non-sag elastomeric sealant that meets ASTM C-920, Type S, Grade NS, Class 25 or higher, use M.

The surface filler material shall be compatible with the protective coating applied to the concrete parapet as specified in the Special Provision for "Protective Coat (Special)".

<u>Construction</u>. All cracks and surface defects to be repaired shall be sound, dry, and clean of any foreign material. Preparation, filling, and tooling shall be according to the Manufacturer's specifications. Curing time shall be as recommended by the manufacturer, but a minimum of one day cure time shall be allowed prior to overcoating with "Protective Coat (Special)".

A manufacturer's technical representative shall be present on the first day of surface filling operations to ensure correct interpretation of the Manufacturer's specifications.

Method of Measurement. The surface filler will be measured for payment in gallons used in place to the nearest 0.1 gallon.

Basis of Payment. The surface filler will be paid for at the contract unit price per gallon for SURFACE FILLER (SPECIAL), which price shall include the furnishing of all materials, crack and surface defect preparation, and the application of the surface filler as specified.

TEMPORARY SHORING AND CRIBBING

Effective: October 22, 2004

<u>Description</u>: This item shall consist of furnishing all material, equipment and labor to support the effected beam(s) during the substructure repairs and bearing replacement at Pier #7 as shown on the plans, as herein specified and as directed by the Engineer.

<u>Construction Requirements</u>: The Contractor shall submit details and calculations, prepared and sealed by an Illinois Licensed Structural Engineer, of the support system he/she proposes to use for approval of the Engineer prior to ordering of material and implementation. Such approval shall in no way relieve the Contractor of responsibility for the safety of the structure. The supports used shall be such that vertical adjustments may be made in order to maintain the existing beam profile.

<u>Basis of Payment</u>: The work specified herein, as shown on the plans and as directed by the Engineer, shall be paid for at the contract unit price each for TEMPORARY SHORING AND CRIBBING for each beam end temporarily supported.

DRAINAGE SYSTEM

Effective: June 10, 1994 Revised: January 1, 2007

<u>Description.</u> This work shall consist of furnishing and installing a bridge drainage system as shown on the plans, including all piping, fittings, support brackets, inserts, bolts, and splash blocks when specified.

Material. The pipe and fittings shall be reinforced fiberglass according to ASTM D 2996 RTRP with a 30,000 psi (207 MPa) minimum short-time rupture strength hoop tensile stress. The reinforced fiberglass shall also have an apparent stiffness factor at 5 percent deflection exceeding 200 cu in.-lbf/sq. in. (22.6 cu mm-kPa) and a minimum wall thickness of 0.10 in. (2.54 mm). All pipe supports and associated hardware shall be hot dip galvanized according to AASHTO M 232 (M 232M). The fiberglass pipe and fittings furnished shall be pigmented throughout, or have a resin-rich pigmented exterior coat, specifically designed for overcoating fiberglass, as recommended by the manufacturer. The color shall be as specified by the Engineer. The resin in either case shall have an ultraviolet absorber designed to prevent ultraviolet degradation. The supplier shall certify the material supplied meets or exceeds these requirements.

<u>Design.</u> The drainage system shall be designed as an open system with allowances for the differential expansion and contraction expected between the superstructure and the substructure to which the drainage system is attached.

Installation. All connections of pipes and fittings shown on the plans to facilitate future removal for maintenance cleanout or flushing shall be made with a threaded, gasketed coupler or a bolted gasketed flange system. Adhesive bonded joints will be permitted for runs of pipe between such connections. The end run connection shall feature a minimum nominal 6 in. (150 mm) female threaded fiberglass outlet. Straight runs may utilize a 45 degree reducing saddle bonded to the pipe. The female outlet shall be filled with a male threaded PVC plug.

Runs of pipe shall be supported at spacings not exceeding those recommended by the manufacturer of the pipe. Supports that have point contact or narrow supporting areas shall be avoided. Standard slings, clamps, clevis hangers and shoe supports designed for use with steel pipe may be used. A minimum strap width for hangers shall be 1 1/2 in. (40 mm) for all pipe under 12 in. (300 mm) in diameter and 2 in. (50 mm) for diameters 12 in. (300 mm) or greater. Straps shall have 120 degrees of contact with the pipe. Pipes supported on less than 120 degrees of contact shall have a split fiberglass pipe protective sleeve bonded in place with adhesive.

All reinforced fiberglass pipe, fittings, and expansion joints shall be handled and installed according to guidelines and procedures recommended by the manufacturer or supplier of the material.

<u>Basis of Payment.</u> This work will be paid for at the contract lump sum price for DRAINAGE SYSTEM.

JACK AND REMOVE EXISTING BEARINGS

Effective: April 20, 1994 Revised: January 1, 2007

<u>Description</u>: This work consists of furnishing all labor, tools and equipment for jacking and supporting the existing beams/slab while removing the bearing assembly. The Contractor is responsible for the complete design of the bridge lifting procedures and the materials used. The Contractor shall furnish and place all bracing, shoring, blocking, cribbing, temporary structural steel, timber, shims, wedges, hydraulic jacks, and any other materials and equipment necessary for safe and proper execution of the work. The Contractor shall remove and dispose of the bearings according to Article 501.05 of the Standard Specifications.

<u>Construction Requirements:</u> The Contractor shall submit details and calculations of his/her proposed jacking systems and temporary support procedures for approval by the Engineer before commencing work. At any time during the bridge raising operations, the Engineer may require the Contractor to provide additional supports or measures in order to furnish an added degree of safety. The Contractor shall provide such additional supports or measures at no additional cost to the Department. Neither added precautions nor the failure of the Engineer to order additional protection will in any way relieve the Contractor of sole responsibility for the safety of lives, equipment and structure.

(a) Jack and Remove Existing Bearings with bridge deck in place. Jacking and cribbing under and against the existing diaphragms, if applicable, will not be allowed. The Contractor's jacking plans and procedures shall be designed and sealed by an Illinois Licensed Structural Engineer.

In all cases, traffic shall be removed from the portion of the structure to be jacked prior to and during the entire time the load is being supported by the hydraulic pressure of the jack(s). The minimum jack capacity per beam shall be as noted in the plans. Whenever possible, traffic shall be kept off that portion of the structure during the entire bearing replacement operation. The shoring or cribbing supporting the beam(s) during bearing replacement shall be designed to support the dead load plus one half of the live load and impact shown in the plans.

If traffic cannot be kept off that portion of the structure during the bearing replacement then the shoring or cribbing supporting the beam(s) shall be designed to support the dead load and full live load and impact shown in the plans.

No jacking shall be allowed during the period of placement and cure time required for any concrete placed in the span(s) contributing loads to the bearings to be jacked and removed.

Jacking shall be limited to 1/8 in. (4 mm) maximum when jacking one bearing at a time. Simultaneous jacking of all beams at one support may be performed provided the maximum lift is 1/4 in. (7 mm) and the maximum differential displacement between adjacent beams is 1/8 in. (4 mm). Suitable gauges for the measurement of superstructure movement shall be furnished and installed by the Contractor.

(b) Jack and Remove Existing Bearings when entire bridge deck is removed. Jacking and bearing removal shall be done after the removal of the existing bridge deck is complete. The Contractor's plans and procedures for the proposed jacking and cribbing system shall be designed and sealed by an Illinois Licensed Structural Engineer, unless jacking can be accomplished directly from the bearing seat under the beams or girders.

Jacking shall be limited to 1/4 in. (7 mm) maximum when jacking one beam at a time. Simultaneous jacking of all beams at one support may be performed provided the maximum lift is 3/4 in. (19 mm) and the maximum differential displacement between adjacent beams is 1/4 in. (7 mm). When staged construction is utilized, simultaneous jacking of all beams shall be limited to 1/4 in. (7 mm) unless the diaphragms at the stage line are disconnected, in which case the maximum lift is 3/4 in. (19 mm). Suitable gauges for the measurement of superstructure movement shall be furnished and installed by the Contractor.

The Contractor shall be responsible for restoring to their original condition, prior to jacking, the drainage ditches, pavement, or slopewall disturbed by the cribbing footings.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price each for JACK AND REMOVE EXISTING BEARINGS.

JACKING EXISTING SUPERSTRUCTURE

Effective: January 11, 1993 Revised: January 1, 2007

<u>Description</u>: This work shall consist of furnishing all material, equipment and labor for the construction and subsequent removal of jacking support systems complete, including jacks, jack supports, shims and all necessary cribbing. Included under this item shall be all work to raise and support the existing structure as specified on the plans and as noted herein.

<u>Construction Requirements:</u> Jacking and cribbing shall be done only under main beams, with jacking against diaphragms prohibited unless specifically allowed on the plans. Mud sills for timber cribbing shall be placed on firm, level, tamped ground that has been inspected by probes for soft spots. Uneven settlement should be anticipated and correction shims provided for mud sills that are partially on stabilized shoulders or pavement.

At any time during the bridge raising operations, the Engineer may require the Contractor to provide additional supports or measures in order to furnish an added degree of safety. The Contractor shall provide such additional supports or measures at no additional cost to the Department. Neither added precautions nor the failure of the Engineer to order additional protection will in any way relieve the Contractor of sole responsibility for the safety of lives, equipment and structure.

Jacks shall be provided with a ram head plate approximately equal in contact area as the sole plate at the beam. This plate shall be "C" clamped to the beam flange when clearances will not allow the jack to be placed equidistant from the ends of the plate. The centerline of the ram head must be in line with the centerline of the beam. A needle beam or fabricated jacking yoke with two jacks will be allowed provided the design meets with the approval of the Engineer.

The jacking support system shall be such that all beams that are attached transversely by a bridge deck and/or diaphragms or crossframes, for each individual structure, shall be raised simultaneously in the sequence prescribed in the plans and all jacking tolerances stated below apply. If the bridge deck is removed and the diaphragms or crossframes between adjacent beams are detached, then the beams do not need to be raised simultaneously and only the longitudinal jacking tolerances stated below apply. The system shall be installed in such a manner to prevent lateral movement and remain stable during all phases of the work. In all cases where multiple jacks are used for a lift the hydraulic jacks shall be equipped with gages so that jacking pressures can be equalized or the needle and blocking beams equipped with adjustable machinist levels so that a uniform amount of lift can be accomplished. The jacking tolerances shall be as follows:

- (a) <u>Jacking Existing Superstructure with bridge deck in place.</u> The differential jacking height shall not exceed 1/8 in. (4 mm) transversely between adjacent beams and 1/4 in. (7 mm) longitudinally between adjacent supports.
- (b) <u>Jacking Existing Superstructure when entire bridge deck is removed.</u> The differential jacking height shall not exceed 1/4 in. (7 mm) transversely between adjacent beams and 3/4 in. (19 mm) longitudinally between adjacent supports.

The Contractor shall be responsible for restoring to their original condition, prior to jacking, the drainage ditches, pavement, or slopewall disturbed by the cribbing footings. If applicable, existing diaphragms or cross frames at the stage construction line shall be disconnected prior to jacking and reconnected using new H.S. bolts after jacking is completed.

The Contractor shall submit details and calculations of his/her proposed jacking systems, cribbing and procedures for approval of the Engineer before commencing work. The system shall be designed and sealed by a Structural Engineer licensed in Illinois. Approval will not relieve the Contractor of responsibility for the safety of the structure.

<u>Basis of Payment</u>: This work, as herein specified, will be paid for at the contract lump sum price for JACKING EXISTING SUPERSTRUCTURE.

DECK SLAB REPAIR

Effective: May 15, 1995 Revised: January 22, 2010

This work shall consist of hot-mix asphalt surface removal, when required, the removal and disposal of all loose and deteriorated concrete from bridge deck and the replacement with new concrete to the original top of deck. The work shall be done according to the applicable requirements of Sections 501, 503 and 1020 of the Standard Specifications and this Special Provision.

Deck slab repairs will be classified as follows:

- (a) Partial-Depth. Partial-depth repairs shall consist of removing the loose and unsound deck concrete, disposing of the concrete removed and replacing with new concrete. The removal may be performed by chipping with power driven hand tools or by hydroscarification equipment. The depth shall be measured from the top of the concrete deck surface, at least 3/4 in. (20 mm) but not more than 1/2 the concrete deck thickness.
- (b) Full-Depth. Full-depth repairs shall consist of removing concrete full-depth of the deck, disposing of the concrete removed, and replacing with new concrete to the original concrete deck surface. The removal may be performed with power driven hand tools, hydraulic impact equipment, or by hydro-scarification equipment. Full-depth repairs shall be classified for payment as Full-Depth, Type I and Full-Depth, Type II according to the following:
 - Type I Full-depth patches less than or equal to 5 sq. ft. (0.5 sq m) in area. The minimum dimensions for a patch shall be 1 ft. x 1 ft. (300 mm x 300 mm).
 - Type II Full-depth patches greater than 5 sq. ft. (0.5 sq. m) in area.

Materials.

Materials shall be according to Article 1020.02.

Portland cement concrete for partial and full-depth repairs shall be according to Section 1020. Class PP-1, PP-2, PP-3, PP-4, PP-5 or BS concrete shall be used at the Contractor's option unless noted otherwise on the contract plans. For Class BS concrete, a CA 13, 14, or 16 shall be used. If the BS concrete mixture is used only for full depth repairs, a CA-11 may be used. In Section 1020, revise the second sentence of Note 10 for Table 1 of Article1020.04 to read as follows for Class PP concrete: "The bridge deck patching mix design strength shall be increased to 4000 psi (27,500 kPa) compressive or 675 psi (4650 kPa) flexural, and the mixture shall have 72 hours to obtain the required strength."

Grout. The grout for bonding new concrete to old concrete shall be proportioned by weight (mass) and mixed at the job site, or it may be ready-mixed if agitated while at the job site. The bonding grout shall consist of one part portland cement and one part sand, mixed with sufficient water to form a slurry. The bonding grout shall have a consistency allowing it to be scrubbed onto the prepared surface with a stiff brush or broom leaving a thin, uniform coating that will not run or puddle in low spots. Grout that cannot be easily and evenly applied or has lost its consistency may be rejected by the Engineer. Grout that is more than two hours old shall not be used.

Equipment:

The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

- (a) Surface Preparation Equipment. Surface preparation and concrete removal equipment shall be according to the applicable portions of Section 1100 and the following:
 - (1) Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
 - (2) Blast Cleaning Equipment. The blast cleaning may be performed by wet sandblasting, high-pressure waterblasting, shotblasting or abrasive blasting. Blast cleaning equipment shall be capable of removing rust and old concrete from exposed reinforcement bars, and shall have oil traps.
 - (3) Power-Driven Hand Tools. Power-driven hand tools will be permitted including jackhammers lighter than the nominal 45 lb. (20 kg) class. Chipping hammers heavier than a nominal 15 lb. (6.8 kg) class shall not be used for removing concrete from below any reinforcing bar for partial depth repairs, or for removal within 1 ft (300 mm) of existing beams, girders or other supporting structural members that are to remain in service or within 1 ft (300 mm) of the boundaries of full-depth repairs. Jackhammers or chipping hammers shall not be operated at an angle in excess of 45 degrees measured from the surface of the slab.
 - (4) Hydraulic Impact Equipment. Hydraulic impact equipment with a maximum rated striking energy of 360 ft-lbs (270 J) may be permitted only in areas of full depth removal more than 1 ft (300 mm) away from existing beams, girders or other supporting structural members that are to remain in service or more than 1 ft (300 mm) from the boundaries of full-depth repairs.
 - (5) Hydro-Scarification Equipment. The hydro-scarification equipment shall consist of filtering and pumping units operating with a remote-controlled robotic device. The equipment may use river, stream or lake water. Operation of the equipment shall be performed and supervised by qualified personnel certified by the equipment manufacturer. Evidence of certification shall be presented to the Engineer. The equipment shall be capable of removing concrete to the specified depth and removing rust and concrete particles from exposed reinforcing bars. Hydro-scarification equipment shall be calibrated before being used and shall operate at a minimum of 18,000 psi (124 MPa).
- (b) Concrete Equipment: Equipment for proportioning and mixing the concrete shall be according to Article 1020.03.
- (c) Finishing Equipment: Finishing equipment shall be according to Article 1103.17. Adequate hand tools will be permitted for placing and consolidating concrete in the patch areas and for finishing small patches.

<u>Construction Requirements:</u> Sidewalks, curbs, drains, reinforcement and/or existing transverse and longitudinal joints which are to remain in place shall be protected from damage during removal and cleaning operations. All damage caused by the Contractor shall be corrected, at the Contractor's expense, to the satisfaction of the Engineer.

The Contractor shall control the runoff water generated by the various construction activities in such a manner as to minimize, to the maximum extent practicable, the discharge of construction debris into adjacent waters, and shall properly dispose of the solids generated according to Article 202.03. Runoff water will not be allowed to constitute a hazard on adjacent or underlying roadways, waterways, drainage areas or railroads nor be allowed to erode existing slopes.

(a) Hot-Mix Asphalt Surface Removal.

The hot-mix asphalt surface course and all waterproofing membrane shall be removed and disposed of according to applicable portions of Articles 440.04 and 440.06, except milling equipment will not be allowed if the deck is to receive a waterproofing membrane system. If the overlay or waterproofing membrane contains asbestos fibers, removal shall be in accordance with the Special Provision for "Asbestos Waterproofing Membrane or Asbestos Hot-mix Asphalt Surface Removal". Removal of the hot-mix asphalt surface by the use of radiant or direct heat will not be permitted.

(b) Surface Preparation:

All loose, disintegrated and unsound concrete shall be removed from portions of the deck slab shown on the plans or as designated by the Engineer. The Engineer will determine the limits of removal as the work progresses.

The Contractor shall take care not to damage reinforcement bars or expansion joints which are to remain in place. Any damage to reinforcement bars or expansion joints shall be corrected at the Contractor's expense. All loose reinforcement bars, as determined by the Engineer, shall be retied at the Contractor's expense.

(1) Partial-Depth. Areas to be repaired will be determined and marked by the Engineer. A concrete saw shall be used to provide vertical edges approximately 3/4 in. (20 mm) deep around the perimeter of the area to be patched when a concrete overlay is not specified. Where high steel is present, the depth may be reduced as directed by the Engineer. A saw cut will not be required on those boundaries along the face of the curb, parapet or joint or when sharp vertical edges are provided by hydroscarification.

The loose and unsound concrete shall be removed by chipping, with power driven hand tools or by hydro-scarification equipment. All exposed reinforcing bars and newly exposed concrete shall be thoroughly blast cleaned. Where, in the judgment of the Engineer, the bond between existing concrete and reinforcement steel within the patch area has been destroyed, the concrete adjacent to the bar shall be removed to a depth that will permit new concrete to bond to the entire periphery of the exposed bar. A minimum of 1 in. (25 mm) clearance will be required. The Engineer may require enlarging a designated removal area should inspection indicate deterioration beyond the limits previously designated.

In this event, a new saw cut shall be made around the extended area before additional removal is begun. The removal area shall not be enlarged solely to correct debonded reinforcement or deficient lap lengths.

(2) Full-Depth. Concrete shall be removed as determined by the Engineer within all areas designated for full-depth repair and in all designated areas of partial depth repair in which unsound concrete is found to extend below half the concrete deck thickness. Full depth removal shall be performed according to Article 501.05 except that hydraulic impact equipment may be permitted in areas of full depth removal more than 1 ft (300 mm) away from the edges of existing beams, girders or other supporting structural members or more than 1 ft (300 mm) from the boundaries of full-depth repairs. Saw cuts shall be made on the top of the deck, except those boundaries along the face of curbs, parapets and joints or where hydro-scarification provided sharp vertical edges. The top saw cut may be omitted if the deck is to receive an overlay.

Forms for full-depth repair may be supported by hangers with adjustable bolts or by blocking from the beams below. When approved by the Engineer, forms for Type 1 patches may be supported by No. 9 wires or other devices attached to the reinforcement bars.

All form work shall be removed after the curing sequence is complete and prior to opening to traffic.

- (3) Reinforcement Treatment. Care shall be exercised during concrete removal to protect the reinforcement bars and structural steel from damage. Any damage to the reinforcement bars or structural steel to remain in place shall be repaired or replaced to the satisfaction of the Engineer at the Contractor's expense. All existing reinforcement bars shall remain in place except as herein provided for corroded bars. Tying of loose bars will be required. Reinforcing bars which have been cut or have lost 25 percent or more of their original cross sectional area shall be supplemented by new in kind reinforcement bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. An approved mechanical bar splice capable of developing in tension at least 125 percent of the yield strength of the existing bar shall be used when it is not feasible to provide the minimum bar lap. No welding of bars will be permitted.
- (4) Cleaning. Immediately after completion of the concrete removal and reinforcement repairs, the repair areas shall be cleaned of dust and debris. Once the initial cleaning is completed, the repair areas shall be thoroughly blast cleaned to a roughened appearance free from all foreign matter. Particular attention shall be given to removal of concrete fines. Any method of cleaning which does not consistently produce satisfactory results shall be discontinued and replaced by an acceptable method. All debris, including water, resulting from the blast cleaning shall be confined and shall be immediately and thoroughly removed from all areas of accumulation. If concrete placement does not follow immediately after the final cleaning, the area shall be carefully protected with well-anchored polyethylene sheeting.

Exposed reinforcement bars shall be free of dirt, detrimental scale, paint, oil, or other foreign substances which may reduce bond with the concrete. A tight non-scaling coating of rust is not considered objectionable. Loose, scaling rust shall be removed by rubbing with burlap, wire brushing, blast cleaning or other methods approved by the Engineer.

(c) Placement & Finishing of Concrete Repair:

(1) Grout Placement. After the repair areas have been cleaned and immediately prior to concrete placement, the grout shall be applied to a dampened surface. A thin layer of grout shall be thoroughly scrubbed into the deck surface. All vertical as well as horizontal surfaces shall receive a thorough, even coating. The rate of grout placement shall be limited so the brushed grout does not dry out before it is covered with concrete. Grout that has become dry and chalky shall be blast cleaned and replaced at the Contractor's expense. No concrete shall be placed over dry grout.

(2) Concrete Placement.

The concrete shall be placed and consolidated according to Article 503.07 and as herein specified. Article 1020.14 shall apply.

When an overlay system is not specified, the patches shall be finished according to Article 503.16 (a), followed by a light brooming.

(d) Curing and Protection.

Concrete patches shall be cured by the Wetted Burlap or Wetted Cotton Mat Method according to Article 1020.13 (a)(3) or Article 1020.13 (a)(5). The curing period shall be 3 days for Class PP-1, PP-2, PP-3, PP-4, and PP-5 concrete. The curing period shall be 7 days for Class BS concrete. In addition to Article 1020.13, when the air temperature is less than 55° F (13° C), the Contractor shall cover the patch according to Article 1020.13 (d)(1) with minimum R12 insulation. Insulation is optional when the air temperature is 55° F. - 90° F (13° C - 32° C). Insulation shall not be placed when the air temperature is greater than 90° F (32° C). A 72-hour minimum drying period shall be required before placing waterproofing or hot-mix asphalt surfacing.

(e) Opening to Traffic.

No traffic will be permitted on a patch until after the specified cure period, and the concrete has obtained a minimum compressive strength of 4000 psi (27.6 MPa) or flexural strength of 675 psi (4.65 MPa).

Construction equipment will be permitted on a patch during the cure period if the concrete has obtained the minimum required strength. In this instance, the strength specimens shall be cured with the patch.

Method of Measurement.

When specified, hot-mix asphalt surface removal and full or partial depth repairs will be measured for payment and computed in square yards (square meters).

Basis of Payment.

The hot-mix asphalt surface removal will be paid for at the contract unit price per square yard (square meter) for HOT-MIX ASPHALT SURFACE REMOVAL (DECK). Areas removed and replaced up to and including a depth of half the concrete deck thickness will be paid for at the contract unit price per square yard (square meter) for DECK SLAB REPAIR (PARTIAL). Areas requiring removal greater than a depth of half the concrete deck thickness shall be removed and replaced full depth and will be paid for at the contract unit price per square yard (square meter) for DECK SLAB REPAIR (FULL DEPTH, TYPE I) and/or DECK SLAB REPAIR (FULL DEPTH, TYPE II).

When corroded reinforcement bars are encountered in the performance of this work and replacement is required, the Contractor will be paid according to Article 109.04.

No payment will be allowed for removal and replacement of reinforcement bars damaged by the Contractor in the performance of his/her work or for any increases in dimensions needed to provide splices for these replacement bars.

Removal and disposal of asbestos waterproofing and/or asbestos bituminous concrete will be paid for as specified in the Special Provision for "Asbestos Waterproofing Membrane or Asbestos Hot-Mix Asphalt Surface Removal".

BRIDGE DECK MICROSILICA CONCRETE OVERLAY

Effective: May 15, 1995 Revised: April 30, 2010

<u>Description</u>. This work shall consist of the preparation of the existing concrete bridge deck and the construction of a microsilica concrete overlay to the specified thickness. The minimum thickness of the overlay shall be 2 1/4 in. (60 mm).

Materials. Materials shall meet the requirements of the following Articles of Section 1000:

<u>Item</u>	Article/Section
(a) Microsilica	1010
(b) Portland Cement Concrete (Notes 1-6)	1020
(c) Grout (Note 7)	
(d) Packaged Rapid Hardening Mortar or Concrete	1018
(e) Concrete Curing Materials	1022.02

Note 1: Cement shall be Type I portland cement. Fine aggregate shall be natural sand and the coarse aggregate shall be crushed stone or crushed gravel. The gradation of the coarse aggregate shall be CA 11, CA 13, CA 14 or CA 16.

Note 2: Mix Design Criteria.

Article 1020.04 shall not apply. The microsilica concrete mix design shall meet the following requirements:

Cement Factor 565 lb./cu. yd. (335 kg/cu. m)

Microsilica Solids 33 lb./cu. yd. (20 kg/cu. m)

Water/Cement Ratio

(including water in the slurry)

0.37 to 0.41

Mortar Factor 0.88 to 0.92

Slump 3 to 6 in. (75 to 150 mm)

Air Content 5.0 to 8.0 percent

Compressive Strength (14 days) 4000 psi (27,500 kPa) minimum

Flexural Strength (14 days) 675 psi (4,650 kPa) minimum

Note 3: Admixtures.

Article 1020.05(b) shall apply except as follows:

High-range water reducing admixtures (superplasticizers) shall be added as determined by the Engineer.

Note 4: Fly Ash.

Article 1020.05(c)(1) shall apply except as follows:

Only Class C fly ash may be used to partially replace portland cement. The amount of cement replaced and replacement ratio shall be the same as for Class BS concrete.

Note 5: Ground Granulated Blast-Furnace Slag.

Ground granulated blast-furnace slag may be used according to Article 1020.05(c)(2). The amount of cement replaced and replacement ratio shall be the same as for Class BS concrete.

Note 6: Mixing.

The mixing requirements shall be according to Article 1020.11, except as follows:

- (a) Water-based microsilica slurry:
 - (1) Truck Mixer:
 - Combine simultaneously air entraining admixture, water-reducing admixture and/or retarding admixture, microsilica slurry and 80 percent of the water with cement, fly ash (if used) and aggregates.
 - Add remaining water.
 - Mix 30-40 revolutions at 12-15 RPM.
 - Add high range water-reducing admixture.
 - Mix 60-70 revolutions at 12-15 RPM.

(2) Stationary Mixer:

- The microsilica slurry shall be diluted into the water stream or weigh box prior to adding into mixer. Combine simultaneously air entraining admixture, water-reducing admixture and/or retarding admixture, microsilica slurry and 80 percent of the water with cement, fly ash (if used) and aggregates.
- Add remaining water.
- After mixing cycle is completed deposit into truck mixer.
- Add high range water-reducing admixture.
- Mix 60-70 revolutions at 12-15 RPM.

(b) Densified microsilica (bulk):

(1) Truck Mixer:

 Same as (a)1 above except the densified microsilica shall be added with the cement.

(2) Stationary Mixer:

 Same as (a)2 above except the densified microsilica shall be added with the cement.

(c) Densified microsilica (bag):

Bagged microsilica shall be kept dry. No bag or material containing moisture shall be introduced into the concrete mixer.

(1) Truck Mixer:

- Combine air entraining admixture, water-reducing admixture and/or retarding admixture and 80 percent of the water.
- Add cement, fly ash (if used), and aggregates.
- Add remaining water.
- Mix 30-40 revolutions at 12-15 RPM.
- Add microsilica.
- Mix 70-80 revolutions at 12-15 RPM.
- Add high range water-reducing admixture.
- Mix 60-70 revolutions at 12-15 RPM.

(2) Stationary Mixer:

- Combine air entraining admixture, water-reducing admixture and/or retarding admixture and 80% of the water.
- Add cement, fly ash (if used), and aggregates.
- Add remaining water.
- After mixing cycle is completed deposit into truck mixer.
- Add microsilica to truck.
- Mix 70-80 revolutions at 12-15 RPM.
- Add high range water-reducing admixture.
- Mix 60-70 revolutions at 12-15 RPM.

Note 7: Grout. The grout for bonding new concrete to old concrete shall be proportioned by weight (mass) and mixed at the job site, or it may be ready-mixed if agitated while at the job site. The bonding grout shall consist of one part portland cement and two parts sand, mixed with sufficient water to form a slurry. The bonding grout shall have a consistency allowing it to be scrubbed onto the prepared surface with a stiff brush or broom leaving a thin, uniform coating that will not run or puddle in low spots. Grout that cannot be easily and evenly applied or has lost its consistency may be rejected by the Engineer. Grout that is more than one hour old shall not be used.

At the option of the Contractor the grout may be applied by mechanical applicators. If this option is chosen, the sand shall be eliminated from the grout mix.

<u>Equipment:</u> The equipment used shall be subject to the approval of the Engineer and shall meet the following requirements:

- (a) Surface Preparation Equipment. Surface preparation equipment shall be according to the applicable portions of Section 1100 and the following:
 - (1) Sawing Equipment. Sawing equipment shall be a concrete saw capable of sawing concrete to the specified depth.
 - (2) Mechanical Blast Cleaning Equipment. Mechanical blast cleaning may be performed by high-pressure waterblasting or shotblasting. Mechanical blast cleaning equipment shall be capable of removing weak concrete at the surface, including the microfractured concrete surface layer remaining as a result of mechanical scarification, and shall have oil traps.
 - Mechanical high-pressure waterblasting equipment shall be mounted on a wheeled carriage and shall include multiple nozzles mounted on a rotating assembly. The distance between the nozzles and the deck surface shall be kept constant and the wheels shall maintain contact with the deck surface during operation.
 - (3) Hand-Held Blast Cleaning Equipment. Blast cleaning using hand-held equipment may be performed by high-pressure waterblasting or abrasive blasting. Hand-held blast cleaning equipment shall have oil traps.
 - Hand-held high-pressure waterblasting equipment that is used in areas inaccessible to mechanical blast cleaning equipment shall have a minimum pressure of 7,000 psi (48 MPa).
 - (4) Mechanical Scarifying Equipment. Scarifying equipment shall be a power-operated, mechanical scarifier capable of uniformly scarifying or removing the old concrete surface and new patches to the depths required in a satisfactory manner. Other types of removal devices may be used if their operation is suitable and they can be demonstrated to the satisfaction of the Engineer.
 - (5) Hydro-Scarification Equipment. The hydro-scarification equipment shall consist of filtering and pumping units operating with a computerized, self-propelled robotic machine with gauges and settings that can be easily verified.

The equipment shall use potable water according to Section 1002. Operation of the equipment shall be performed and supervised by qualified personnel certified by the equipment manufacturer. Evidence of certification shall be presented to the Engineer. The equipment shall be capable of removing sound concrete to the specified depth and deteriorated concrete down to half of the existing deck thickness, as well as rust and old concrete particles from exposed reinforcement bars. The hydro-scarification equipment shall be calibrated before being used and shall operate at a uniform pressure sufficient to remove the specified depth of concrete in a timely manner.

- (6) Vacuum Cleanup Equipment. The equipment shall be equipped with fugitive dust control devices capable of removing wet debris and water all in the same pass. Vacuum equipment shall also be capable of washing the deck with pressurized water prior to the vacuum operation to dislodge all debris and slurry from the deck surface.
- (7) Power-Driven Hand Tools. Power-driven hand tools will be permitted including jackhammers lighter than the nominal 45 lb. (20 kg) class. Jackhammers or chipping hammers shall not be operated at an angle in excess of 45 degrees measured from the surface of the slab.
- (b) Pull-off Test Equipment. Equipment used to perform pull-off testing shall be either approved by the Engineer, or obtained from one of the following approved sources:

James Equipment 007 Bond Tester 800-426-6500 Germann Instruments, Inc. BOND-TEST Pull-off System 847-329-9999

SDS Company DYNA Pull-off Tester 805-238-3229

Pull-off test equipment shall include all miscellaneous equipment and materials to perform the test and clean the equipment, as indicated in the Illinois Test Procedures 304 and 305 "Pull-off Test (Surface or Overlay Method)". Prior to the start of testing, the Contractor shall submit to the Engineer a technical data sheet and material safety data sheet for the epoxy used to perform the testing. For solvents used to clean the equipment, a material safety data sheet shall be submitted.

- (c) Concrete Equipment. Equipment for proportioning and mixing the concrete shall be according to Article 1020.03.
- (d) Finishing Equipment. Finishing equipment shall be according to Article 503.03.
- (e) Mechanical Fogging Equipment. Mechanical fogging equipment shall be according to 1103.17 (k)

<u>Construction Requirements:</u> Sidewalks, curbs, drains, reinforcement and/or existing transverse and longitudinal joints which are to remain in place shall be protected from damage during scarification and cleaning operations. All damage caused by the Contractor shall be corrected, at the Contractor's expense, to the satisfaction of the Engineer.

The Contractor shall control the runoff water generated by the various construction activities in such a manner as to minimize, to the maximum extent practicable, the discharge of construction debris into adjacent waters, and shall properly dispose of the solids generated according to Article 202.03. Runoff water will not be allowed to constitute a hazard on adjacent or underlying roadways, waterways, drainage areas or railroads nor be allowed to erode existing slopes.

(a) Deck Preparation:

(1) Bridge Deck Scarification. The scarification work shall consist of removing the designated concrete deck surface using mechanical or hydro-scarifying equipment as specified. The areas designated shall be scarified uniformly, except as noted below, to the depth as specified on the plans. In areas of the deck not accessible to the scarifying equipment, power-driven hand tools will be permitted. Power driven hand tools shall be used for removal around areas to remain in place.

A trial section on the existing deck surface will be designated by the Engineer to demonstrate that the equipment, personnel and methods of operation are capable of producing results satisfactory to the Engineer. The trial section will consist of approximately 30 sq. ft. (3 sq. m).

Once the settings for the equipment are established, they shall not be changed without the permission of the Engineer. The removal shall be verified, as necessary, at least every 16 ft. (5 m) along the cutting path. If sound concrete is being removed below the desired depth, the equipment shall be reset or recalibrated.

If the use of hydro-scarification equipment is specified, the Contractor may use mechanical scarification equipment to remove an initial depth of concrete provided that the last 1/4 in. (6 mm) of removal is accomplished with hydro-scarification equipment. If the Contractor's use of mechanical scarifying equipment results in exposing, snagging, or dislodging the top mat of reinforcing steel, the scarifying shall be stopped immediately and the remaining removal shall be accomplished using the hydro-scarification equipment. All damage to the existing reinforcement resulting from the Contractor's operation shall be repaired or replaced at the Contractor's expense as directed by the Engineer. Replacement shall include the removal of any additional concrete required to position or splice the new reinforcing steel. Undercutting of exposed reinforcement bars shall only be as required to replace or repair damaged or corroded reinforcement. Repairs to existing reinforcement shall be according to the Special Provision for "Deck Slab Repair".

After hydro-scarification the deck shall be vacuum cleaned in a timely manner before the water and debris are allowed to dry and re-solidify to the deck. The uses of alternative cleaning and debris removal methods to minimize driving heavy vacuum equipment over exposed deck reinforcement may be used subject to the approval of the Engineer.

(2) Deck Patching. After bridge deck scarification, all designated patching, except as note below, shall be completed according to the Special Provision for "Deck Slab Repair". All full depth patching shall be completed prior to final surface preparation.

When mechanical scarification is specified, partial depth patches may be filled with overlay material at the time of overlay placement.

All patches placed prior to overlay placement shall be struck off and then roughened with a suitable stiff bristled broom or wire brush to provide a rough texture designed to promote bonding of the overlay. Hand finishing of the patch surface shall be kept to a minimum to prevent overworking of the surface.

After scarification, the deck shall be thoroughly cleaned of broken concrete and other debris. The Engineer will sound the scarified deck and all remaining unsound areas will be marked for additional removal and/or repairs as applicable. If the bottom mat of reinforcement is exposed, that area shall be defined as a full depth repair.

In areas where hydro-scarification is specified, No separate payment for partial depth patching will be made regardless of whether it was detailed in the plans or not. Just prior to performing hydro-scarification, the deck shall be sounded, with unsound areas marked on the deck to assist the hydro-scarification process in performing the partial depth removal simultaneously with the hydro-scarification operation. If in the opinion of the Engineer additional removal is required after the hydro-scarification process, which could not have been anticipated or accounted for by normal modifications to the scarification process (such as modifying the dwell time or Nozzle pressure), such removal not classified as full depth patching shall be paid for according to Article 109.04. Any removal required or made below the specified depth for scarification of the bridge deck, which does not result in full depth patching, shall be filled with the overlay material at the time of the overlay placement.

(3) Final Surface Preparation. Final surface preparation shall consist of the operation of mechanical blast cleaning equipment to remove any weak concrete at the surface, including the microfractured concrete surface layer remaining as a result of mechanical scarification. Any areas determined by the Engineer to be inaccessible to mechanical equipment shall be thoroughly blast cleaned with hand-held equipment. When hydro-scarification equipment is used for concrete removal, the deck surface need not be blast cleaned with mechanical equipment unless the spoils from the scarification operation are allowed to dry and re-solidify on the deck surface.

Final surface preparation shall also include the cleaning of all dust, debris, and concrete fines from the deck surface including vertical faces of curbs, previously placed adjacent overlays, barrier walls up to a height of 1 in. (25 mm) above the overlay, depressions, and beneath reinforcement bars. Hand-held high-pressure waterblasting equipment shall be used for this operation.

If mechanical scarification is used to produce the final deck surface texture, surface pull-off testing will be required. After the final surface preparation has been completed and before placement of the overlay, the prepared deck surface will be tested by the Engineer according to the Illinois Test Procedure 304 "Pull-off Test (Surface Method)". The Contractor shall provide the test equipment.

a. Start-up Testing. Prior to the first overlay placement, the Engineer will evaluate the blast cleaning method. The start-up area shall be a minimum of 600 sq. ft. (56 sq. m).

After the area has been prepared, six random test locations will be determined by the Engineer, and tested according to the Illinois Test Procedure 304 "Pull-off Test (Surface Method)".

The average of the six tests shall be a minimum of 175 psi (1,207 kPa) and each individual test shall have a minimum strength of 160 psi (1,103 kPa). If the criteria are not met, the Contractor shall adjust the blast cleaning method. Start-up testing will be repeated until satisfactory results are attained.

Once an acceptable surface preparation method is established, it shall be continued for the balance of the work. The Contractor may, with the permission of the Engineer, change the surface preparation method, in which case, additional start-up testing will be required.

b. Lot Testing. After start-up testing has been completed, the following testing frequency will be used. For each structure, each stage will be divided into lots of not more than 4500 sq. ft. (420 sq. m). Three random test locations will be determined by the Engineer for each lot, and tested according to the Illinois Test procedure 304 "Pull-off Test (Surface Method)".

The average of the three tests shall be a minimum of 175 psi (1,207 kPa) and each individual test shall have a minimum strength of 160 psi (1,103 kPa). In the case of a failing individual test or a failing average of three tests, the Engineer will determine the area that requires additional surface preparation by the Contractor. Additional test locations will be determined by the Engineer.

In addition to start-up and lot testing, the Department may require surface pull-off testing of areas inaccessible to mechanical blast cleaning equipment and blast cleaned with hand-held equipment. The Engineer shall determine each test location, and each individual test shall have a minimum strength of 175 psi (1,207 kPa).

Exposed reinforcement bars shall be free of dirt, detrimental scale, paint, oil, and other foreign substances which may reduce bond with the concrete. A tight non-scaling coating of rust is not considered objectionable. Loose, scaling rust shall be removed by rubbing with burlap, wire brushing, blast cleaning or other methods approved by the Engineer. All loose reinforcement bars, as determined by the Engineer, shall be retied at the Contractor's expense.

All dust, concrete fines, debris, including water, resulting from the surface preparation shall be confined and shall be immediately and thoroughly removed from all areas of accumulation. If concrete placement does not follow immediately after the final surface preparation, the area shall be carefully protected with well-anchored white polyethylene sheeting.

(b) Pre-placement Procedure. Prior to placing the overlay, the Engineer will inspect the deck surface. All contaminated areas shall be blast cleaned again at the Contractor's expense.

Before placing the overlay, the finishing machine shall be operated over the full length of bridge segment to be overlaid to check support rails for deflection and confirm the minimum overlay thickness. All necessary adjustments shall be made and another check performed, unless otherwise directed by the Engineer.

- (c) Placement Procedure. Concrete placement shall be according to Article 503.07 and the following:
 - (1) Bonding Methods. The Contractor shall prepare the deck prior to overlay placement by one of the following methods unless restricted as specified on the plans:
 - a. Grout Method. The deck shall be cleaned to the satisfaction of the Engineer and shall be thoroughly wetted and maintained in a dampened condition for at least 12 hours before placement of the grout is started. Any excess water shall be removed by compressed air or by vacuuming prior to grout placement. Water shall not be applied to the deck surface within one hour before or at any time during placement of the grout. Immediately before placing the overlay mixture, the exposed area shall be thoroughly covered with a thin layer of grout. The grout shall be thoroughly scrubbed into the surface. All vertical as well as horizontal surfaces shall receive a thorough, even coating. The rate of grout placement shall be limited so the brushed grout does not dry out before it is covered with the concrete.

Grout that is allowed to become dry and chalky shall be blast cleaned and replaced at the Contractor's expense. No concrete shall be placed over dry grout.

- b. Direct Bond Method. The deck shall be cleaned to the satisfaction of the Engineer and shall be thoroughly wetted and maintained in a dampened condition for at least 12 hours before placement of the overlay. Any excess water shall be removed by compressed air or by vacuuming prior to beginning overlay placement. Water shall not be applied to the deck surface within one hour before or at any time during placement of the overlay.
 - (2) Overlay Placement. Placement of the concrete shall be a continuous operation throughout the pour. The overlay shall be placed as close to its final position as possible and then mechanically consolidated and screeded to final grade. All fogging, finishing, and texturing shall be according to Article 503.16.

Internal vibration shall be performed along edges, adjacent to bulkheads, and where the overlay thickness exceeds 3 in. (75 mm). Internal vibration along the longitudinal edges of a pour shall be performed with a minimum of 2 hand-held vibrators, one on each edge of the pour. Hand finishing shall be performed along the edges of the pour and shall be done from sidewalks, curbs or work bridges.

A construction dam or bulkhead shall be installed in case of a delay of 30 minutes or more in the concrete placement operation.

All construction joints shall be formed. When required by the Engineer the previously placed overlay shall be sawed full-depth to a straight and vertical edge before fresh concrete is placed.

The Engineer will determine the extent of the removal. When longitudinal joints are not shown on the plans, the locations shall be subject to approval by the Engineer and shall not be located in the wheel paths.

The Contractor shall stencil the date of construction (month and year) and the appropriate letters MS, or MSFA when fly ash is used in the mix design, into the overlay before it takes its final set. The stencil shall be located in a conspicuous location, as determined by the Engineer, for each stage of construction. This location shall be outside of the grooving where possible and within 3 ft. (1 m) of an abutment joint. The characters shall be 3 to 4 in. (75 mm to 100 mm) in height, 1/4 in. (5 mm) in depth and face the centerline of the roadway.

(3) Limitations of Operations:

- a. Weather limitations. Temperature control for concrete placement shall be according to 1020.14(b). The concrete protection from low air temperatures during the curing period shall be according to Article 1020.13(d). Concrete shall not be placed when rain is expected during the working period. If night placement is required, illumination and placement procedures will be subject to approval of the Engineer. No additional compensation will be allowed if night work is required.
- b. Other Limitations. Concrete delivery trucks shall be limited to a maximum load of 6 cu. vd. (4.6 cu. m).

Truck mixers, concrete pumps, or other heavy equipment will not be permitted on any portion of the deck where the top reinforcing mat has been exposed. Conveyors, buggy ramps and pump piping shall be installed in a way that will not displace undercut reinforcement bars. Air compressors may be operated on the deck only if located directly over a pier and supported off undercut reinforcement bars. Compressors will not be allowed to travel over undercut reinforcement bars.

Concrete removal may proceed during final cleaning and concrete placement on adjacent portions of the deck, provided the removal does not interfere in any way with the cleaning or placement operations.

If water or contaminants from the hydro-scarification flow into the area of final cleaning or concrete placement, hydro-scarification shall be suspended until the concrete has been placed and has cured a minimum of 24 hours. No concrete shall be removed within 6 ft. (1.8 m) of a newly-placed overlay until the concrete has obtained a minimum compressive strength of 3000 psi (20,700 kPa) or flexural strength of 600 psi (4,150 kPa).

- (4) Curing Procedure. The surface shall be continuously wet cured for at least 7 days according to Article 1020.13(a)(5) Wetted Cotton Mat Method.
- (5) Opening to Traffic. No traffic or construction equipment will be permitted on the overlay until after the specified cure period and the concrete has obtained a minimum compressive strength of 4000 psi (27,500 kPa) or flexural strength of 675 psi (4,650 kPa) unless permitted by the Engineer.

(6) Overlay Testing. The Engineer reserves the right to conduct pull-off tests on the overlay to determine if any areas are not bonded to the underlying concrete, and at a time determined by the Engineer. The overlay will be tested according to the Illinois Test Procedure 305 "Pull-off Test (Overlay Method)", and the Contractor shall provide the test equipment. Each individual test shall have a minimum strength of 150 psi (1,034 kPa). Unacceptable test results will require removal and replacement of the overlay at the Contractor's expense, and the locations will be determined by the Engineer. When removing portions of an overlay, the saw cut shall be a minimum depth of 1 in. (25 mm).

If the overlay is to remain in place, all core holes due to testing shall be filled with a rapid set mortar or concrete. Only enough water to permit placement and consolidation by rodding shall be used, and the material shall be struck-off flush with the adjacent material.

For a rapid set mortar mixture, one part packaged rapid set cement shall be combined with two parts fine aggregate, by volume; or a packaged rapid set mortar shall be used. For a rapid set concrete mixture, a packaged rapid set mortar shall be combined with coarse aggregate according to the manufacturer's instructions; or a packaged rapid set concrete shall be used. Mixing of a rapid set mortar or concrete shall be according to the manufacturer's instructions.

<u>Method of Measurement</u>. The areas of mechanical and/or hydro scarification on the bridge deck will be measured for payment in square yards (square meters). No additional payment will be made for multiple passes of the equipment required to achieve the specified scarification depth.

The concrete overlay will be measured for payment in square yards (square meters).

When Bridge Deck Hydro-Scarification is specified, the additional concrete placed with the overlay, required to fill all depressions below the specified thickness will be measured for payment in cubic yards (cubic meters). The volume will be determined by subtracting the theoretical volume of the overlay from the ticketed volume of overlay delivered minus the volume estimated by the Engineer left in the last truck at the end of the overlay placement. The theoretical cubic yard (cubic meter) quantity for the overlay will be determined by multiplying the plan surface area of the overlay times the specified thickness of the overlay.

<u>Basis of Payment</u>. Concrete scarification of the bridge deck using mechanical scarification equipment will be paid for at the contract unit price per square yard (square meter) for CONCRETE BRIDGE DECK SCARIFICATION of the depth specified. Concrete scarification of the bridge deck using hydro-scarification equipment will be paid for at the contract unit price per square yard (square meter) for BRIDGE DECK HYDRO-SCARIFICATION of the depth specified.

Microsilica concrete overlay will be paid for at the contract unit price per square yard (square meter) for BRIDGE DECK MICROSILICA CONCRETE OVERLAY, of the thickness specified. When hydro-scarification equipment is used, the additional volume of overlay required to fill all depressions below the specified thickness and/or for grade adjustments will be paid for at the Contractor's actual material cost for the microsilica concrete per cubic yard (cubic meter) times an adjustment factor.

For volumes 15 percent or less over the theoretical volume of the overlay the adjustment factor will be 1.15. For volumes greater than 15 percent the adjustment factor will be 1.25 for that volume over 15 percent of the theoretical volume of the overlay.

When mechanical scarification equipment is used, additional partial depth patches poured monolithically with the overlay will be paid for at the contract unit price bid per square yard (square meter) for DECK SLAB REPAIR (PARTIAL).

When the Engineer conducts pull-off tests on the overlay and they are acceptable, Contractor expenses incurred due to testing and for filling core holes will be paid according to Article 109.04. Unacceptable pull-off tests will be at the Contractor's expense.

When specified, the Contractor has the option of choosing the type of overlay. The options will be limited to those specified in the plans and will be paid for at the contract unit price per square yard (square meter) for BRIDGE DECK CONCRETE OVERLAY OPTION, of the thickness specified.

Overlay material placed off the deck in abutment backwalls, and/or other locations will not be measured for payment but will be included in the pay item involved.

STRUCTURAL REPAIR OF CONCRETE

Effective: March 15, 2006 Revised: January 22, 2010

<u>Description</u>. This work shall consist of structurally repairing concrete.

Materials. Materials shall be according to the following.

Item	Article/Section
(a) Portland Cement Concrete (Note 1)	1020
(b) R1 or R2 Mortar (Note2)	
(c) Normal Weight Concrete (Note 3)	
(d) Shotcrete (High Performance) (Note 4)	
(e) Reinforcement Bars	1006.10
(f) Anchor Bolts	1006.09
(g) Water	1002
(h) Curing Compound (Type I)	1022
(i) Cotton Mats	1022.02
(j) Protective Coat	1023.01
(k) Epoxy (Note 5)	1025
(I) Mechanical Bar Splicers (Note 6)	

Note 1. The concrete shall be Class SI, except the cement factor shall be a minimum 6.65 cwt/cu. yd. (395 kg/cu. m), the coarse aggregate shall be a CA 16, and the strength shall be a minimum 4000 psi (27,500 kPa) compressive or 675 psi (4650 kPa) flexural at 14 days. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump, but the cement factor shall not be reduced. This cement factor restriction shall also apply if a water-reducing admixture is used.

- Note 2. The R1 or R2 mortar shall be from the Department's approved list of Packaged, Dry, Rapid Hardening, Cementitious Materials for Concrete Repairs with coarse aggregate added. The amount of coarse aggregate added to the R1 or R2 Mortar shall be per the manufacturer's recommendations. The coarse aggregate gradation shall be CA 16 from an Aggregate Gradation Control System source or a packaged aggregate meeting Article 1004.02 with a maximum size of 1/2 in. (12.5 mm). The R1 or R2 Mortar and coarse aggregate mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump.
- Note 3. The packaged concrete mixture shall be from the Department's approved list of Packaged, Dry, Formed, Concrete Repair Mixtures. The materials and preparation of aggregate shall be according to ASTM C 387. Proportioning shall be according to ASTM C 387, except the minimum cement factor shall be 6.65 cwt/cu. yd. (395 kg/cu. m). Cement replacement with fly ash or ground granulated blast-furnace slag shall be according to Section 1020. The coarse aggregate shall be a maximum size of 1/2 in. (12.5 mm). The packaged concrete mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 5-7 in. (125-175 mm) slump.
- Note 4. A packaged, pre-blended, and dry combination of materials, for the wet-mix shotcrete method shall be provided according to ASTM C 1480. An accelerator is prohibited, except the shotcrete may be modified at the nozzle with a non-chloride accelerator for overhead applications. The shotcrete shall be Type FA or CA, Grade FR, and Class I. The fibers shall be Type III synthetic according to ASTM C 1116.

The packaged shotcrete shall have a maximum water soluble chloride ion content of 0.06 % by weight (mass) of cement. The test shall be performed according to ASTM C 1218, and the hardened shotcrete shall have an age of 28 to 42 days at the time of test. The test shall be performed a minimum of once every two years.

Each individual aggregate used in the packaged shotcrete shall have either a maximum ASTM C 1260 expansion of 0.16 percent or a maximum ASTM C 1293 expansion of 0.040 percent. However, the ASTM C 1260 value may be increased to 0.27 percent for each individual aggregate if the cement total equivalent alkali content ($Na_2O + 0.658K_2O$) does not exceed 0.60 percent. As an alternative to these requirements, ASTM C 1567 testing which shows the packaged shotcrete has a maximum expansion of 0.16 percent may be submitted. The ASTM C 1260, C 1293, or C 1567 test shall be performed a minimum of once every two years.

The 7 and 28 day compressive strength requirements in ASTM C 1480 shall not apply. Instead the shotcrete shall obtain a minimum compressive strength of 4000 psi (27,500 kPa) at 14 days.

The packaged shotcrete shall be limited to the following proportions:

The portland cement and finely divided minerals shall be 6.05 cwt/cu. yd. (360 kg/cu. m) to 8.50 cwt/cu. yd (505 kg/cu. m) for Type FA and 6.05 cwt/cu. yd. (360 kg/cu. m) to 7.50 cwt/cu. yd. (445 kg/cu. m) for Type CA. The portland cement shall not be below 4.70 cwt/cu. yd. (279 kg/cu. m) for Type FA or CA.

The finely divided mineral(s) shall constitute a maximum of 35 percent of the total cement plus finely divided mineral(s).

Class F fly ash is optional and the maximum shall be 20 percent by weight (mass) of cement.

Class C fly ash is optional and the maximum shall be 25 percent by weight (mass) of cement.

Ground granulated blast-furnace slag is optional and the maximum shall be 30 percent by weight (mass) of cement.

Microsilica is required and shall be a minimum of 5 percent by weight (mass) of cement, and a maximum of 10 percent. As an alternative to microsilica, high-reactivity metakaolin may be used at a minimum of 5 percent by weight (mass) of cement, and a maximum of 10 percent.

Fly ash shall not be used in combination with ground granulated blast-furnace slag. Class F fly ash shall not be used in combination with Class C fly ash. Microsilica shall not be used in combination with high-reactivity metakaolin. A finely divided mineral shall not be used in combination with a blended hydraulic cement, except for microsilica or high-reactivity metakaolin.

The water/cement ratio as defined in Article 1020.06 shall be a maximum of 0.42.

The air content as shot shall be 4.0 - 8.0 percent.

- Note 5. In addition ASTM C 881, Type IV, Grade 2 or 3, Class A, B, or C may be used.
- Note 6. Mechanical bar splicers shall be from the approved list of Mechanical Reinforcing Bar Splicers / Coupler Systems, and shall be capable of developing in tension at least 125 percent of the yield strength of the existing reinforcement bar.

Equipment. Equipment shall be according to Article 503.03 and the following.

Chipping Hammer – The chipping hammer for removing concrete shall be a light-duty pneumatic or electric tool with a 15 lb. (7 kg) maximum class or less.

Blast Cleaning Equipment – Blast cleaning equipment for concrete surface preparation shall be the abrasive type, and the equipment shall have oil traps.

Hydrodemolition Equipment – Hydrodemolition equipment for removing concrete shall be calibrated, and shall use water according to Section 1002.

High Performance Shotcrete Equipment – The batching, mixing, pumping, hose, nozzle, and auxiliary equipment shall be for the wet-mix shotcrete method, and shall meet the requirements of ACI 506R.

Construction Requirements

<u>General</u>. The repair methods shall be either formed concrete repair or shotcrete. The repair method shall be selected by the Contractor with the following rules.

- (a) Rule 1. For formed concrete repair, a subsequent patch to repair the placement point after initial concrete placement will not be allowed. As an example, this may occur in a vertical location located at the top of the repair.
- (b) Rule 2. Formed concrete repair shall not be used for overhead applications.
- (c) Rule 3. Shotcrete shall not be used for column repairs greater than 4 in. (100 mm) in depth, or any repair location greater than 8 in. (205 mm) in depth. The only exception to this rule would be for a horizontal application, where the shotcrete may be placed from above in one lift.
- (d) Rule 4. If formed concrete repair is used for locations that have reinforcement with less than 0.75 in. (19 mm) of concrete cover, the concrete mixture shall contain fly ash or ground granulated blast-furnace slag at the maximum cement replacement allowed.

<u>Temporary Shoring or Cribbing</u>. When a temporary shoring or cribbing support system is required, the Contractor shall provide details and computations, prepared and sealed by an Illinois licensed Structural Engineer, to the Department for review and approval. When ever possible the support system shall be installed prior to starting the associated concrete removal. If no system is specified, but during the course of removal the need for temporary shoring or cribbing becomes apparent or is directed by the Engineer due to a structural concern, the Contractor shall not proceed with any further removal work until an appropriate and approved support system is installed.

Concrete Removal. The Contractor shall provide ladders or other appropriate equipment for the Engineer to mark the removal areas. Repair configurations will be kept simple, and squared corners will be preferred. The repair perimeter shall be sawed a depth of 1/2 in. (13 mm) or less, as required to avoid cutting the reinforcement. Any cut reinforcement shall be repaired or replaced at the expense of the Contractor. If the concrete is broken or removed beyond the limits of the initial saw cut, the new repair perimeter shall be recut. The areas to be repaired shall have all loose, unsound concrete removed completely by the use of chipping hammers, hydrodemolition equipment, or other methods approved by the Engineer. The concrete removal shall extend along the reinforcement bar until the reinforcement is free of bond inhibiting corrosion. The outermost layer of reinforcement bar within the repair area shall be undercut to a depth of 3/4 in. (19 mm) or the diameter of the reinforcement bar, whichever value is larger. The underlying transverse reinforcement bar shall also be undercut as previously described, unless the reinforcement is not corroded, and the reinforcement bar is encased and well bonded to the surrounding concrete.

If sound concrete is encountered before existing reinforcement bars are exposed, further removal of concrete shall not be performed unless the minimum repair depth is not met.

The repair depth shall be a minimum of 1 in. (25 mm). The substrate profile shall be \pm 1/16 in. (\pm 1.5 mm). The perimeter of the repair area shall have a vertical face.

If a repair is located at the ground line, any excavation required below the ground line to complete the repair shall be included in this work.

The Contractor shall have a maximum of 14 calendar days to complete each repair location with concrete or shotcrete, once concrete removal has started for the repair.

The Engineer shall be notified of concrete removal that exceeds 6 in. (150 mm) in depth, one fourth the cross section of a structural member, more than half the vertical column reinforcement is exposed in a cross section, more than 6 consecutive reinforcement bars are exposed in any direction, within 1.5 in. (38 mm) of a bearing area, or other structural concern. Excessive deterioration or removal may require further evaluation of the structure or installation of temporary shoring and cribbing support system.

<u>Surface Preparation</u>. Prior to placing the concrete or shotcrete, the Contractor shall prepare the repair area and exposed reinforcement by blast cleaning. The blast cleaning shall provide a surface that is free of oil, dirt, and loose material.

If a succeeding layer of shotcrete is to be applied, the initial shotcrete surface and remaining exposed reinforcement shall be free of curing compound, oil, dirt, loose material, rebound (i.e. shotcrete material leaner than the original mixture which ricochets off the receiving surface), and overspray. Preparation may be by lightly brushing or blast cleaning if the previous shotcrete surface is less than 36 hours old. If more than 36 hours old, the surface shall be prepared by blast cleaning.

The repair area and perimeter vertical face shall have a rough surface. Care shall be taken to ensure the perimeter sawcut is roughened. Just prior to concrete or shotcrete placement, saturate the repair area with water to a saturated surface-dry condition. Any standing water shall be removed.

Concrete or shotcrete placement shall be done within 3 calendar days of the surface preparation or the repair area shall be prepared again.

<u>Reinforcement.</u> Exposed reinforcement bars shall be cleaned of concrete and corrosion by blast cleaning. After cleaning, all exposed reinforcement shall be carefully evaluated to determine if replacement or additional reinforcement bars are required.

Reinforcing bars that have been cut or have lost 25 percent or more of their original cross sectional area shall be supplemented by new in kind reinforcement bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. A mechanical bar splicer shall be used when it is not feasible to provide the minimum bar lap. No welding of bars shall be performed.

Intersecting reinforcement bars shall be tightly secured to each other using 0.006 in. (1.6 mm) or heavier gauge tie wire, and shall be adequately supported to minimize movement during concrete placement or application of shotcrete.

For reinforcement bar locations with less than 0.75 in. (19 mm) of cover, protective coat shall be applied to the completed repair.

The application of the protective coat shall be according to Article 503.19, 2nd paragraph, except blast cleaning shall be performed to remove curing compound.

The Contractor shall anchor the new concrete to the existing concrete with 3/4 in. (19 mm) diameter hook bolts for all repair areas where the depth of concrete removal is greater than 8 in. (205 mm) and there is no existing reinforcement extending into the repair area. The hook bolts shall be spaced at 15 in. (380 mm) maximum centers both vertically and horizontally, and shall be a minimum of 12 in. (305 mm) away from the perimeter of the repair. The hook bolts shall be installed according to Section 584.

Repair Methods. All repair areas shall be inspected and approved by the Engineer prior to placement of the concrete or application of the shotcrete.

(a) Formed Concrete Repair. Falsework shall be according to Article 503.05. Forms shall be according to Article 503.06. Formwork shall provide a smooth and uniform concrete finish, and shall approximately match the existing concrete structure. Formwork shall be mortar tight and closely fitted where they adjoin the existing concrete surface to prevent leakage. Air vents may be provided to reduce voids and improve surface appearance. The Contractor may use exterior mechanical vibration, as approved by the Engineer, to release air pockets that may be entrapped.

The concrete for formed concrete repair shall be a Class SI Concrete, or a packaged R1 or R2 Mortar with coarse aggregate added, or a packaged Normal Weight Concrete at the Contractor's option. The concrete shall be placed and consolidated according to Article 503.07. The concrete shall not be placed when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 40 °F (4 °C). All repaired members shall be restored as close as practicable to their original dimensions.

Curing shall be done according to Article 1020.13.

If temperatures below $45^{\circ}F$ ($7^{\circ}C$) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(d)(1), or Protection Method II according to Article 1020.13(d)(2) shall be used during the curing period.

The surfaces of the completed repair shall be finished according to Article 503.15.

(b) Shotcrete. Shotcrete shall be tested by the Engineer for air content according to Illinois Modified AASHTO T 152. Obtain the sample in a damp, non-absorbent container from the discharge end of the nozzle.

For compressive strength of shotcrete, a 18 x 18 x 3.5 in. $(457 \times 457 \times 89 \text{ mm})$ test panel shall be shot by the Contractor for testing by the Engineer. A steel form test panel shall have a minimum thickness of 3/16 in. (5 mm) for the bottom and sides. A wood form test panel shall have a minimum 3/4 in. (19 mm) thick bottom, and a minimum 1.5 in. (38 mm) thickness for the sides. The test panel shall be cured according to Article 1020.13 (a) (3) or (5) while stored at the jobsite and during delivery to the laboratory. After delivery to the laboratory for testing, curing and testing shall be according to ASTM C 1140.

The method of alignment control (i.e. ground wires, guide strips, depth gages, depth probes, and formwork) to ensure the specified shotcrete thickness and reinforcing bar cover is obtained shall be according to ACI 506R. Ground wires shall be removed after completion of cutting operations. Guide strips and formwork shall be of dimensions and a configuration that do not prevent proper application of shotcrete. Metal depth gauges shall be cut 1/4 in. (6 mm) below the finished surface. All repaired members shall be restored as close as practicable to their original dimensions.

For air temperature limits when applying shotcrete in cold weather, the first paragraph of Article 1020.14(b) shall apply. For hot weather, shotcrete shall not be applied when the air temperature is greater than 90°F (32°C). The applied shotcrete shall have a minimum temperature of 50°F (10°C) and a maximum temperature of 90°F (32°C). The shotcrete shall not be applied during periods of rain unless protective covers or enclosures are installed. The shotcrete shall not be applied when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 40°F (4°C). If necessary, lighting shall be provided to provide a clear view of the shooting area.

The shotcrete shall be applied according to ACI 506R, and shall be done in a manner that does not result in cold joints, laminations, sandy areas, voids, sags, or separations. In addition, the shotcrete shall be applied in a manner that results in maximum densification of the shotcrete. Shotcrete which is identified as being unacceptable while still plastic shall be removed and re-applied.

The nozzle shall normally be at a distance of 2 to 5 ft. (0.6 to 1.5 m) from the receiving surface, and shall be oriented at right angles to the receiving surface. Exceptions to this requirement will be permitted to fill corners, encase large diameter reinforcing bars, or as approved by the Engineer. For any exception, the nozzle shall never be oriented more than 45 degrees from the surface. Care shall be taken to keep the front face of the reinforcement bar clean during shooting operations. Shotcrete shall be built up from behind the reinforcement bar. Accumulations of rebound and overspray shall be continuously removed prior to application of new shotcrete. Rebound material shall not be incorporated in the work.

Whenever possible, shotcrete shall be applied to the full thickness in a single layer. The maximum thickness shall be 4 in. (100 mm) unless the shotcrete is applied from above on a horizontal surface, or a thicker application is approved by the Engineer. When two or more layers are required, the minimum number shall be used and shall be done in a manner without sagging or separation. A flash coat (i.e. a thin layer of up to 1/4 in. (6 mm) applied shotcrete) may be used as the final lift for overhead applications.

Prior to application of a succeeding layer of shotcrete, the initial layer of shotcrete shall be prepared according to the surface preparation and reinforcement bar cleaning requirements. Upon completion of the surface preparation and reinforcement bar treatment, water shall be applied according to the surface preparation requirements unless the surface is moist. The second layer of shotcrete shall then be applied within 30 minutes.

Shotcrete shall be cut back to line and grade using trowels, cutting rods, screeds or other suitable devices. The shotcrete shall be allowed to stiffen sufficiently before cutting. Cutting shall not cause cracks or delaminations in the shotcrete. For depressions, cut material may be used for small areas. Rebound material shall not be incorporated in the work. For the final finish, a wood float shall be used to approximately match the existing concrete texture. All repaired members shall be restored as close as practicable to their original dimensions.

Contractor operations for curing shall be continuous with shotcrete placement and finishing operations. The Engineer may require modification of operations to ensure satisfactory results are obtained. Cotton mats shall be applied according to Article 1020.13(a)(5) except the exposed layer of shotcrete shall be covered within 10 minutes after finishing, and wet curing shall begin immediately. As an alternative to this method, Type I curing compound shall be applied according to Article 1020.13(a)(4) within 10 minutes and moist curing with cotton mats shall begin within 3 hours. For overhead applications where the final shotcrete layer has been applied, the Contractor has the option to use Type I curing compound in lieu of the cotton mats. Note 5 of the Index Table in Article 1020.13 shall apply to the membrane curing method. The curing compound shall be applied according to Article 1020.13(a)(4).

When a shotcrete layer is to be covered by a succeeding shotcrete layer within 36 hours, the repair area shall be protected with intermittent hand fogging, or wet curing with either burlap or cotton mats shall begin within 10 minutes. Intermittent hand fogging may be used only for the first hour. Thereafter, wet curing with burlap or cotton mats shall be used until the succeeding shotcrete layer is applied. Intermittent hand fogging may be extended to the first hour and a half if the succeeding shotcrete layer is applied by the end of this time.

The curing period shall be for 7 days, except when there is a succeeding layer of shotcrete. In this instance, the initial shotcrete layer shall be cured until the surface preparation and reinforcement bar treatment is started.

If temperatures below $45^{\circ}F$ ($7^{\circ}C$) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(d)(1), or Protection Method II according to Article 1020.13(d)(2) shall be used during the curing period

<u>Inspection of Completed Work.</u> The Contractor shall provide ladders or other appropriate equipment for the Engineer to inspect the repaired areas. After curing but no sooner than 28 days after placement of concrete or shooting of shotcrete, the repair shall be examined for conformance with original dimensions, cracks, voids, and delaminations. Sounding for delaminations will be done with a hammer or by other methods determined by the Engineer.

The repaired area shall be removed and replaced, as determined by the Engineer, for nonconformance with original dimensions, surface cracks greater than 0.01 in. (0.25 mm) in width, map cracking with a crack spacing in any direction of 18 in. (0.45 m) or less, voids, or delaminations.

If a nonconforming repair is allowed to remain in place, cracks 0.01 in. (0.25 mm) or less shall be repaired with epoxy according to Section 590.

For cracks less than 0.007 in. (2 mm), the epoxy may be applied to the surface of the crack. Voids shall be repaired according to Article 503.15.

<u>Publications and Personnel Requirements</u>. The Contractor shall provide a current copy of ACI 506R to the Engineer a minimum of one week prior to start of construction.

The shotcrete personnel who perform the work shall have current American Concrete Institute (ACI) nozzlemen certification for vertical wet and overhead wet applications, except one individual may be in training. This individual shall be adequately supervised by a certified ACI nozzlemen as determined by the Engineer. A copy of the nozzlemen certificate(s) shall be given to the Engineer.

<u>Method of Measurement</u>. This work will be measured for payment in place and the area computed in square feet (square meters). For a repair at a corner, both sides will be measured.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per square foot (square meter) for STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 IN. (125 MM), STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 IN. (125 MM).

When not specified to be paid for elsewhere, the work to design, install, and remove the temporary shoring and cribbing will be paid for according to Article 109.04.

With the exception of reinforcement damaged by the Contractor during removal, the furnishing and installation of supplemental reinforcement bars, mechanical bar splicers, hook bolts, and protective coat will be paid according to Article 109.04.

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 (Na₂O + 0.658K₂O) 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.

<u>Aggregate Groups</u>. 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 ASTM C 1260 Expansion	Fine Aggregate or Fine Aggregate Blend 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.

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.

- 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 $(Na_2O + 0.658K_2O)$ 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.

<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 ($Na_2O + 0.658K_2O$) 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.

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."

CERTIFICATION OF METAL FABRICATOR (BDE)

Effective: July 1, 2010

Revise Article 106.08 of the Standard Specifications to read:

- "106.08 Certification of Metal Fabricator. All fabricators performing work on metal components of structures shall be certified under the appropriate category of the AISC Quality Certification Program as follows.
 - (a) Fabricators of the main load carrying steel components of welded plate girder, box girder, truss, and arch structures shall be certified under Category MBr (Major Steel Bridges).
 - (b) Fabricators of the main load carrying steel components of rolled beam structures, either simple span or continuous, and overhead sign structures shall be certified under Category SBr (Simple Steel Bridges).

Fabricators of steel or other non-ferrous metal components of structures not certified under (a) or (b) above shall be certified under the program for Bridge and Highway Metal Component Manufacturers."

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.

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 5.00% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

(a) The bidder documents that enough DBE participation has been obtained to meet the goal; or

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

<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 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. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so.

A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE 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 award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) The Contractor must notify and obtain written approval from the Department's Bureau of Small Business Enterprises prior to replacing a DBE or making any change in the participation of a DBE. Approval for replacement will be granted only if it is demonstrated that the DBE is unable or unwilling to perform. The Contractor must make every good faith effort to find another certified DBE subcontractor to substitute for the original DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the original DBE, to the extent needed to meet the contract goal.
- (c) Any deviation from the DBE condition-of-award or contract specifications must be approved, in writing, by the Department. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract.
- (d) In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
- (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
- 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.
- The Contractor shall maintain a record of payments for work performed to the DBE (h) participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (j) of this part.
- (i) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

(j) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

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."

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 - FINE AGGREGATE (BDE)

Effective: April 1, 2010

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

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

FINE AGGREGATE GRADATIONS (Metric)					
Grad No.	Sieve Size and Percent Passing				
Grad No.	9.5 mm	4.75 mm	2.36 mm	1.18 mm	75 µm
FA 22	100 6/ 6/ 8±8 2±2				

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

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

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

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

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22.

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

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:

		1	
	Frequency of Tests	Frequency of	Test Method
		Tests	See Manual of
"Parameter	High ESAL Mixture		Test Procedures
	Low ESAL Mixture	All Other	for Materials
		Mixtures	
Aggregate			
Gradation	1 washed ignition oven test on the	1 washed	Illinois Procedure
	mix per half day of production	ignition oven	
		test on the mix	
	Note 4.	per day of	
% passing sieves:		production	
1/2 in. (12.5 mm),			
No. 4 (4.75 mm),		Note 4.	
No. 8 (2.36 mm),			
No. 30 (600 μm)			
No. 200 (75 μm)			
Note 1.			
Asphalt Binder			
Content by Ignition	1 per half day of production	1 per day	Illinois-Modified
Oven			AASHTO T 308
Note 2.			
VMA	Day's production ≥ 1200 tons:	N/A	Illinois Modified
			AASHTO R 35
Note 3.	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	1 per half day of production	1 per day	Illinois-Modified
Gravity			AASHTO T 312
of Gyratory Sample	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)		

	Day's production ≥ 1200 tons:		
Maximum Specific Gravity of Mixture	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 μ 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."

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:

Add the following to Article 504.02 of the Standard Specifications:

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)"

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	n Gravity A	djustment F	actors	
Types of Violations	Soil Dist	urbed an	d Not P	ermanently
	Stabilized	At Time of	Violation	
	< 5	5 - 10	>10 - 25	> 25
	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				
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				

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."

POLYUREA PAVEMENT MARKING (BDE)

Effective: April 1, 2004 Revised: January 1, 2009

<u>Description</u>. This work shall consist of furnishing and applying pavement marking lines.

The type of polyurea pavement marking applied will be determined by the type of reflective media used. Polyurea Pavement Marking Type I shall use glass beads as a reflective media. Polyurea Pavement Marking Type II shall use a combination of composite reflective elements and glass beads as a reflective media.

Polyurea-based liquid pavement markings shall only be applied by Contractors on the list of Approved Polyurea Contractors maintained by the Engineer of Operations and in effect on the date of advertisement for bids.

<u>Materials</u>. Materials shall meet the following requirements:

- (a) Polyurea Pavement Marking. The polyurea pavement marking material shall consist of 100 percent solid two part system formulated and designed to provide a simple volumetric mixing ratio of two components (must be two or three volumes of Part A to one volume of Part B). No volatile or polluting solvents or fillers will be allowed.
- (b) Pigmentation. The pigment content by weight (mass) of component A shall be determined by low temperature ashing according to ASTM D 3723. The pigment content shall not vary more than ± two percent from the pigment content of the original qualified paint.

White Pigment shall be Titanium Dioxide meeting ASTM D 476 Type II, Rutile.

Yellow Pigment shall be an Organic Yellow and contain no heavy metals.

- (c) Environmental. Upon heating to application temperature, the material shall not exude fumes which are toxic or injurious to persons or property.
- (d) Daylight Reflectance. The daylight directional reflectance of the cured polyurea material (without reflective media) shall be a minimum of 80 percent (white) and 50 percent (yellow) relative to magnesium oxide when tested using a color spectrophotometer with a 45 degrees circumferential /zero degrees geometry, illuminant C, and two degrees observer angle. The color instrument shall measure the visible spectrum from 380 to 720 nm with a wavelength measurement interval and spectral bandpass of 10 nm. In addition, the color of the yellow polyurea shall visually match Color Number 33538 of Federal Standard 595a with chromaticity limits as follows:

X	0.490	0.475	0.485	0.539
Υ	0.470	0.438	0.425	0.456

(e) Weathering Resistance. The polyurea marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness to an aluminum alloy panel (Federal Test Std. No. 141, Method 2013) and allowed to cure for 72 hours at room temperature, shall be subjected to accelerated weathering for 75 hours. The accelerated weathering shall be completed by using the light and water exposure apparatus (fluorescent UV - condensation type) and tested according to ASTM G 53.

The cycle shall consist of four hours UV exposure at 122 °F (50 °C) and four hours of condensation at 104 °F (40 °C). UVB 313 bulbs shall be used. At the end of the exposure period, the material shall show no substantial change in color or gloss.

- (f) Dry Time. The polyurea pavement marking material, when mixed in the proper ratio and applied at 14 to 16 mils (0.35 to 0.41 mm) wet film thickness and with the proper saturation of reflective media, shall exhibit a no-tracking time of ten minutes or less when tested according to ASTM D 711.
- (g) Adhesion. The catalyzed polyurea pavement marking materials when applied to a 4 x 4 x 2 in. (100 x 100 x 50 mm) concrete block, shall have a degree of adhesion which results in a 100 percent concrete failure in the performance of this test.

The concrete block shall be brushed on one side and have a minimum strength of 3500 psi (24,100 kPa).

A 2 in. (50 mm) square film of the mixed polyurea shall be applied to the brushed surface and allowed to cure for 72 hours at room temperature. A 2 in. (50 mm) square cube shall be affixed to the surface of the polyurea by means of an epoxy glue. After the glue has cured for 24 hours, the polyurea specimen shall be placed on a dynamic testing machine in such a fashion so that the specimen block is in a fixed position and the 2 in. (50 mm) cube (glued to the polyurea surface) is attached to the dynamometer head. Direct upward pressure shall be slowly applied until the polyurea system fails. The location of the break and the amount of concrete failure shall be recorded.

- (h) Hardness. The polyurea pavement marking materials when tested according to ASTM D 2240, shall have a shore D hardness of between 70 and 100. Films shall be cast on a rigid substrate at 14 to 16 mils (0.35 to 0.41 mm) in thickness and allowed to cure at room temperature for 72 hours before testing.
- (i) Abrasion. The abrasion resistance shall be evaluated according to ASTM D 4060 using a Taber Abrader with a 1,000 gram load and CS 17 wheels. The duration of the test shall be 1,000 cycles. The loss shall be calculated by difference and be less than 120 mgs. The tests shall be run on cured samples of polyurea material which have been applied at a film thickness of 14 to 16 mils (0.35 to 0.41 mm) to code S-16 stainless steel plates. The films shall be allowed to cure at room temperature for at least 72 hours and not more than 96 hours before testing.
- (j) Reflective Media. The reflective media shall meet the following requirements:
 - (1) Type I The glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications and the following requirements:
 - a. First Drop Glass Beads. The first drop glass beads shall be tested by the standard visual method of large glass spheres adopted by the Department. The beads shall have a silane coating and meet the following sieve requirements:

U.S. Standard	Sieve	% Passing
Sieve Number	Size	By Weight (mass)
12	1.70 mm	95-100
14	1.40 mm	75-95
16	1.18 mm	10-47
18	1.00 mm	0-7
20	850 μm	0-5

- b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B.
 - (2) Type II The combination of microcrystalline ceramic elements and glass beads shall meet the following requirements:
- a. First Drop Glass Beads. The first drop glass beads shall meet the following requirements:
 - 1. Composition. The elements shall be composed of a titania opacified ceramic core having clear and or yellow tinted microcrystalline ceramic beads embedded to the outer surface.
 - 2. Index of Refraction. All microcrystalline reflective elements embedded to the outer surface shall have an index of refraction of 1.8 when tested by the immersion method.

- 3. Acid Resistance. A sample of microcrystalline ceramic beads supplied by the manufacturer, shall show resistance to corrosion of their surface after exposure to a one percent solution (by weight (mass)) of sulfuric acid. Adding 0.2 oz (5.7 ml) of concentrated acid into the water shall make the one percent acid solution. This test shall be performed by taking a 1 x 2 in. (25 x 50 mm) sample and adhering it to the bottom of a glass tray and placing just enough acid solution to completely immerse the sample. The tray shall be covered with a piece of glass to prevent evaporation and allow the sample to be exposed for 24 hours under these conditions. The acid solution shall be decanted (do not rinse, touch, or otherwise disturb the bead surfaces) and the sample dried while adhered to the glass tray in a 150 °F (66 °C) oven for approximately 15 minutes. Microscope examination (20X) shall show no white (corroded) layer on the entire surface.
- b. Second Drop Glass Beads. The second drop glass beads shall meet the requirements of Article 1095.07 of the Standard Specifications for Type B or the following manufacturer's specification:
 - 1. Sieve Analysis. The glass beads shall meet the following sieve requirements:

U.S. Standard Sieve Number	Sieve Size	% Passing By Weight (mass)
20	850 μm	100
30	600 μm	75-95
50	300 μm	15-35
100	150 μm	0-5

The manufacturer of the glass beads shall certify that the treatment of the glass beads meets the requirements of the polyurea manufacturer.

- 2. Imperfections. The surface of the glass beads shall be free of pits and scratches. The glass beads shall be spherical in shape and shall contain a maximum of 20 percent by weight (mass) of irregular shapes when tested by the standard method using a vibratile inclined glass plate as adopted by the Department.
- 3. Index of Refraction. The index of refraction of the glass beads shall be a minimum of 1.50 when tested by the immersion method at 77 °F (25 °C).
- (k) Packaging. Microcrystalline ceramic reflective elements and glass beads shall be delivered in approved moisture proof bags or weather resistant bulk boxes. Each carton shall be legibly marked with the manufacturer, specifications and type, lot number, and the month and year the microcrystalline ceramic reflective elements and/or glass beads were packaged. The letters and numbers used in the stencils shall be a minimum of 1/2 in. (12.7 mm) in height.
 - (1) Moisture Proof Bags. Moisture proof bags shall consist of at least five ply paper construction unless otherwise specified. Each bag shall contain 50 lb (22.7 kg) net.
 - (2) Bulk Weather Resistance Boxes. Bulk weather resistance boxes shall conform to Federal Specification PPP-8-640D Class II or latest revision. Boxes are to be weather resistant, triple wall, fluted, corrugated-fiber board. Cartons shall be strapped with two metal straps.

Straps shall surround the outside perimeter of the carton. The first strap shall be located approximately 2 in. (50 mm) from the bottom of the carton and the second strap shall be placed approximately in the middle of the carton. All cartons shall be shrink wrapped for protection from moisture. Cartons shall be lined with a minimum 4 mil polyester bag and meet Interstate Commerce Commission requirements. Cartons shall be approximately 38 x 38 in. (1 x 1 m), contain 2000 lb (910 kg) of microcrystalline ceramic reflective elements and/or glass beads and be supported on a wooden pallet with fiber straps.

- (I) Packaging. The material shall be shipped to the job site in substantial containers and shall be plainly marked with the manufacturer's name and address, the name and color of the material, date of manufacture, and batch number.
- (m) Verification. Prior to approval and use of the polyurea pavement marking materials, the manufacturer shall submit a notarized certification of an independent laboratory, together with the results of all tests, stating these materials meet the requirements as set forth herein. The certification test report shall state the lot tested, manufacturer's name, brand name of polyurea and date of manufacture. The certification shall be accompanied by one 1 pt (1/2 L) samples each of Part A and Part B. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B.

After approval by the Department, certification by the polyurea manufacturer shall be submitted for each batch used. New independent laboratory certified test results and samples for testing by the Department shall be submitted any time the manufacturing process or paint formulation is changed. All costs of testing (other than tests conducted by the Department) shall be borne by the manufacturer.

- (n) Acceptance samples. Acceptance samples shall consist of one 1 pt (1/2 L) samples of Part A and Part B, of each lot of paint. Samples shall be sent in the appropriate volumes for complete mixing of Part A and Part B. The samples shall be submitted to the Department for testing, together with a manufacturer's certification. The certification shall state the formulation for the lot represented is essentially identical to that used for qualification testing. All, acceptance samples will be taken by a representative of the Department. The polyurea pavement marking materials shall not be used until tests are completed and they have met the requirements as set forth herein.
- (o) Material Retainage. The manufacturer shall retain the test sample for a minimum of 18 months.

Equipment. The polyurea pavement marking compounds shall be applied through equipment specifically designed to apply two component liquid materials, glass beads and/or reflective elements in a continuous and skip-line pattern. The two-component liquid materials shall be applied after being accurately metered and then mixed with a static mix tube or airless impingement mixing guns. The static mixing tube or impingement mixing guns shall accommodate plural component material systems that have a volumetric ratio of 2 to 1 or 3 to 1. This equipment shall produce the required amount of heat at the mixing head and gun tip and maintain those temperatures within the tolerances specified. The guns shall have the capacity to deliver materials from approximately 1.5 to 3 gal/min (5.7 to 11.4 L/min) to compensate for a typical range of application speeds of 6 to 8 mph (10 to 13 km/h). The accessories such as spray tip, mix chamber, and rod diameter shall be selected according to the manufacturer's specifications to achieve proper mixing and an acceptable spray pattern. The application equipment shall be maneuverable to the extent that straight lines can be followed and normal curves can be made in a true arc.

This equipment shall also have as an integral part of the gun carriage, a high pressure air spray capable of cleaning the pavement immediately prior to making application.

The equipment shall be capable of spraying both yellow and white polyurea, according to the manufacturer's recommended proportions and be mounted on a truck of sufficient size and stability with an adequate power source to produce lines of uniform dimensions and prevent application failure. The truck shall have at least two polyurea tanks each of 110 gal (415 L) minimum capacity and be equipped with hydraulic systems and agitators. It shall be capable of placing stripes on the left and right sides and placing two lines on a three-line system simultaneously with either line in a solid or intermittent pattern, in yellow or white, and applying the appropriate reflective media according to manufacturer's recommendations. All guns shall be in full view of operations at all times. The equipment shall have a metering device to register the accumulated installed quantities for each gun, each day. Each vehicle shall include at least one operator who shall be a technical expert in equipment operations and polyurea application techniques. Certification of equipment shall be provided at the pre-construction conference.

The mobile applicator shall include the following features:

- (a) Material Reservoirs. The applicator shall provide individual material reservoirs, or space for the storage of Part A and Part B of the resin composition.
- (b) Heating Equipment. The applicator shall be equipped with heating equipment of sufficient capacity to maintain the individual resin components at the manufacturer's recommended temperature of ±5 °F (±2.8 °C) for spray application.
- (c) Dispensing Equipment. The applicator shall be equipped with glass bead and/or reflective element dispensing equipment. The applicator shall be capable of applying the glass beads and/or reflective elements at a rate and combination indicated by the manufacturer.
- (d) Volumetric Usage. The applicator shall be equipped with metering devices or pressure gauges on the proportioning pumps as well as stroke counters to monitor volumetric usage. Metering devices or pressure gauges and stroke counters shall be visible to the Engineer.
- (e) Pavement Marking Placement. The applicator shall be equipped with all the necessary spray equipment, mixers, compressors and other appurtenances to allow for the placement of reflectorized pavement markings in a simultaneous sequence of operations.

The Contractor shall provide an accurate temperature-measuring device(s) that shall be capable of measuring the pavement temperature prior to application of the material, the material temperature at the gun tip and the material temperature prior to mixing.

CONSTRUCTION REQUIREMENTS

<u>General</u>. The pavement shall be cleaned by a method approved by the Engineer to remove all dirt, grease, glaze, or any other material that would reduce the adhesion of the markings with minimum or no damage to the pavement surface. New portland cement concrete pavements shall be air-blast-cleaned to remove all latents.

Widths, lengths, and shapes of the cleaned surface shall be of sufficient size to include the full area of the specified pavement marking to be placed.

The cleaning operation shall be a continuous moving operation process with minimum interruption to traffic.

Markings shall be applied to the cleaned surfaces on the same calendar day. If this cannot be accomplished, the surface shall be re-cleaned prior to applying the markings. No markings shall be applied until the Engineer approves the cleaning.

The pavement markings shall be applied to the cleaned road surface, during conditions of dry weather and subsequently dry pavement surfaces at a minimum uniform wet thickness of 15 mils (0.4 mm) according to the manufacturer's installation instructions. On new hot-mix asphalt (HMA) surfaces the pavement markings shall be applied at a minimum uniform wet thickness of 20 mils (0.5 mm). The application of and combination of reflective media (glass beads and/or reflective elements) shall be applied at a rate specified by the manufacturer. At the time of installation the pavement surface temperature and the ambient temperature shall be above 40 °F (4 °C) and rising. The pavement markings shall not be applied if the pavement shows any visible signs of moisture or it is anticipated that damage causing moisture, such as rain showers, may occur during the installation and set periods. The Engineer will determine the atmospheric conditions and pavement surface conditions that produce satisfactory results.

Using the application equipment, the pavement markings shall be applied in the following manner, as a simultaneous operation:

- (a) The surface shall be air-blasted to remove any dirt and residue.
- (b) The resin shall be mixed and heated according to manufacturer's recommendations and sprayed onto the pavement surface.

The edge of the center line or lane line shall be offset a minimum distance of 2 in. (50 mm) from a longitudinal crack or joint. Edge lines shall be approximately 2 in. (50 mm) from the edge of pavement. The finished center and lane lines shall be straight, with the lateral deviation of any 10 ft (3 m) line not to exceed 1 in. (25 mm).

<u>Notification</u>. The Contractor shall notify the Engineer 72 hours prior to the placement of the markings in order that he/she can be present during the operation. At the time of notification, the Contractor shall provide the Engineer the manufacturer and lot numbers of polyurea and reflective media that will be used.

<u>Inspection</u>. The polyurea pavement markings will be inspected following installation according to Article 780.10 of the Standard Specifications, except, no later than December 15, and inspected following a winter performance period that extends 180 days from December 15.

Method of Measurement. This work will be measured for payment as follows:

- (a) Contract Quantities. The requirements for the use of contract quantities shall be according to Article 202.07(a).
- (b) Measured Quantities. Lines will be measured for payment in place in feet (meters). Double yellow lines will be measured as two separate lines.

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per foot (meter) for POLYUREA PAVEMENT MARKING TYPE I – LINE of the line width specified or for POLYUREA PAVEMENT MARKING TYPE II – LINE of the line width specified.

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	n Entrance Angle Fluorescent										
Angle (deg.)	(deg.)	White	Orange	Orange							
0.2	-4	365	160	150							
0.2	+30	175	80	70							
0.5	-4	245	100	95							
0.5	+30	100	50	40"							

Revise the first sentence of the first paragraph of Article 1106.02(c) of the Standard Specifications to read:

"Barricades and vertical panels shall have alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

Revise the third sentence of the first paragraph of Article 1106.02(d) of the Standard Specifications to read:

"The bottom panels shall be 8 x 24 in. (200 x 600 mm) with alternating white and orange stripes sloping downward at 45 degrees toward the side on which traffic will pass."

REINFORCEMENT BARS - STORAGE AND PROTECTION (BDE)

Effective: August 1, 2008 Revised: April 1, 2009

Revise Article 508.03 of the Standard Specifications to read:

"508.03 Storage and Protection. Reinforcement bars shall be stored off the ground using platforms, skids, or other supports; and shall be protected from mechanical injury and from deterioration by exposure. Epoxy coated bars shall be stored on wooden or padded steel cribbing and all systems for handling shall have padded contact areas. The bars or bundles shall not be dragged or dropped.

When epoxy coated bars are stored in a manner where they will be exposed to the weather more than 60 days prior to use, they shall be protected from deterioration such as that caused by sunlight, salt spray, and weather exposure. The protection shall consist of covering with opaque polyethylene sheeting or other suitable opaque material. The covering shall be secured and allow for air circulation around the bars to minimize condensation under the cover.

Covering of the epoxy coated bars will not be required when the bars are installed and tied, or when they are partially incorporated into the concrete."

SELECTION OF LABOR (BDE)

Effective: July 2, 2010

Revise Section I of Check Sheet #5 of the Recurring Special Provisions to read:

"I. SELECTION OF LABOR

The Contractor shall comply with all Illinois statutes pertaining to the selection of labor.

EMPLOYMENT OF ILLINOIS WORKERS DURING PERIODS OF EXCESSIVE UNEMPLOYMENT

Whenever there is a period of excessive unemployment in Illinois, which is defined herein as any month immediately following two consecutive calendar months during which the level of unemployment in the State of Illinois has exceeded five percent as measured by the United States Bureau of Labor Statistics in its monthly publication of employment and unemployment figures, the Contractor shall employ at least 90 percent Illinois laborers. "Illinois laborer" means any person who has resided in Illinois for at least 30 days and intends to become or remain an Illinois resident.

Other laborers may be used when Illinois laborers as defined herein are not available, or are incapable of performing the particular type of work involved, if so certified by the Contractor and approved by the Engineer. The Contractor may place no more than three of his/her regularly employed non-resident executive and technical experts, who do not qualify as Illinois laborers, to do work encompassed by this contract during period of excessive unemployment.

This provision applies to all labor, whether skilled, semi-skilled, or unskilled, whether manual or non-manual."

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.

TRUCK MOUNTED/TRAILER MOUNTED ATTENUATORS (BDE)

Effective: January 1, 2010

Revise Article 701.03(k) of the Standard Specifications to read:

"(k) Truck Mounted/Trailer Mounted Attenuators1106.02"

Revise Article 701.15(h) of the Standard Specifications to read:

"(h) Truck Mounted/Trailer Mounted Attenuators (TMA). TMA units shall have a roll ahead distance in the event of an impact. The TMA shall be between 100 and 200 ft (30 and 60 m) behind the vehicle ahead or the workers. This distance may be extended by the Engineer.

TMA host vehicles shall have the parking brake engaged when stationary.

The driver and passengers of the TMA host vehicle should exit the vehicle if the TMA is to remain stationary for 15 minutes or more in duration."

Revise Article 1106.02(g) of the Standard Specifications to read:

"(g) Truck Mounted/Trailer Mounted Attenuators. The attenuator shall be a NCHRP 350 approved unit for Test Level 3. Test Level 2 may be used as directed by the Engineer for normal posted speeds less than or equal to 45 mph."

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

Effective: April 2, 2004 Revised: April 1, 2009

<u>Description</u>. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

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

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

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

<u>Documentation</u>. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

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

SCA = Q X D

Where: SCA = steel cost adjustment, in dollars

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

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

 $D = MPI_M - MPI_L$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-

Record for the month the steel is shipped from the mill. The indices will be

converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-

Record for the month prior to the letting. The indices will be converted from

dollars per 100 lb to dollars per lb (kg).

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

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

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

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

Percent Difference = $\{(MPI_L - MPI_M) \div MPI_L\} \times 100$

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

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights
	(masses)
Reinforcing Steel	See plans for weights
	(masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 – 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 – 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 – 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 – 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 – 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 – 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

OPTION FOR STEEL COST ADJUSTMENT

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment. After award, this form, when submitted shall become part of the contract.

Contract No.:		
Company Name:		
Contractor's Option:		
Is your company opting to include this special provision a following items of work?	s part of the	contract plans for the
Metal Piling	Yes	
Structural Steel	Yes	
Reinforcing Steel	Yes	
Dowel Bars, Tie Bars and Mesh Reinforcement	Yes	
Guardrail	Yes	
Steel Traffic Signal and Light Poles, Towers and Mast Arms	Yes	
Metal Railings (excluding wire fence)	Yes	
Frames and Grates	Yes	
Signature:	Date:	

ILLINOIS DEPARTMENT OF LABOR

PREVAILING WAGES FOR OGLE COUNTY EFFECTIVE OCTOBER 2010

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

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

Ogle County Prevailing Wage for October 2010

ASSESTOS ABT-GEN ASSESTOS ABT-GEN SAGESTOS ABT-WEC SID SAGESTOS ABT-WEC SID SAGESTOS ABT-WEC SID SAGESTOS ABT-WEC SID SAGESTOS ASSESTOS ABT-WEC SID SAGESTOS ABSESTOS ABT-WEC SID SAGESTOS ABT-WEC CAMPENTER SID SAGESTOS ABT-WEC SAGESTOS ABLO SAGES	Trade Name	_	_	Base	FRMAN *M-F>			,	Pensn	Vac	Trng
BOLLEMMAKER BILD 34.107 37.170 2.0 2.0 2.0 2.0 6.820 8.550 0.000 0.540 BILD 35.000 37.750 1.5 1.5 2.0 6.900 11.58 0.000 0.540 CARRENTER N BILD 31.550 33.300 1.5 1.5 2.0 6.900 11.58 0.000 0.540 CARRENTER N BILD 32.040 35.560 1.5 1.5 2.0 6.900 10.70 0.000 0.600 CARRENT NASON	ASBESTOS ABT-GEN		BLD	29.200	30.200 1.5	1.5	2.0	7.590	11.29	0.000	0.800
REICK MASON CAMPENTER HWY 35.000 37.750 1.5 1.5 2.0 6.900 11.58 0.000 0.490 CAMPENTER N BLD 36.320 40.320 1.5 1.5 2.0 6.900 10.70 0.000 0.600 CAMPENTER S BLD 36.320 40.320 1.5 1.5 2.0 6.900 12.88 0.000 0.500 CEMENT MASON ALL 32.500 35.50 1.5 1.5 2.0 6.900 12.88 0.000 0.500 CEMENT MASON ALL 32.500 35.50 1.5 1.5 2.0 6.900 12.88 0.000 0.500 CEMENT MASON ALL 32.500 37.400 1.5 1.5 2.0 6.900 12.88 0.000 0.470 COMMUNICATION TECH BLD 30.530 0.000 1.5 1.5 2.0 6.900 12.88 0.000 0.470 CELECTRIC PWR GRINDMAN ALL 33.140 42.570 1.5 1.5 2.0 4.750 10.60 0.000 0.680 ELECTRIC PWR GRINDMAN ALL 33.140 42.570 1.5 1.5 2.0 4.750 7.960 0.000 0.900 ELECTRIC PWR TEK DAY ALL 36.500 42.570 1.5 1.5 2.0 4.750 7.960 0.000 0.900 ELECTRICIN PWR TEK DAY BLD 40.000 44.000 1.5 1.5 2.0 4.750 7.960 0.000 0.900 ELEVATOR CONSTRUCTOR BLD 40.000 44.000 1.5 1.5 2.0 4.750 8.330 0.000 0.800 ELEVATOR CONSTRUCTOR BLD 33.280 33.280 35.750 2.0 2.0 2.0 10.30 9.460 2.050 0.000 ELABORER BLD 33.080 33.280 35.750 2.0 2.0 2.0 2.0 3.00 3.940 0.000 0.000 ELABORER SLD 33.080 33.500 33.500 1.5 2.0 7.590 11.29 0.000 0.800 ELABORER SLD 33.080 33.500 1.5 1.5 2.0 7.590 11.29 0.000 0.800 ELABORER SLD 33.800 33.500 1.5 1.5 2.0 7.590 11.29 0.000 0.800 ELABORER SLD 33.380 33.600 1.5 1.5 2.0 7.590 11.29 0.000 0.800 ELABORER SLD 33.380 33.600 1.5 1.5 2.0 7.590 11.29 0.000 0.800 ELABORER SLD 33.800 33.500 1.5 1.5 2.0 7.590 11.29 0.000 0.800 ELABORER SLD 33.800 33.500 1.5 1.5 2.0 7.590 1.290 0.000 0.800 ELABORER SLD 33.800 33.600 1.5 1.5 2.0 7.590 1.290 0.000 0.800 ELABORER SLD 33.800 33.	ASBESTOS ABT-MEC		BLD	18.950	0.000 1.5	1.5	2.0	2.700	3.350	0.000	0.000
CARPENTER	BOILERMAKER		BLD	34.170	37.170 2.0	2.0	2.0	6.820	8.550	0.000	0.350
CARPENTER	BRICK MASON		BLD	35.000	37.750 1.5	1.5	2.0	6.900	11.58	0.000	0.540
CAMPENTERN ASON	CARPENTER		HWY	31.550	33.300 1.5	1.5	2.0	8.190	10.99	0.000	0.490
CEMBMIC TILE FINSHER SLID 30.530 35.250 1.5 1.5 2.0 6.900 12.88 0.000 0.250 CEMBMIC TILE FINSHER SLID 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.680 CELECTRIC PER GRIDDAM ALL 33.140 42.570 1.5 1.5 2.0 4.750 10.67 0.000 0.190 CELECTRIC PER GRIDDAM ALL 33.140 42.570 1.5 1.5 2.0 4.750 10.27 0.000 0.190 CELECTRIC PER GRIDDAM ALL 39.420 42.570 1.5 1.5 2.0 4.750 1.220 0.000 0.300 CELECTRIC PER TRINDAM ALL 40.500 44.000 1.5 1.5 2.0 4.750 1.220 0.000 0.300 CELECTRIC PER TRINDAM ALL 42.540 47.600 2.0 2.0 0.001 39.460 0.000 0.300 CELECTRIC PER TRINDAM ALL 42.540 47.600 2.0 2.0 0.010 39.460 0.000 0.300 CELECTRIC PER TRINDAM ALL 42.540 47.600 2.0 2.0 0.010 39.460 0.000 0.300 CELECTRIC PER TRINDAM ALL 42.540 47.600 2.0 2.0 2.0 0.010 39.460 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 31.800 32.080 1.5 1.5 2.0 8.100 8.200 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 33.280 35.770 1.5 1.5 2.0 7.550 11.29 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 33.280 35.770 1.5 1.5 2.0 7.550 11.29 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 32.800 33.280 35.770 1.5 1.5 2.0 7.550 11.29 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 33.280 35.770 1.5 1.5 2.0 7.550 11.29 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 32.800 33.280 1.5 1.5 2.0 7.550 11.29 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 32.800 33.280 1.5 1.5 2.0 7.550 11.29 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 33.280 31.550 1.5 1.5 2.0 7.550 11.29 0.000 0.800 CELEVATOR CONSTRUCTOR BLD 30.800 30.5	CARPENTER	N	BLD	36.320	40.320 1.5	1.5	2.0	6.900	10.70	0.000	0.600
CERRAIC TILE FINSHER BID 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 COMMUNICATION TECH BID 34.000 37.400 1.5 1.5 2.0 9.740 10.60 0.000 0.420 CERCITEIC PWR EQMT OP ALL 33.140 42.570 1.5 1.5 2.0 4.750 10.27 0.000 0.250 CERCITEIC PWR EQMT OP ALL 35.402 42.570 1.5 1.5 2.0 4.750 10.27 0.000 0.300 CERCITEIC PWR INTERMAN ALL 25.680 42.570 1.5 1.5 2.0 4.750 10.27 0.000 0.300 CERCITEIC PWR TEN DRV ALL 26.520 42.570 1.5 1.5 2.0 4.750 8.230 0.000 0.300 CERCITEIC PWR TEN DRV ALL 26.520 42.570 1.5 1.5 2.0 4.750 8.230 0.000 0.300 CERCITEIC PWR TEN DRV ALL 26.520 42.570 1.5 1.5 2.0 4.750 8.230 0.000 0.300 CERCITEIC PWR TEN DRV ALL 26.520 42.570 1.5 1.5 2.0 4.750 8.230 0.000 0.300 CERCITEIC PWR TEN DRV ALL 26.520 47.860 2.0 2.0 2.0 2.0 10.03 9.460 2.550 0.000 CERCITEIC PWR TEN DRV ALL 25.600 35.700 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 0.000 0.000 0.000 CERCITEIC PWR ALL 25.600 35.700 2.	CARPENTER	S	BLD	32.040	35.560 1.5	1.5	2.0	8.190	11.87	0.000	0.600
COMMUNICATION TECH	CEMENT MASON		ALL	32.500	35.250 1.5	1.5	2.0	6.900	12.88	0.000	0.250
Reference Pure Grund and All 33.140 42.570 1.5 1.5 2.0 4.750 10.27 0.000 0.250				30.530	0.000 1.5	1.5					0.470
Labctric PWR GAIDMAN ALL 25.680 42.570 1.5 1.5 2.0 4.750 7.960 0.000 0.300 Clectric PWR INK DRV ALL 39.420 42.570 1.5 1.5 2.0 4.750 1.222 0.000 0.300 Clectric PWR INK DRV ALL 26.520 42.570 1.5 1.5 2.0 4.750 1.232 0.000 0.300 Clectric PWR INK DRV ALL 26.520 42.570 1.5 1.5 2.0 4.750 1.232 0.000 0.300 Clectric PWR INK DRV ALL 26.520 42.570 1.5 1.5 2.0 4.750 1.232 0.000 0.800 Clear Constructor BLD 42.540 47.860 2.0 2.0 2.0 10.03 9460 2.550 0.000 1.000											
Recented Note Linemain All 39,420 42,570 1.5 1.5 2.0 4,750 12.22 0.000 0.300 0.200	~										
RLECTRIC PWR TRK DRY											
BLD											
BLD											
CLAZIER											
HT/FROST INSULATOR SLD 33,280 35.770 1.5											
LABORER	-										
LABORER LABORE	·										
LABORER LABORER, SKILLED LABORER, SKILLED LATHER N BLD 30.800 31.550 1.55 1.55 2.0 7.590 11.29 0.000 0.800 0.800 LATHER N BLD 30.803 31.550 1.55 1.55 2.0 7.590 11.29 0.000 0.800 0.600 LATHER N BLD 30.303 0.5506 1.55 1.55 2.0 8.190 11.27 0.000 0.600 0.600 MACHINIST BLD 30.530 0.000 1.55 1.55 2.0 8.190 1.180 0.000 0.400 0.470 MARBLE FINISHERS BLD 30.530 0.000 1.55 1.55 2.0 8.190 0.1800 0.490 0.490 MATERIAL TESTER I MATERIALS TESTER II MALE 21.550 0.000 0.155 0.155 2.0 7.460 0.4800 0.000 0.500 0.500 0.500 0.600 0.500 0.											
LABORER, SKILLED LATHER N BLD 36.320 40.320 1.5 5 1.5 2.0 7.590 11.29 0.000 0.600 LATHER S BLD 36.320 40.320 1.5 5 1.5 2.0 6.900 10.70 0.000 0.600 MACHINIST S BLD 43.160 45.160 1.5 1.5 2.0 8.190 11.87 0.000 0.600 MARCHINIST BLD 30.530 0.000 1.5 1.5 2.0 7.640 8.700 0.000 0.470 MARBLE FINISHERS BLD 30.530 0.000 1.5 1.5 2.0 6.900 6.980 0.000 0.470 MARBLE MASON MARBLE MASON MARBLE STER I MATERIAL TESTER I MALL 21.550 0.000 1.5 1.5 2.0 7.460 4.840 0.000 0.170 MATERIAL TESTER II MILLWRIGHT BLD 33.3970 37.370 1.5 1.5 2.0 6.550 12.35 0.000 0.170 MATERIAL STESTER II MILLWRIGHT BLD 33.970 37.370 1.5 1.5 2.0 6.550 12.35 0.000 0.170 OPERATING ENGINEER OPERATING ENGINEER DLD 3 37.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 3 37.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 4 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 5 44.100 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 6 43.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 7 40.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 7 40.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 7 40.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 8 44.000 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 7 40.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 8 44.000 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 8 44.000 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 8 44.000 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 8 40.000 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER DED 8 40.000 44.200 1.5 1.5 2.0 13.05 8.000 2.350 1.300 OPERATING ENGINEER DED 8 40.000 44.200 1.5 1.5 2											
LATHER	LABORER, SKILLED					1.5	2.0				0.800
MACHINIST MARBLE FINISHERS BLD 30.530 0.000 1.5 1.5 2.0 7.640 8.700 0.000 0.470 MARBLE FINISHERS BLD 30.530 0.000 1.5 1.5 2.0 6.900 6.980 0.000 0.500 MARTERIAL TESTER I ALL 21.550 0.000 1.5 1.5 2.0 7.460 4.840 0.000 0.170 MATERIALS TESTER II ALL 26.550 0.000 1.5 1.5 2.0 7.460 4.840 0.000 0.170 MATERIALS TESTER II BLD 33.970 37.370 1.5 1.5 2.0 7.460 4.840 0.000 0.170 MATERIALS TESTER II BLD 34.970 37.370 1.5 1.5 2.0 7.460 4.840 0.000 0.170 MATERIALS TESTER II BLD 34.950 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 4 0.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 3 37.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 4 35.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 5 44.100 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 6 43.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 6 43.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 4.690 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER	LATHER	N	BLD	36.320	40.320 1.5	1.5	2.0	6.900	10.70	0.000	0.600
MARBLE FINISHERS BLD 30.530 0.000 1.5 2.0 6.900 4.840 0.000 0.500 MARBLE MASON BLD 33.380 33.630 1.5 2.0 6.900 6.980 0.000 0.500 MATERIAL TESTER I ALL 21.550 0.000 1.5 1.5 2.0 7.460 4.840 0.000 0.170 MILWRIGHT BLD 33.970 37.370 1.5 1.5 2.0 6.550 1.203 0.000 0.500 OPERATING ENGINEER BLD 23.650 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 23.96.50 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 44.100 44.350 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 44.100 44.350 2.0 2.0 13.0	LATHER	S	BLD	32.040	35.560 1.5	1.5	2.0	8.190	11.87	0.000	0.600
MARBLE MASON	MACHINIST		BLD	43.160	45.160 1.5	1.5	2.0	7.640	8.700	0.000	0.000
MATERIAL TESTER I	MARBLE FINISHERS		BLD	30.530	0.000 1.5	1.5	2.0	6.900	4.840	0.000	0.470
MATERIALS TESTER II	MARBLE MASON		BLD	33.380	33.630 1.5	1.5	2.0	6.900	6.980	0.000	0.500
MILLWRIGHT BLD 33.970 37.370 1.5 1.5 2.0 6.550 12.35 0.000 0.500 OPERATING ENGINEER BLD 1 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 2 39.650 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 3 37.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 4 35.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 5 44.100 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 6 43.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 38.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.500 36.500 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200	MATERIAL TESTER I		ALL			1.5					
OPERATING ENGINEER BLD 1 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 2 39.650 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 3 37.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 3 55.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 5 44.100 44.350 2.0 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 6 43.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 38.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPE											
OPERATING ENGINEER BLD 2 39.650 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 3 37.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 4 35.200 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 5 44.100 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 6 43.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 1 40.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 34.540 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300											
OPERATING ENGINEER											
OPERATING ENGINEER											
OPERATING ENGINEER OPERATION ENGINEER OPERATING ENGINEER OPERATING ENGINEER OPERATION ENG			_								
OPERATING ENGINEER BLD 6 43.350 44.350 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 1 40.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 38.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 3.550 33.300 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 8 4											
OPERATING ENGINEER BLD 7 40.350 44.350 2.0 2.0 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 1 40.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 38.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 8 31.550 33.300 1.5 1.5 2.0 13.05 8.800 2.350 1.300			_								
OPERATING ENGINEER HWY 1 40.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 2 39.650 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 38.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 8.100 1.000 2.000 0.000 PILEDRIVER N BLD 37.500 40.130 1.5 1.5 2.0 8.100 10.70 0.000 0.000 0.600											
OPERATING ENGINEER HWY 2 39.650 44.200 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 3 38.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 PERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 PAINTER HWY 3 31.550 33.300											
OPERATING ENGINEER HWY 3 38.350 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 PAINTER ALL 34.500 36.500 1.5 1.5 1.5 8.100 8.200 0.000 1.000 PILEDRIVER HWY 31.550 33.300 1.5 1.5 2.0 8.190 10.99 0.000 0.490 PILEDRIVER N BLD 37.320 41.430 1.5 1.5 2.0 8.190 10.70 0.000 0.600 PILEDRIVER S BLD 33.040 36.670 1.5 1.5 2.0 8.190 11.87 0.000 0.600 PIPEFITTER BLD 37.500 40.130 1.5 1.5 2.0 8.190 10.38 0.000 0.900 PLUMBER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.250 SHEETMETAL WORKER BLD 37.650 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.250 SPRINKLER FITTER BLD 35.190 37.120 1.5 1.5 2.0 5.250 14.43 0.520 0.290 STONE MASON BLD 35.000 37.750 1.5 1.5 2.0 6.900 4.840 0.000 0.540 TERRAZZO FINISHER											
OPERATING ENGINEER HWY 4 36.900 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 5 35.450 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 PAINTER ALL 34.500 36.500 1.5 1.5 2.0 13.05 8.800 2.350 1.300 PAINTER HWY 31.550 33.300 1.5 1.5 2.0 13.05 8.800 2.350 1.300 PILEDRIVER HWY 31.550 33.300 1.5 1.5 2.0 8.100 8.200 0.000 1.000 PILEDRIVER N BLD 37.320 41.430 1.5 1.5 2.0 8.190 10.99 0.000 0.490 PILEDRIVER S BLD 333.040 36.670 1.5 1.5 2.0 8.190 10.70 0.000 0.600 PILESTITER BLD 37.500 40.130 1.5 1.5 2.0 8.190 10.38 0.000 0.900 PLUMBER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 1.5 2.0 8.200 6.900 11.58 0.000 0.500 STONE MASON BLD 35.000 37.750 1.5 1.5 2.0 6.900 4.840 0.000 0.540 TERRAZZO FINISHER BLD 30.533 00.530 0.000 1.5 1.5 2.0											
OPERATING ENGINEER HWY 6 43.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 PAINTER ALL 34.500 36.500 1.5 1.5 1.5 8.100 8.200 0.000 1.000 PILEDRIVER HWY 31.550 33.300 1.5 1.5 2.0 8.190 10.99 0.000 0.490 PILEDRIVER N BLD 37.320 41.430 1.5 1.5 2.0 6.900 10.70 0.000 0.600 PILEDRIVER S BLD 33.040 36.670 1.5 1.5 2.0 6.900 10.70 0.000 0.600 PIPEFITTER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 PLUMBER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500	OPERATING ENGINEER		HWY 4	36.900	44.200 1.5						
OPERATING ENGINEER HWY 7 41.200 44.200 1.5 1.5 2.0 13.05 8.800 2.350 1.300 PAINTER ALL 34.500 36.500 1.5 1.5 1.5 8.100 8.200 0.000 1.000 PILEDRIVER HWY 31.550 33.300 1.5 1.5 2.0 8.190 10.99 0.000 0.490 PILEDRIVER N BLD 37.320 41.430 1.5 1.5 2.0 6.900 10.70 0.000 0.600 PILEDRIVER S BLD 33.040 36.670 1.5 1.5 2.0 8.190 11.87 0.000 0.600 PIPEFITTER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 PLUMBER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 1.5 2.0 6.900 6.550 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500	OPERATING ENGINEER		HWY 5	35.450	44.200 1.5	1.5	2.0	13.05	8.800	2.350	1.300
PAINTER ALL 34.500 36.500 1.5 1.5 1.5 8.100 8.200 0.000 1.000 PILEDRIVER HWY 31.550 33.300 1.5 1.5 2.0 8.190 10.99 0.000 0.490 PILEDRIVER N BLD 37.320 41.430 1.5 1.5 2.0 6.900 10.70 0.000 0.600 PILEDRIVER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 PLASTERER BLD 32.540 35.790 2.0 2.0 2.0 6.900 10.70 0.000 0.250 PLUMBER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 1.5 2.0 7.890 10.38 0.000 0.900 SHEETMETAL WORKER BLD 37.650 40.650 1.5 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 1.5 2.0 7.750 6.570 0.000 0.250 STONE MASON BLD 35.000 37.750 1.5 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 35.000 37.750 1.5 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 STONE MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500	OPERATING ENGINEER		ншу б	43.200	44.200 1.5	1.5	2.0	13.05	8.800	2.350	1.300
PILEDRIVER HWY 31.550 33.300 1.5 1.5 2.0 8.190 10.99 0.000 0.490 PILEDRIVER N BLD 37.320 41.430 1.5 1.5 2.0 6.900 10.70 0.000 0.600 PILEDRIVER S BLD 33.040 36.670 1.5 1.5 2.0 8.190 11.87 0.000 0.600 PIPEFITTER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 PLASTERER BLD 32.540 35.790 2.0 2.0 2.0 6.900 10.70 0.000 0.250 PLUMBER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 30.530 0.000 1.5 1.5 2.0 6.900 11.58 0.000 0.470 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470	OPERATING ENGINEER		HWY 7	41.200	44.200 1.5	1.5	2.0	13.05	8.800	2.350	1.300
PILEDRIVER N BLD 37.320 41.430 1.5 1.5 2.0 6.900 10.70 0.000 0.600 PILEDRIVER S BLD 33.040 36.670 1.5 1.5 2.0 8.190 11.87 0.000 0.600 PIPEFITTER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 PLASTERER BLD 32.540 35.790 2.0 2.0 2.0 6.900 10.70 0.000 0.250 PLUMBER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 6.980 0.000 0.500	PAINTER										
PILEDRIVER S BLD 33.040 36.670 1.5 2.0 8.190 11.87 0.000 0.600 PIPEFITTER BLD 37.500 40.130 1.5 2.0 7.890 10.38 0.000 0.900 PLASTERER BLD 32.540 35.790 2.0 2.0 2.0 6.900 10.70 0.000 0.250 PLUMBER BLD 37.500 40.130 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 2.0 6.900 <											
PIPEFITTER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 PLASTERER BLD 32.540 35.790 2.0 2.0 2.0 6.900 10.70 0.000 0.250 PLUMBER BLD 37.500 40.130 1.5 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 35.000 37.750 1.5 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500											
PLASTERER BLD 32.540 35.790 2.0 2.0 2.0 6.900 10.70 0.000 0.250 PLUMBER BLD 37.500 40.130 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 35.000 37.750 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO MASON BLD 33.380 33.630 1.5 2.0 6.900 6.980 0.000 0.500		S									
PLUMBER BLD 37.500 40.130 1.5 2.0 7.890 10.38 0.000 0.900 ROOFER BLD 37.650 40.650 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 35.000 37.750 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 2.0 6.900 6.980 0.000 0.500											
ROOFER BLD 37.650 40.650 1.5 2.0 7.750 6.570 0.000 0.430 SHEETMETAL WORKER BLD 35.190 37.120 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 35.000 37.750 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500											
SHEETMETAL WORKER BLD 35.190 37.120 1.5 2.0 5.250 14.43 0.520 0.290 SPRINKLER FITTER BLD 36.140 38.890 1.5 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 35.000 37.750 1.5 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500											
SPRINKLER FITTER BLD 36.140 38.890 1.5 2.0 8.200 6.550 0.000 0.250 STONE MASON BLD 35.000 37.750 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500											
STONE MASON BLD 35.000 37.750 1.5 2.0 6.900 11.58 0.000 0.540 TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500											
TERRAZZO FINISHER BLD 30.530 0.000 1.5 1.5 2.0 6.900 4.840 0.000 0.470 TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500											
TERRAZZO MASON BLD 33.380 33.630 1.5 1.5 2.0 6.900 6.980 0.000 0.500											
TILE LAYER N BLD 36.320 40.320 1.5 1.5 2.0 6.900 10.70 0.000 0.600	TERRAZZO MASON		BLD	33.380	33.630 1.5						
	TILE LAYER	N	BLD	36.320	40.320 1.5	1.5	2.0	6.900	10.70	0.000	0.600

TILE LAYER	S	BLD	32.040	35.560	1.5	1.5	2.0	8.190	11.87	0.000	0.600
TILE MASON		BLD	33.380	33.630	1.5	1.5	2.0	6.900	6.980	0.000	0.500
TRUCK DRIVER		0&C 1	23.580	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER		O&C 2	23.920	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER		O&C 3	24.090	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER		0&C 4	24.300	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER		0&C 5	24.930	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER	E	ALL 1	32.550	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000
TRUCK DRIVER	E	ALL 2	32.700	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000
TRUCK DRIVER	E	ALL 3	32.900	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000
TRUCK DRIVER	E	ALL 4	33.100	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000
TRUCK DRIVER	N	ALL 1	32.960	33.420	1.5	1.5	2.0	6.900	8.220	0.000	0.000
TRUCK DRIVER	N	ALL 2	33.110	33.420	1.5	1.5	2.0	6.900	8.220	0.000	0.000
TRUCK DRIVER	N	ALL 3	33.310	33.420	1.5	1.5	2.0	6.900	8.220	0.000	0.000
TRUCK DRIVER	N	ALL 4	33.420	33.420	1.5	1.5	2.0	6.900	8.220	0.000	0.000
TRUCK DRIVER	S	ALL 1	29.480	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER	S	ALL 2	29.900	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER	S	ALL 3	30.110	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER	S	ALL 4	30.370	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TRUCK DRIVER	S	ALL 5	31.160	0.000	1.5	1.5	2.0	9.050	4.347	0.000	0.250
TUCKPOINTER		BLD	35.000	37.750	1.5	1.5	2.0	6.900	11.58	0.000	0.540

Legend:

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

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

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

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

Explanations

OGLE COUNTY

CARPENTER, LATHER, MILLWRIGHT, PILEDRIVER AND TILE LAYER (NORTH) - That part of Ogle County East from the Winnebago County western boundary and North of

an imaginary line running east and west located $4\ \mathrm{miles}$ north of the City of Oregon.

TRUCK DRIVER (EAST) - That part of the county East of Rt. 251, including all portions of the city of Rochelle, and South of Rt. 72. TRUCK DRIVER (SOUTH) - That part of the county West of Rt. 251 and South of Rt. 72. TRUCK DRIVER (NORTH) - That part of the county North of Route 72.

The following list is considered as those days for which holiday rates of wages for work performed apply:
New Years Day, Memorial/Decoration Day, Fourth of July, Labor Day,

Veterans Day, Thanksgiving Day, Christmas Day. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration such as the day after Thanksgiving for Veterans Day. If in doubt, please check with IDOL.

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

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

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

CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

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

COMMUNICATIONS TECHNICIAN

Installing, manufacturing, assembling and maintaining sound and intercom, protection alarm (security), fire alarm, master antenna television, closed circuit television, low voltage control for computers and/or door monitoring, school communications systems, telephones and servicing of nurse and emergency calls, and the installation and maintenance of transmit and receive antennas, transmitters, receivers, and associated apparatus which operates in conjunction with above systems. All work associated with these system installations will be included EXCEPT the installation of protective metallic conduit in new construction projects (excluding less than ten-foot runs strictly for protection of cable) and 120 volt AC (or higher) power wiring and associated hardware.

LABORER, SKILLED - HIGHWAY

Individuals engaged in the following types of work, irrespective of the site of the work: asbestos abatement worker, handling of any materials with any foreign matter harmful to skin or clothing, track laborer, cement handlers, chloride handlers, the unloading and loading with steel workers and re-bars, concrete workers wet, tunnel helpers in free air, batch dumpers, mason tenders, kettle and tar men, tank cleaners, plastic installers, scaffold workers, motorized buggies or motorized unit used for wet concrete or handling of building materials, laborers with de-watering systems, sewer workers plus depth, rod and chainmen with technical engineers, rod and chainmen with land surveyors, rod and chainmen with surveyors, vibrator operators, cement silica, clay, fly ash, lime and plasters, handlers

(bulk or bag), cofferdam workers plus depth, on concrete paving, placing, cutting and tying of reinforcing, deck hand, dredge hand, and shore laborers, bankmen on floating plant, grade checker, power tools, front end man on chip spreaders, cassion workers plus depth, qunnite nozzle men, lead man on sewer work, welders, cutters, burners and torchmen, chainsaw operators, jackhammer and drill operators, layout man and/or drainage tile layer, steel form setter - street and highway, air tamping hammermen, signal man on crane, concrete saw operator, screedman on asphalt pavers, laborers tending masons with hot material or where foreign materials are used, mortar mixer operators, multiple concrete duct - leadsman, lumen, asphalt raker, curb asphalt machine operator, ready mix scalemen (permanent, portable or temporary plant), laborers handling masterplate or similar materials, laser beam operator, concrete burning machine operator, coring machine operator, plaster tender, underpinning and shoring of buildings, pump men, manhole and catch basin, dirt and stone tamper, hose men on concrete pumps, hazardous waste worker, lead base paint abatement worker, lining of pipe, refusing machine, assisting on direct boring machine, the work of laying watermain, fire hydrants, all mechanical joints to watermain work, sewer worker, and tapping water service and forced lift station mechanical worker.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

OPERATING ENGINEERS - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver (over 27E cu. ft.): Concrete Paver (27 cu. ft. and under); Concrete Placer; Concrete Pump (Truck Mounted); Concrete Conveyor (Truck Mounted); Concrete Tower; Cranes, All; GCI and similar types (required two operators only); Cranes, Hammerhead; Creter Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, one, two and three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Locomotives, All; Lubrication Technician; Manipulators; Motor Patrol; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Raised and Blind Hole Drill; Rock Drill (self-propelled); Rock Drill -Truck Mounted; Roto Mill Grinder; Scoops - Tractor Drawn; Slipform Paver; Scrapers Prime Movers; Straddle Buggies; Tie Back Machine; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Bobcat (over 3/4 cu. yd.); Boilers; Brick Forklift; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Asphalt Spreader; Combination - Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators - (Rheostat Manual Controlled); Hydraulic Power Units (Pile Driving and Extracting); Pumps, Over 3" (1 to 3 not to exceed total of 300 ft.); Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches; Bobcat (up to and including 3/4 cu. yd.).

Class 4. Elevator push button with automatic doors; Hoists, Inside; Oilers; Brick Forklift.

Class 5. Assistant Craft Foreman

Class 6. Mechanics

Class 7. Gradall

OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Silo Tender; Asphalt Spreader; Autograder; ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Backhoe w/shear attachments; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower of all types; Creter Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Directional Boring Machine over 12"; Dredges; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Mounted; Hoists, One, Two and Three Drum; Hydraulic Backhoes; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; GCI Crane; Hydraulic Telescoping Form (Tunnel); Tie Back Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader with attached pusher; Tractor with Boom; Tractaire with Attachments; Traffic Barrier Conveyor Machine; Raised or Blind Hole Drills; Trenching Machine (over 12"); Truck Mounted Concrete Pump with Boom; Truck Mounted Concrete Conveyor; Underground Boring and/or Mining Machines; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Conveyor Muck Cars (Haglund or Similar Type); Drills, all; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro Blaster; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) / 2 ton capacity or more; Non-Self Loading Ejection Dump; Pump Cretes: Squeeze Cretes -Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Scoops - Tractor Drawn; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper; Scraper - Prime Mover in Tandem (Regardless of Size); Tank

Car Heater; Tractors, Push, Pulling Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

- Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Fireman on Boilers; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper Form Motor Driven.
- Class 4. Air Compressor Small and Large; Asphalt Spreader, Backend Man; Bobcat (Skid Steer) all; Brick Forklift; Combination Small Equipment Operator; Directional Boring Machine up to 12"; Generators; Heaters, Mechanical; Hydraulic Power Unit (Pile Driving, Extracting, or Drilling); Hydro-Blaster; Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Tractaire; Trencher 12" and under; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.
- Class 5. Oilers and Directional Boring Machine Locator.
- Class 6. Field Mechanics and Field Welders
- Class 7. Gradall and machines of like nature.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION - SOUTH

- Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.
- Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vactor trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.
- Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.
- Class 4. Low Boy and Oil Distributors.
- Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

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

material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION - EAST AND NORTH

- Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation; Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.
- Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.
- Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnatrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; mechanic--Truck Welder and Truck Painter.
- Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators

(regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.