BID PROPOSAL INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals are potential bidding proposals. Each proposal contains all certifications and affidavits, a proposal signature sheet and a proposal bid bond.

PREQUALIFICATION

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

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.

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 124) 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.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?

When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status" (BDE 124) 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 and the Chief Procurement Officer 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 to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the Department as to the status. 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 bidder'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 or revision will be included with the Electronic Plans and Proposals. 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 service emails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin 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 DOT.D&Econtracts@illlinois.gov

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

STANDARD GUIDELINES FOR SUBMITTING BIDS

- All pages should be single sided.
- Use the Cover Page that is provided in the Bid Proposal (posted on the IDOT Web Site) as the first page of your submitted bid. It has the item number in large bold type in the upper left-hand corner and lines provided for your company name and address in the upper right-hand corner.
- Do not use report covers, presentation folders or special bindings and do not staple multiple times on left side like a book. Use only 1 staple in the upper left hand corner. Make sure all elements of your bid are stapled together including the bid bond or guaranty check (if required).
- Do not include any certificates of eligibility, your authorization to bid, Addendum Letters or affidavit of availability.
- Do not include the Subcontractor Documentation with your bid (pages i iii and pages a g). This documentation is required only if you are awarded the project.
- Use the envelope cover sheet (provided with the proposal) as the cover for the proposal envelope.
- Do not rely on overnight services to deliver your proposal prior to 10 AM on letting day. It will not be read if it is delivered after 10 AM.
- Do not submit your Substance Abuse Prevention Program (SAPP) with your bid. If you are awarded the contract this form is to be submitted to the district engineer at the pre-construction conference.

BID SUBMITTAL CHECKLIST

Cover page (the sheet that has the item number on it) – This should be the first page of your bid proposal, followed by your bid (the Schedule of Prices/Pay Items). If you are using special software or CBID to generate your schedule of prices, do not include the blank pages of the schedule of prices that came with the proposal package.
☐ Page 4 (Item 9) — Check "YES" if you will use a subcontractor(s) with an annual value over \$50,000. Include the subcontractor(s) name, address, general type of work to be performed and the dollar amount. If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.
☐ After page 4 – Insert the following documents: Cost Adjustments for Steel, Bituminous and Fuel (if applicable) and the Contractor Letter of Assent (if applicable). The general rule should be, if you don't know where it goes, put it after page 4.
☐ Page 10 (Paragraph J) – Check "YES" or "NO" whether your company has any business in Iran.
☐ Page 10 (Paragraph K) – (Not applicable to federally funded projects) List the name of the apprenticeship and training program sponsor holding the certificate of registration from the US Department of Labor. If no applicable program exists, please indicate the work/job category. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.
☐ Page 11 (Paragraph L) – A copy of your State Board of Elections certificate of registration is no longer required with your bid.
☐ Page 11 (Paragraph M) – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.
☐ Page 12 (Paragraph C) – This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each completed Form A.
□ Pages 14-17 (Form A) – One Form A (4 pages) is required for each applicable person in your company. Copies of the forms can be used and only need to be changed when the information changes. The certification signature and date must be original for each letting. Do not staple the forms together. If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.
Page 18 (Form B) - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". Ownership Certification (at the bottom of the page) - Check N/A if the Form A(s) you submitted accounts for 100 percent of the company ownership. Check YES if any percentage of ownership falls outside of the parameters that require reporting on the Form A. Checking NO indicates that the Form A(s) you submitted is not correct and you will be required to submit a revised Form A.
☐ Page 20 (Workforce Projection) – Be sure to include the Duration of the Project. It is acceptable to use the phrase "Per Contract Specifications".

☐ Proposal Bid Bond – (Insert after the proposal signature page) Submit you using the current Proposal Bid Bond form provided in the proposal package. T the Proposal Bid Bond. If you are using an electronic bond, include your bid bothe Proof of Insurance printed from the Surety's Web Site.	he Power of Attorney page should be stapled to
☐ Disadvantaged Business Utilization Plan and/or Good Faith Effort – Th Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE documentation of a Good Faith Effort, it is to follow the SBE Forms.	
The Bid Letting is now available in streaming Audio/Video from the IDOT the main page of the current letting on the day of the Letting. The stream will no bids does not begin until approximately 10:30 AM.	Web Site. A link to the stream will be placed on not begin until 10 AM. The actual reading of the
Following the Letting, the As-Read Tabulation of Bids will be posted by the end Web page for the current letting.	d of the day. You will find the link on the main
QUESTIONS: pre-letting up to execution of the contract	
Contractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	
Contracts, Bids, Letting process or Internet downloads	
Estimates Unit	
Aeronautics	
IDNR (Land Reclamation, Water Resources, Natural Resources)	217-782-6302
QUESTIONS: following contract execution	
Subcontractor documentation, payments	217-782-3413
Railroad Insurance	217-785-0275

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Proposal Submitted By	
Name	
Address	
City	

Letting November 6, 2015

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.

BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

Notice to Bidders, Specifications, Proposal, Contract and Contract Bond



Springfield, Illinois 62764

Contract No. 61B90
KANE County
Section 11-00132-01-BR
Route CH 45 (Allen Road)
Project BROS-0089(166)
District 1 Construction Funds

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

Prepared by

Checked by

F

(Printed by authority of the State of Illinois)

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PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1.	Proposal of
	Taxpayer Identification Number (Mandatory) For the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 61B90 KANE County Section 11-00132-01-BR Project BROS-0089(166)
	Route CH 45 (Allen Road) District 1 Construction Funds

This project consists of replacing the bridge over Hampshire Creek located east of Walker Road.

Project includes approach roadway reconstruction, shoulder construction and guardrail installation.

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 will govern performance and payments.

- 3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned bidder 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 bid proposal he/she waives all right to plead any misunderstanding regarding the same.
- 4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned bidder 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, or as specified in the special provisions, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
- 5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

<u>A</u>	mount o	of Bid	Proposal <u>Guaranty</u>	<u>Am</u>	ount c		roposal luaranty
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\$	3400,000
\$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	000,008
\$1,000,000	to	\$1,500,000	\$50,000	\$30,000,000	to	\$35,000,000\$	3900,000
\$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 bid proposals will be made payable to the Treasurer, State of Illinois.

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

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

undersigned.		sine told of the proposal guaranty officer, will be foldined to the
Attach Cashier's C	heck or Certif	ied Check Here
In the event that one proposal guaranty check is intended to cover two of the proposal guaranties which would be required for each individual proposal, state below where it may be found.		
The proposal guaranty check will be found in the bid proposal for:	Item	
	Section No.	
	County	

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

6.	following combination proportion to the	BIDS. The undersigned bidder further agrees that if awarded the ation, he/she will perform the work in accordance with the requirement bid specified in the schedule below, and that the combination bid bid submitted for the same. If an error is found to exist in the gross in a combination, the combination bid shall be corrected as provide	ents of each individual contract comprisir shall be prorated against each section s sum bid for one or more of the individu
		a combination bid is submitted, the schedule below must be coising the combination.	ompleted in each proposal
		nate bids are submitted for one or more of the sections compri nation bid must be submitted for each alternate.	sing the combination, a
		Schedule of Combination Bids	
Со	mbination No.	Sections Included in Combination	Combination Bid Dollars Cents
7.	schedule of price all extensions ar schedule are app is an error in the will be made only The scheduled q	PRICES. The undersigned bidder submits herewith, in accordant is for the items of work for which bids are sought. The unit prices and summations have been made. The bidder understands that proximate and are provided for the purpose of obtaining a gross surextension of the unit prices, the unit prices will govern. Payment to actual quantities of work performed and accepted or materials unantities of work to be done and materials to be furnished may be the in the contract.	bid are in U.S. dollars and cents, and the quantities appearing in the bid in for the comparison of bids. If there to the contractor awarded the contract is furnished according to the contract.
8.	500/20-43) provid	DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Produces that a person (other than an individual acting as a sole proprietor or conduct affairs in the State of Illinois prior to submitting the bid.	
9.	Department proc and make payme Purchasing Office Neither the CPO	F CONTRACT: The Department of Transportation will, in accurements, execute the contract and shall be the sole entity having ents under the contract. Execution of the contract by the Chief Proper (SPO) is for approval of the procurement process and execution on the SPO shall be responsible for administration of the coayment there under except as otherwise permitted in the Code.	the authority to accept performance ocurement Officer (CPO) or the State of the contract by the Department.
10.	The services of	a subcontractor will be used.	
	Check box Check box	Yes No	
		ubcontractors with subcontracts with an annual value of more than \$ address, general type of work to be performed, and the dollar allocat 0/20-120)	

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STATE JOB # PPS NBR -

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

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

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

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

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

I. GENERAL

- **A.** Article 50 of the Code establishes the duty of all State CPOs, SPOs, 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 CPO to void the contract, and may result in the suspension or debarment of the bidder or subcontractor. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.
- ☐ I acknowledge, understand and accept these terms and conditions.

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

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 State 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 State 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 calendar 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.

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. Information concerning the exemption process is available from the Department upon request.

B. Negotiations

Section 50-15. Negotiations.

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.

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

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 provide a submission to a vendor portal or 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, not making a submission to a vendor portal, or who withholds a bid or submission to a vendor portal in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

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

Section 50-30. Revolving door prohibition.

CPOs, SPOs, 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.

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

Section 50-40. Reporting anticompetitive practices.

When, for any reason, any vendor, bidder, contractor, CPO, SPO, 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 CPO.

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 or submission to a vendor portal is submitted.

F. Confidentiality

Section 50-45. Confidentiality.

Any CPO, SPO, 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.

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

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.

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.

☐ I acknowledge, understand and accept these terms and conditions for the above assurances.

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 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 CPO 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

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 2012.
- (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 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 CPO 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.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50-5.

B. Felons

Section 50-10. Felons.

- (a) 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.
- (b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code and every vendor's submission to a vendor portal 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 CPO may declare the related contract void if any of the certifications required by this Section are false.

C. Debt Delinquency

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 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 CPO 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

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

The bidder or contractor or subcontractor, respectively, certifies in accordance with Section 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 Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontract under this Section and acknowledges that the CPO 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

Section 50-14 Environmental Protection Act violations.

The bidder or contractor or subcontractor, respectively, certifies in accordance with Section 50-14 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 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 CPO may declare the contract void if this certification is false.

F. Educational Loan

Section 3 of the Educational Loan Default Act, 5 ILCS 385/3.

Pursuant to the Educational Loan Default Act no State agency shall contract with an individual for goods or services if that individual is in default on an educational loan.

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

Section 33E-11 of the Criminal Code of 2012, 720 ILCS 5/3BE-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.
- (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.

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

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

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

I. Drug Free Workplace

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.

The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace in compliance with the provisions of the Act.

J. Disclosure of Business Operations in Iran

Section 50-36 of the Code 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 may cause the bid, offer or proposal to be considered not responsive. The disclosure will be considered when evaluating the bid 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 appro	priate statement:
//	Company has no business operations in Iran to disclose.
//	Company has business operations in Iran as disclosed on 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 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.

Addtionally, Section 30-22 of the Code requires that the bidder certify that an Illinois office be maintained as the primary place of employment for persons employed for this contract.

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

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

Sections 20-160 and 50-37 of the 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 or any other procurement opportunity 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 Code, and that it makes the following certification:

The undersigned bidder 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. If the business entity is required to register, the CPO shall verify that it is in compliance on the date the bid or proposal is due. The CPO shall not accept a bid or proposal if the business entity is not in compliance with the registration requirements.

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 Code. This provision does not apply to Federal-aid contracts.

M. Lobbyist Disclosure

Section 50-38 of the 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 CPO 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 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.
	Or	
		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:
П∣ас	kno	owledge understand and accept these terms and conditions for the above certifications

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 CPO may void the bid, or contract, 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 Code. Furthermore, the CPO 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 Code provides that all bids of more than \$50,000 and all submissions to a vendor portal 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 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 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual 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 individual 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 individual 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. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.**

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

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual 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 an individual 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? YES NO
3.	Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? YES NO
4.	Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES NO
	(Note: Only one set of forms needs to be completed <u>per individual per bid</u> even if a specific individual would require a yes answer to more than one question.)

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

If the answer to each of the above questions is "NO", then the <u>NOT APPLICABLE STATEMENT</u> of Form A must be signed and dated by an individual 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		
O'h Olah Z'a		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)

Disclosure of the information contained in this Form is required by Section 50-35 of the 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 \$50,000, and for all open-ended contracts. A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.

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

DISCLOSURE OF FINANCIAL INFORMATION

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

FOR IND	IVIDUAL (type	or print information)		
NA	ME:			
AD	DRESS			
Тур	e of ownership	/distributable income share:	:	
stoo		sole proprietorship	Partnership	other: (explain on separate sheet):
% 0	r \$ value of own	ership/distributable income sh	are:	

- **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.

3.	If you are currently appointed to or employed by any agency of the Salary exceeds 60% of the annual salary of the Governor, are you e (i) more than 7 1/2% of the total distributable income of your firm corporation, or (ii) an amount in excess of 100% of the annual salary	ntitled to receive n, 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 a or minor children entitled to receive (i) more than 15% in aggregate of your firm, partnership, association or corporation, or (ii) an amour salary of the Governor?	nd your spouse of the total distributable income
	employment of spouse, father, mother, son, or daughter, including con previous 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 employee Board or the Illinois State Toll Highway Authority?	of the Capitol Development YesNo
2.	Is your spouse or any minor children currently appointed to or employ of Illinois? If your spouse or minor children is/are currently appointed agency of the State of Illinois, and his/her annual salary exceeds 60 annual salary of the Governor, provide the name of the spouse and/of the State agency for which he/she is employed and his/her annual	d to or employed by any 0% of the or minor children, the name
3.	If your spouse or any minor children is/are currently appointed to or estate of Illinois, and his/her annual salary exceeds 60% of the annual are you entitled to receive (i) more than 71/2% of the total distributable firm, partnership, association or corporation, or (ii) an amount in excannual salary of the Governor?	I salary of the Governor, e income of your
4.	If your spouse or any minor children are currently appointed to or er State of Illinois, and his/her annual salary exceeds 60% of the annual and your spouse or any minor children entitled to receive (i) more that aggregate of the total distributable income from your firm, partnership (ii) an amount in excess of two times the salary of the Governor?	salary of the Governor, are you an 15% in the
		Yes No
unit of	e status; the holding of elective office of the State of Illinois, the govern government authorized by the Constitution of the State of Illinoic currently or in the previous 3 years.	
	nship to anyone holding elective office currently or in the previous 2 ye daughter.	ears; spouse, father, mother, YesNo
Americ of the S	tive office; the holding of any appointive government office of the State a, or any unit of local government authorized by the Constitution of the State of Illinois, which office entitles the holder to compensation in exceptage of that office currently or in the previous 3 years.	State of Illinois or the statues
	nship to anyone holding appointive office currently or in the previous 2 daughter.	years; spouse, father, mother, YesNo
(g) Employ	yment, currently or in the previous 3 years, as or by any registered lob	byist of the State government. YesNo

e previous 2 years; spouse, father, mother, YesNo
s, by any registered election or reelection clerk of the State of Illinois, or any political the Federal Board of Elections. YesNo
er; who was a compensated employee in the registered with the Secretary of State or any littee registered with either the Secretary of
Yes No
t of the bidder or offeror who is not identified ng, or may communicate with any State officer continuing obligation and must be promp nout the term of the contract. If no person

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:							
Trace of dississance.							
ADDITO ADI E CTATEMENT							
APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Un	dor						
penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of knowledge.							
Completed by:							
Signature of Individual or Authorized Representative Date							
NOT APPLICABLE STATEMENT	<u>.</u>						
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 CONTRACTOR listed on the previous page.							
Signature of Authorized Representative Date	_						

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Financial Related Information Disclosure

Contractor Na	ıme				
Legal Address	3				
City, State, Zi	p				
Telephone Nu	ımber		Email Address	Fax Number (if avail	able)
			l s Form is required by Section 50 dicly available contract file. This		
	DISCLOSURE (OF OTHER (CONTRACTS AND PROCURE	MENT RELATED INF	ORMATION
has any per any other S	nding contracts (incl state of Illinois agend	luding leases cy: Yes _	ement Related Information. The s), bids, proposals, or other ongo	ping procurement rela	
	such as bid or proje		relationship by showing State o attach additional pages as neces		
		THE FOL	LOWING STATEMENT MUST I	BE CHECKED	
	П				
			Signature of Authorized Representative		Date
			OWNERSHIP CERTIFICA	TION	
	e certify that the foll of ownership.	owing stater	nent is true if the individuals for	all submitted Form F	A disclosures do not total
			erest is held by individuals rec outive income or holding less tha		
	☐ Yes ☐ No	□ N/A (I)	Form A disclosure(s) established	d 100% ownership)	

SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Department of Human Rights Act 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 Title 44, Illinois Administrative Code, Section 750.120. 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. 61B90 KANE County Section 11-00132-01-BR Project BROS-0089(166) Route CH 45 (Allen Road) District 1 Construction Funds

PART I. IDENTIFICA	ATION																	
Dept. of Human Rig	hts #						[Duratio	n of P	roject:								
Name of Bidder:																		
PART II. WORKFO A. The undersigned which this contract wor projection including a p	bidder hark is to be	as analyz e perform	ed mir ed, an	d for th d fema	ne locati	ons from	n whic	h the b	idder re	cruits	employe	ees, and h	ereb	y subm	its the fol	lowir con	ng workfo	n orce
		TOTA	AL Wo	rkforce	Projec	tion for	Contra	ct						C	URREN			S
				MINO	ORITY I	EMPLO	YEES			TRA	AINEES						IGNED RACT	
JOB CATEGORIES	_	TAL OYEES F	BL/	ACK F	HISP		*OTI MIN M		APPF TIC M	REN-	ON T	HE JOB INEES F		_	TAL OYEES F		MINC EMPLO M	RITY DYEES F
OFFICIALS (MANAGERS)	IVI	Г	IVI	Г	IVI	Г	IVI	Г	IVI	Г	IVI	Г		IVI	Г		IVI	Г
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
		BLE C		, 0				•	7			FOF	R DE	PARTM	IENT USE	- - - -	ILY	
EMPLOYEES		aining Pro	ojectio	n for C	ontract		*01	HER	1									
IN	_	OYEES	BLA	ACK	HISP	ANIC	_	NOR.										
TRAINING	М	F	М	F	М	F	М	F										
APPRENTICES																		
ON THE JOB TRAINEES																		

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

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

Contract No. 61B90 KANE County Section 11-00132-01-BR Project BROS-0089(166) Route CH 45 (Allen Road) District 1 Construction Funds

PART II. WORKFORCE PROJECTION - continued

		number of new hires that would	be employed in the
The u	undersigned bidder projects that: (number)		new hires would be
recrui			
offico	new hires would	be recruited from the area in which	ch the bidder's principal
	•		
The u	undersigned bidder estimates that (number)		persons will
be dir emplo	rectly employed by the prime contractor and that (nupyed by subcontractors.	ımber)	persons will be
III. AFF	FIRMATIVE ACTION PLAN		
utiliza in any comm (geard utiliza	ation projection included under PART II is determined by job category, and in the event that the undersign nencement of work, develop and submit a writtened to the completion stages of the contract) whation are corrected. Such Affirmative Action Plan whation	ed to be an underutilization of mined bidder is awarded this cont n Affirmative Action Plan includer ereby deficiencies in minority a	nority persons or women ract, he/she will, prior to ling a specific timetable and/or female employee
subm	itted herein, and the goals and timetable included u		
any		Telephone Number	
		the signing of this form. The follow	wing signature block needs
ture: 🗌		Title:	Date:
ions:	All tables must include subcontractor personnel in addition to p	orime contractor personnel.	
۱ -	(Table B) that will be allocated to contract work, and include a	all apprentices and on-the-job trainees.	The "Total Employees" column
3 -	Include all employees currently employed that will be allocated currently employed.	d to the contract work including any appro	entices and on-the-job trainees
) -	Indicate the racial breakdown of the total apprentices and on-t	he-job trainees shown in Table A.	
	The L office Included III. AFI The L utilization and common (gear utilization and to be beauty	recruited from the area in which the contract project is located. The undersigned bidder projects that: (number) recruited from the area in which the contract project is located. Included in "Total Employees" under Table A is a projectic undersigned bidder as well as a projection of numbers of the undersigned bidder estimates that (number) be directly employed by the prime contractor and that (numper) be directly employed by the prime contractor and that (numper) be directly employed by subcontractors. III. AFFIRMATIVE ACTION PLAN The undersigned bidder understands and agrees that in utilization projection included under PART II is determine in any job category, and in the event that the undersigned commencement of work, develop and submit a writter (geared to the completion stages of the contract) who utilization are corrected. Such Affirmative Action Plan withe IIIInois Department of Human Rights. The undersigned bidder understands and agrees that the submitted herein, and the goals and timetable included used to be part of the contract specifications. Pany	The undersigned bidder projects that: (number) recruited from the area in which the contract project is located; and/or (number) new hires would be recruited from the area in which office or base of operation is located. Included in "Total Employees" under Table A is a projection of numbers of persons to be undersigned bidder as well as a projection of numbers of persons to be employed by subcurrective employed by the prime contractor and that (number) be directly employed by the prime contractor and that (number) employed by subcontractors. III. AFFIRMATIVE ACTION PLAN The undersigned bidder understands and agrees that in the event the foregoing minori utilization projection included under PART II is determined to be an underutilization of mi in any job category, and in the event that the undersigned bidder is awarded this concommencement of work, develop and submit a written Affirmative Action Plan includ (geared to the completion stages of the contract) whereby deficiencies in minority autilization are corrected. Such Affirmative Action Plan will be subject to approval by the the Illinois Department of Human Rights. The undersigned bidder understands and agrees that the minority and female employee to submitted herein, and the goals and timetable included under an Affirmative Action Plan in to be part of the contract specifications. **NOTICE REGARDING SIGNATURE** **NOTICE REGARDING SIGNATURE** **Include both the number of employees that would be hired to perform the contract work and the to (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees to be employed included all employees currently employed that will be allocated to the contract work including any approurently employed.

ADDITIONAL FEDERAL REQUIREMENTS

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

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

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

Contract No. 61B90 KANE County Section 11-00132-01-BR Project BROS-0089(166) Route CH 45 (Allen Road) District 1 Construction Funds

PROPOSAL SIGNATURE SHEET

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

Firm Name	
Signature of Owner	
Business Address	
Firm Name	
Ву	
Business Address	
	Name and Address of All Members of the Firm:
Corporate Name	
Ву	Signature of Authorized Representative
	Signature of Authorized Representative
	Typed or printed name and title of Authorized Representative
	, ,
Attest	Signature
Duningan Addungan	
Business Address	
Corporate Name	
-,	Signature of Authorized Representative
	Typed or printed name and title of Authorized Representative
	Typed of printed name and title of Authorized Representative
Attest	
	Signature
Business Address	
nlease attach an addit	onal signature sheet
	Signature of Owner Business Address Firm Name By Business Address Corporate Name By Attest Business Address Corporate Name By

Return with Bid



Division of Highways Annual Proposal Bid Bond

This Annual Proposal Bid Bond shall become effective at 12:01 AM (CDST) on	and shall be valid until 11:59 PM (CDST).
KNOW ALL PERSONS BY THESE PRESENTS, That We	
as PRINCIPAL, and	
price, or for the amount specified in the bid proposal under '	ne STATE OF ILLINOIS in the penal sum of 5 percent of the total bid 'Proposal Guaranty" in effect on the date of the Invitation for Bids, d STATE OF ILLINOIS, for the payment of which we bind ourselves,
	SUCH that whereas, the PRINCIPAL may submit bid proposal(s) to tof Transportation, for various improvements published in the e.
the time and as specified in the bidding and contract document into a contract in accordance with the terms of the bidding ar coverages and providing such bond as specified with good and the prompt payment of labor and material furnished in the prosenter into such contract and to give the specified bond, the P penalty hereof between the amount specified in the bid propo	d proposal(s) of the PRINCIPAL; and if the PRINCIPAL shall, within its; and if, after award by the Department, the PRINCIPAL shall enter and contract documents including evidence of the required insurance I sufficient surety for the faithful performance of such contract and for secution thereof; or if, in the event of the failure of the PRINCIPAL to RINCIPAL pays to the Department the difference not to exceed the sal and such larger amount for which the Department may contract oposal, then this obligation shall be null and void, otherwise, it shall
preceding paragraph, then Surety shall pay the penal sum to t Surety does not make full payment within such period of time	PAL has failed to comply with any requirement as set forth in the he Department within fifteen (15) days of written demand therefor. If e, the Department may bring an action to collect the amount owed. If attorney's fees, incurred in any litigation in which it prevails either in
In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer day of A.D.,	In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer day of A.D.,
(Company Name)	(Company Name)
Ву	Ву
(Signature and Title)	(Signature of Attorney-in-Fact)
Notary for PRINCIPAL	Notary for SURETY
STATE OF	STATE OF
COUNTY OF	COUNTY OF
Signed and attested before me on (date)	Signed and attested before me on (date)
by	
(Name of Notary Public)	(Name of Notary Public)
(Seal) (Signature of Notary Public)	(Seal) (Signature of Notary Public)
(19 111 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(-3 , , , , , , , , , , , , , , , , ,
(Date Commission Expires)	(Date Commission Expires)

signing the proposal(s) the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety
are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

In lieu of completing the above section of the Annual Proposal Bid Bond form, the Principal may file an Electronic Bid Bond. By

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

This bond may be terminated, at Surety's request, upon giving not less than thirty (30) days prior written notice of the cancellation/termination of the bond. Said written notice shall be issued to the Illinois Department of Transportation, Chief Contracts Official, 2300 South Dirksen Parkway, Springfield, Illinois, 62764, and shall be served in person, by receipted courier delivery or certified or registered mail, return receipt requested. Said notice period shall commence on the first calendar day following the Department's receipt of written cancellation/termination notice. Surety shall remain firmly bound to all obligations herein for proposals submitted prior to the cancellation/termination. Surety shall be released and discharged from any obligation(s) for proposals submitted for any letting or date after the effective date of cancellation/termination.

Illinois Department of Transportation

Return with Bid

Division of Highways Proposal Bid Bond

		Item No.	
		Letting Dat	e
KNOW ALL PERSONS BY THESE	PRESENTS, That We		
as PRINCIPAL, and			
the amount specified in the bid prop	osal under "Proposal Guaranty" in	effect on the date of the Invitation fo	of 5 percent of the total bid price, or for Bids, whichever is the lesser sum, well s, executors, administrators, successors
			omitted a bid proposal to the STATE OF rtation Bulletin Item Number and Letting
specified in the bidding and contract with the terms of the bidding and co with good and sufficient surety for prosecution thereof; or if, in the eve pays to the Department the difference	ct documents; and if, after award be intract documents including evidence the faithful performance of such cent of the failure of the PRINCIPAL cent to exceed the penalty hereof with another party to perform the vertical documents.	by the Department, the PRINCIPAL size of the required insurance coverage contract and for the prompt payment to enter into such contract and to go between the amount specified in the	PRINCIPAL shall, within the time and as shall enter into a contract in accordance es and providing such bond as specified at of labor and material furnished in the give the specified bond, the PRINCIPAL bid proposal and such larger amount for nen this obligation shall be null and void,
hen Surety shall pay the penal sur	m to the Department within fifteen artment may bring an action to coll	(15) days of written demand thereforect the amount owed. Surety is liable	as set forth in the preceding paragraph, or. If Surety does not make full payment e to the Department for all its expenses,
n TESTIMONY WHEREOF, the caused this instrument to be sign day of		In TESTIMONY WHEREOF, instrument to be signed by its day of	the said SURETY has caused this sofficer A.D.,
	N		N
(Company	name)	,	npany Name)
Sy(Signatur	re and Title)	By(Signatur	re of Attorney-in-Fact)
Notary for PRINCIPAL	o and mo,	Notary for SURETY	io of Attornoy in Fact,
•		-	
STATE OF COUNTY OF		STATE OF	
Signed and attested before me oby	on (date)	Signed and attested before n	ne on (date)
(Name of Nota	ary Public)	(Name o	of Notary Public)
0 1)		(01)	
Seal)	(Signature of Notary Public)	(Seal)	(Signature of Notary Public)
	(Date Commission Expires)	-	(Date Commission Expires)
n lieu of completing the above s	section of the Proposal Bid Boring the identified electronic bid	d bond has been executed and	Electronic Bid Bond. By signing the the Principal and Surety are firmly
Electronic Bid Bond ID #	Company/Bidder Name	<u> </u>	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) Proj	ect and Bid Identification			
Complet	e the following information concerning the project and bid:			
Route		Total Bid		_
Section		Contract DBE Goal		
Project			(Percent)	(Dollar Amount)
County				
Letting D	Date			
Contract	No			
Letting It	tem No.			
(4) Assı	urance			
	in my capacity as an officer of the undersigned bidder (or bidden y company: (check one) Meets or exceeds contract award goals and has provided door Disadvantaged Business Participation percent Attached are the signed participation statements, forms SBE use of each business participating in this plan and assuring the work of the contract. Failed to meet contract award goals and has included good far provided participation as follows: Disadvantaged Business Participation percent The contract goals should be accordingly modified or waive support of this request including good faith effort. Also at required by the Special Provision evidencing availability and to business will perform a commercially useful function in the work.	cumented participation as fort 2025, required by the Spectat each business will perfort documentation to ed. Attached is all informatached are the signed pause of each business participation.	ollows: ial Provision evi m a commercial meet the goals a ation required by	dencing availability and ly useful function in the and that my company has the Special Provision in the ments, forms SBE 2025,
-	Company	The "as read" Low Bidder is re	equired to comply wit	h the Special Provision.
Ву		Submit only one utilization pla submitted in accordance with		
Title		Bureau of Small Business Ent	erprises	Local 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.

2300 South Dirksen Parkway

Springfield, Illinois 62764

Submit forms to the

Local Agency



DBE Participation Statement

Subcontractor	Registration Num	ber		L	etting	
Participation Statement				Item No.		
(1) Instruction	าร			С	ontract No.	
accordance w	ith the special prov	r each disadvantaged bu vision and will be attach cking participation items	ed to the Utilization Pl	an form. If addition	nal space is needed	l complete an
(2) Work:						
Please indicat	te: J/V	Manufacturer	Supplier (60%)	Subcor	tractor	Trucking
Pay Item No.	Descri	ption (Anticipated items	for trucking)*	Quantity	Unit Price	Total
(2) Doutiel De	umant Itama (Far	any of the above items y	uhiah ava navtial nav it	a-ma)	Total	
	ist be sufficient to d	any of the above items v letermine a Commercially			work and subcontrac	t dollar amount:
subcontract, it	is to be a second-t must be clearly in	tier subcontractor, or if the dicated on the DBE Par	ticipation Statement, a	and the details of the	ne transaction fully	explained.
In the event a contract, the p	DBE subcontractorime must submit	or second-tiers a portion a DBE Participation Sta	of its subcontract to o tement, with the detail	ne or more subcor s of the transaction	ntractors during the n(s) fully explained.	work of a
perform a com contractor or 1 prior approval	The undersigned certify that the information included herein is true and correct, and that the DBE firm listed below has agreed to perform a commercially useful function in the work of the contract item(s) listed above and to execute a contract with the prime contractor or 1 st Tier subcontractor. The undersigned further understand that no changes to this statement may be made without prior approval from the Department's Bureau of Small Business Enterprises and that complete and accurate information regarding actual work performed on this project and the payment therefore must be provided to the Department.					
ű	nature for Contractor_	1 st Tier 2 nd Tier		•	DBE Firm 1 st Tier	2 nd Tier
Contact Pers	on		Cont	act Person		
Title			Title			
Firm Name Firm Name						
Address			Addı	ess		
City/State/Zip			City/	State/Zip		
Phone			Phoi	ne		
Email Addres	ss		Ema	il Address		
					E	
The Department of To-	anapartation is requestive all	and any and information that in passage	with accomplish the statut	ann an airitimed riades the enter	to and WC	

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.

PROPOSAL ENVELOPE



PROPOSALS

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

Item No.	Item No.	Item No.

Submitted By:

lame:	
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. 61B90 KANE County Section 11-00132-01-BR Project BROS-0089(166) Route CH 45 (Allen Road) District 1 Construction Funds



SUBCONTRACTOR DOCUMENTATION

Public Acts 96-0795, 96-0920, and 97-0895 enacted substantial changes to the provisions of the 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 that entered into a contractual agreement with a total value of \$50,000 or more with a person or entity who has a contract subject to the Code and 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 Illinois Department of Transportation's CPO upon request within 15 calendar days after execution of the subcontract.

Financial disclosures required pursuant to Sec. 50-35 of the Code must be submitted for all applicable subcontractors. The subcontract shall contain the certifications required to be made by subcontractors pursuant to Article 50 of the Code. This Notice to Bidders includes a document incorporating all required subcontractor certifications and disclosures for use by the Contractor in compliance with this mandate. The document is entitled <u>State Required Ethical Standards Governing Subcontractors</u>.

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

Article 50 of the Code establishes the duty of all State CPOs, SPOs, 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 CPO may terminate or void the contract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

Section 50-2 of the 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 CPO 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

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 2012.
- (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 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 CPO 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.

The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50-5.

B. Felons

Section 50-10. Felons.

- (a) 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.
- (b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the 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 CPO may declare the related contract void if any of the certifications required by this Section are false.

C. <u>Debt Delinquency</u>

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 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 CPO 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

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 Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontract is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO 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 500/50-14 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 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 CPO 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 CPO 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 Code. Furthermore, the CPO may void the contract.

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Code provides that all subcontracts with a total value of \$50,000 or more, from subcontractors identified in Section 20-120 of the 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 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual 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 individual 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 individual 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. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.**

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

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the 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 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual 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 an individual 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? YESNO
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 individual per subcontract</u> even if a specific individual would require a yes answer to more than one question.)
'FS"	answer to any of these questions requires the completion of Form A. The subcontractor must determine each individual in

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 an individual that is authorized to execute contracts for your organization. The individual signing can be, but does not have to be, the individual 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 an individual 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 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		
Subcontractor Name		
Legal Address		
Legal Address		
City, State, Zip		
Oity, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
relephone Number	Liliali Addiess	i ax inuitibei (ii available)

Disclosure of the information contained in this Form is required by Section 50-35 of the 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 \$50,000 or more, from subcontractors identified in Section 20-120 of the Code, 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 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)

TOTT INDIVIDUAL (type or print information)		
NAME:			
ADDRESS _			
Type of owner	ship/distributable income share:	:	
stock % or \$ value of	sole proprietorship ownership/distributable income sh	Partnershipare:	other: (explain on separate shee
	nterest relationships apply. If the		dicate which, if any, of the following is "Yes", please attach additional
(a) State employme	nt, currently or in the previous 3	years, including contractu	ual employment of services. Yes No
If your answer is	yes, please answer each of the	e following questions.	<u> </u>
-	currently an officer or employee way Authority?	e of either the Capitol Deve	elopment Board or the Illinois State YesNo
currently exceeds	currently appointed to or emplo appointed to or employed by a 60% of the annual salary of the or which you are employed and	ny agency of the State of le Governor, provide the na	Illinois, and your annual salary

	3.	If you are currently appointed to or employed by any agency of t salary exceeds 60% of the annual salary of the Governor, are yo (i) more than 7 1/2% of the total distributable income of your corporation, or (ii) an amount in excess of 100% of the annual salary	ou entitled to receive firm, 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 your minor children entitled to receive (i) more than 15% in the income of your firm, partnership, association or corporation, or the salary of the Governor?	ou and your spouse aggregate of the total distributable
(b)		employment of spouse, father, mother, son, or daughter, includir previous 2 years.	ng contractual employment services YesNo
	If	your answer is yes, please answer each of the following question	
	1.	Is your spouse or any minor children currently an officer or empl Board or the Illinois State Toll Highway Authority?	oyee of the Capitol Development YesNo
		Is your spouse or any minor children currently appointed to or er of Illinois? If your spouse or minor children is/are currently agency of the State of Illinois, and his/her annual salary ex annual salary of the Governor, provide the name of your spouse of the State agency for which he/she is employed and his/her an	appointed to or employed by any ceeds 60% of the and/or minor children, the name
	3.	If your spouse or any minor children is/are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you entitled to receive (i) more than 71/2% of the total distribution, partnership, association or corporation, or (ii) an amount annual salary of the Governor?	nnual salary of the Governor, utable income of your
	4.	If your spouse or any minor children are currently appointed to State of Illinois, and his/her annual salary exceeds 60% of the are you and your spouse or minor children entitled to receive aggregate of the total distributable income of your firm, partner (ii) an amount in excess of two times the salary of the Governor?	nual salary of the Governor, (i) more than 15 % in the ship, association or corporation, or
<u></u>	- 1		YesNo
(C)	unit of	ve status; the holding of elective office of the State of Illinois, the glocal government authorized by the Constitution of the State of Illicurrently or in the previous 3 years.	
(d)		onship to anyone holding elective office currently or in the previour daughter.	s 2 years; spouse, father, mother, YesNo
(e)	Americ of the	ntive office; the holding of any appointive government office of the ca, or any unit of local government authorized by the Constitution State of Illinois, which office entitles the holder to compensation is charge of that office currently or in the previous 3 years.	of the State of Illinois or the statutes
		onship to anyone holding appointive office currently or in the previous daughter.	ous 2 years; spouse, father, mother, YesNo
(g)	Emplo	yment, currently or in the previous 3 years, as or by any registere	d lobbyist of the State government. YesNo

(h) Relationship to anyone who is or was a registered lobbyist son, or daughter.	in the previous 2 years; spouse, father, mother, YesNo
(i) Compensated employment, currently or in the previous 3 y committee registered with the Secretary of State or any contact action committee registered with either the Secretary of States	ounty clerk of the State of Illinois, or any political
(j) Relationship to anyone; spouse, father, mother, son, or data last 2 years by any registered election or re-election common county clerk of the State of Illinois, or any political action of State or the Federal Board of Elections.	ttee registered with the Secretary of State or any ommittee registered with either the Secretary of
	YesNo
Communication Disclosure.	
Disclose the name and address of each lobbyist and other a Section 2 of this form, who is has communicated, is communic employee concerning the bid or offer. This disclosure i supplemented for accuracy throughout the process and threidentified, enter "None" on the line below:	eating, or may communicate with any State officer or s a continuing obligation and must be promptly
Name and address of person(s):	

3

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 & Financial Related Information Disclosure

Subcontractor Name		
Legal Address		
City, State, Zip		
Telephone Number	Email Address	Fax Number (if available)
Disclosure of the information contained in information shall become part of the publicl a total value of \$50,000 or more, from subcontracts.	y available contract file. This Form	B must be completed for subcontracts with
DISCLOSURE OF OTHER CONTRA	CTS, SUBCONTRACTS, AND PRO	OCUREMENT RELATED INFORMATION
1. Identifying Other Contracts & Procure any pending contracts, subcontracts, includ any other State of Illinois agency: Ye If "No" is checked, the subcontractor only	ing leases, bids, proposals, or othe sNo	r ongoing procurement relationship with
2. If "Yes" is checked. Identify each such information such as bid or project number (a INSTRUCTIONS:		
THE FOLLO	WING STATEMENT MUST BE CH	ECKED
П		
	Signature of Authorized Officer	Date
	OWNERSHIP CERTIFICATION	
Please certify that the following statement is of ownership	s true if the individuals for all submit	ted Form A disclosures do not total 100%
Any remaining ownership interest is parent entity's distributive income o		han \$106,447.20 of the bidding entity's or interest.
□ Ves □ No □ N/A (Form	A disclosure(s) established 100% of	ownershin)

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. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 a.mNovember 6, 2015. 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 10:00 a.m.
- **2. DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 61B90
KANE County
Section 11-00132-01-BR
Project BROS-0089(166)
Route CH 45 (Allen Road)
District 1 Construction Funds

This project consists of replacing the bridge over Hampshire Creek located east of Walker Road. Project includes approach roadway reconstruction, shoulder construction and guardrail installation.

- 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

Randall S. Blankenhorn, Secretary

CONTRACT 61B90

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2015

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-12) (Revised 1-1-15)

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RECURRING SPECIAL PROVISIONS

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

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LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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

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LR # LR SD12 LR SD13 LR 107-2 LR 107-4 LR 108 LR 109 LR 212 LR 355-1	Pg# 113	Special Provision Title Slab Movement Detection Device Required Cold Milled Surface Texture Railroad Protective Liability Insurance for Local Lettings Insurance Combination Bids Equipment Rental Rates Shaping Roadway Bituminous Stabilized Base Course, Road Mix or Traveling	Effective Nov. 11, 1984 Nov. 1, 1987 Mar. 1, 2005 Feb. 1, 2007 Jan. 1, 1994 Jan. 1, 2012 Aug. 1, 1969	Revised Jan. 1, 2007 Jan. 1, 2007 Jan. 1, 2006 Aug. 1, 2007 Mar. 1, 2005 Jan. 1, 2002
LR 355-2 LR 400-1 LR 400-2 LR 400-3 LR 400-4 LR 400-5 LR 400-6 LR 400-7 LR 402		Plant Mix Bituminous Stabilized Base Course, Plant Mix Bituminous Treated Earth Surface Bituminous Surface Plant Mix (Class B) Hot In-Place Recycling (HIR) – Surface Recycling Full-Depth Reclamation (FDR) with Emulsified Asphalt Cold In-Place Recycling (CIR) With Emulsified Asphalt Cold In Place Recycling (CIR) with Foamed Asphalt Full-Depth Reclamation (FDR) with Foamed Asphalt Salt Stabilized Surface Course	Oct. 1, 1973 Feb. 20, 1963 Jan. 1, 2007 Jan. 1, 2008 Jan. 1, 2012 Apr. 1, 2012 Apr. 1, 2012 June 1, 2012 June 1, 2012 Feb. 20, 1963	Jan. 1, 2007 Jan. 1, 2007 Apr. 1, 2012 Jun. 1, 2012 Jun. 1, 2012 Jan. 1, 2007
LR 403-1		Surface Profile Milling of Existing, Recycled or Reclaimed Flexible Pavement	Apr. 1, 2012	Jun. 1, 2012
LR 403-2 LR 406 LR 420 LR 442 LR 451 LR 503-1 LR 503-2 LR 542 LR 663 LR 702 LR 1000-1		Bituminous Hot Mix Sand Seal Coat Filling HMA Core Holes with Non-shrink Grout PCC Pavement (Special) Bituminous Patching Mixtures for Maintenance Use Crack Filling Bituminous Pavement with Fiber-Asphalt Furnishing Class SI Concrete Furnishing Class SI Concrete (Short Load) Pipe Culverts, Type (Furnished) Calcium Chloride Applied Construction and Maintenance Signs Cold In-Place Recycling (CIR) and Full Depth Reclamation (EDP) with Emulsified Applied Mix Design Procedures	Aug. 1, 1969 Jan. 1, 2008 May 12, 1964 Jan. 1, 2004 Oct. 1, 1991 Oct. 1, 1973 Jan. 1, 1989 Sep. 1, 1964 Jun. 1, 1958 Jan. 1, 2004 Apr. 1, 2012	Jan. 1, 2007 Jan. 2, 2007 Jun. 1, 2007 Jan. 1, 2002 Jan. 1, 2002 Jan. 1, 2007 Jan. 1, 2007 Jun. 1, 2007 Jun. 1, 2012
LR 1000-2 LR 1004 LR 1030 LR 1032-1 LR 1102		(FDR) with Emulsified Asphalt Mix Design Procedures Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR) with Foamed Asphalt Mix Design Procedures Coarse Aggregate for Bituminous Surface Treatment Growth Curve Emulsified Asphalts Road Mix or Traveling Plan Mix Equipment	June 1, 2012 Jan. 1, 2002 Mar. 1, 2008 Jan. 1, 2007 Jan. 1, 2007	Jan. 1, 2007 Jan. 1, 2010 Feb. 7, 2008

BDE SPECIAL PROVISIONS

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

<u>File</u> Name	<u>Pg.</u>	Special Provision Title	Effective	Revised
80240	Г	Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
80099	ŀ	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274		Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
80192	Ī	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	114	X Bituminous Materials Cost Adjustments	Nov. 2, 2006	July 1, 2015
80241	Ī	Bridge Demolition Debris	July 1, 2009	• •
50261	ľ	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481	ļ	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5049I	Ì	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531		Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80360	117	X Coarse Aggregate Quality	July 1, 2015	, ,
80310		Coated Galvanized Steel Conduit	Jan. 1, 2013	Jan. 1, 2015
80341		Coilable Nonmetallic Conduit	Aug. 1, 2014	Jan. 1, 2015
80198	ļ	Completion Date (via calendar days)	April 1, 2008	
80199		Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293	119	X Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	April 1, 2015
80294		Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	April 1, 2012	April 1, 2014
80311		Concrete End Sections for Pipe Culverts	Jan. 1, 2013	
80334		Concrete Gutter, Curb, Median, and Paved Ditch	April 1, 2014	Aug. 1, 2014
80277		Concrete Mix Design – Department Provided	Jan. 1, 2012	Jan. 1, 2014
80261	140	X Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80335	143	X Contract Claims	April 1, 2014	
80029	144	X Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Nov. 2, 2015
80358	155	X Equal Employment Opportunity	April 1, 2015	
80265		Friction Aggregate	Jan. 1, 2011	Nov. 1, 2014
80229	159	X Fuel Cost Adjustment	April 1, 2009	July 1, 2015
80329		Glare Screen	Jan. 1, 2014	
80304	400	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
80246	163	X Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
80322		Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Nov. 1, 2013	Nov. 1, 2014
80323		Hot-Mix Asphalt – Mixture Design Verification and Production	Nov. 1, 2013	Nov. 1, 2014
80347		Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	July 1, 2015
80348	165	X Hot-Mix Asphalt – Prime Coat	Nov. 1, 2014	
80315		Insertion Lining of Culverts	Jan. 1, 2013	Nov. 1, 2013
80351		Light Tower	Jan. 1, 2015	
80336		Longitudinal Joint and Crack Patching	April 1, 2014	
80324	169	X LRFD Pipe Culvert Burial Tables	Nov. 1, 2013	April 1, 2015
80325		LRFD Storm Sewer Burial Tables	Nov. 1, 2013	April 1, 2015
80045		Material Transfer Device	June 15, 1999	Aug. 1, 2014
80342		Mechanical Side Tie Bar Inserter	Aug. 1, 2014	Jan. 1, 2015
80165	4451148/68/56/641	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
* 80361		Overhead Sign Structures Certification of Metal Fabricator	Nov. 1, 2015	
80337		Paved Shoulder Removal	April 1, 2014	
80349		Pavement Marking Blackout Tape	Nov. 1, 2014	
80298		Pavement Marking Tape Type IV	April 1, 2012	
80254		Pavement Patching	Jan. 1, 2010	

<u>File</u>	<u>Pg.</u>		Special Provision Title	Effective	Revised
Name	i		Decree of Original Original	l 4 0045	
80352			Pavement Striping - Symbols	Jan. 1, 2015	
80359			Portland Cement Concrete Bridge Deck Curing	April 1, 2015	A "14 004E
80353			Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2015
80338			Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	
80343			Precast Concrete Handhole	Aug. 1, 2014	
80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
80328	189	X	Progress Payments	Nov. 2, 2013	
34261			Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157			Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306			Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	Jan. 2, 2015
80350	190	Х	Retroreflective Sheeting for Highway Signs	Nov. 1, 2014	
80327	192	X	Reinforcement Bars	Nov. 1, 2014	
80344	102		Rigid Metal Conduit	Aug. 1, 2014	
80354			Sidewalk, Corner, or Crosswalk Closure	Jan. 1, 2015	April 1, 2015
80340			Speed Display Trailer	April 2, 2014	April 1, 2010
80127	194	Х	Steel Cost Adjustment	April 2, 2014 April 2, 2004	July 1, 2015
80317	134		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	July 1, 2015
80355			Temporary Concrete Barrier	Jan. 1, 2015	July 1, 2015
80301			Tracking the Use of Pesticides	Aug. 1, 2012	odiy 1, 2010
80356			Traffic Barrier Terminals Type 6 or 6B	Jan. 1, 2015	
20338			Training Special Provisions	Oct. 15, 1975	
80318			Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
80345			Underpass Luminaire	Aug. 1, 2014	April 1, 2015
80357			Urban Half Road Closure with Mountable Median	Jan. 1, 2015	July 1, 2015
80346			Waterway Obstruction Warning Luminaire	Aug. 1, 2014	April 1, 2015
80288	198	X	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2014
80302	200	X	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289	200		Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071			Working Days	Jan. 1, 2002	

The following special provisions are in the 2015 Supplemental Specifications and Recurring Special Provisions:

<u>File</u> Name	Special Provision Title	New Location	<u>Effective</u>	Revised
80292	Coarse Aggregate in Bridge Approach Slabs/Footings	Articles 1004.01(b) and 1004.02(f)	April 1, 2012	April 1, 2013
80303	Granular Materials	Articles 1003.04, 1003.04(c), and 1004.05(c)	Nov. 1, 2012	
80330	Pavement Marking for Bike Symbol	Article 780.14	Jan. 1, 2014	
80331	Payrolls and Payroll Records	Recurring CS #1 and #5	Jan. 1, 2014	
80332	Portland Cement Concrete – Curing of Abutments and Piers	Article 1020.13	Jan. 1, 2014	
80326	Portland Cement Concrete Equipment	Article 1103.03(a)(5)	Nov. 1, 2013	
80281	Quality Control/Quality Assurance of Concrete Mixtures	Recurring CS #31	Jan. 1, 2012	Jan. 1, 2014
80283	Removal and Disposal of Regulated Substances	Articles 669.01, 669.08, 669.09, 669.14, and 669.16	Jan. 1, 2012	Nov. 2, 2012
80319	Removal and Disposal of Surplus Materials	Article 202.03	Nov. 2, 2012	
80307	Seeding	Article 250.07	Nov. 1, 2012	
80339	Stabilized Subbase	Article 312.06	April 1, 2014	
80333	Traffic Control Setup and Removal Freeway/Expressway	Articles 701.18(I) and 701.19(a)	Jan. 1, 2014	

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

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

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

GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET Effective as of the: July 31, 2015 Letting

<u>Pg</u> #	7	File Name	<u>Title</u>	<u>Effective</u>	Revised
	ļ	GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	July 26, 2013
		GBSP 12	Drainage System	June 10, 1994	Jun 24, 2015
		GBSP 13	High-Load Multi-Rotational Bearings	Oct 13, 1988	Oct 30, 2012
	1	GBSP 14	Jack and Remove Existing Bearings	April 20, 1994	Jan 1, 2007
		GBSP 15	Three Sided Precast Concrete Structure	July 12, 1994	Dec 29, 2014
		GBSP 16	Jacking Existing Superstructure	Jan 11, 1993	Jan 1, 2007
		GBSP 17	Bonded Preformed Joint Seal	July 12, 1994	Jan 1, 2007
		GBSP 18	Modular Expansion Joint	May 19, 1994	Dec 29, 2014
		GBSP 21	Cleaning and Painting Contact Surface Areas of Existing Steel Structures	June 30, 2003	May 18, 2011
		GBSP 25	Cleaning and Painting Existing Steel Structures	Oct 2, 2001	April 19, 2012
		GBSP 26	Containment and Disposal of Lead Paint Cleaning Residues	Oct 2, 2001	April 30, 2010
	<u> </u>	GBSP 28	Deck Slab Repair	May 15, 1995	Oct 15, 2011
		GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Jun 24, 2015
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Jun 24, 2015
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Jun 24, 2015
		GBSP 32	Temporary Sheet Piling	Sept 2, 1994	Jan 31, 2012
		GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Dec 29, 2014
	1	GBSP 34	Concrete Wearing Surface	June 23, 1994	Feb 6, 2013
		GBSP 35	Silicone Bridge Joint Sealer	Aug 1, 1995	Oct 15, 2011
		GBSP 38	Mechanically Stabilized Earth Retaining Walls	Feb 3, 1999	Dec 29, 2014
		GBSP 42	Drilled Soldier Pile Retaining Wall	Sept 20, 2001	Jan 3, 2014
		GBSP 43	Driven Soldier Pile Retaining Wall	Nov 13, 2002	Jan 3, 2014
	1	GBSP 44	Temporary Soil Retention System	Dec 30, 2002	May 11, 2009
		GBSP 45	Bridge Deck Thin Polymer Overlay	May 7, 1997	Feb 6, 2013
		GBSP 46	Geotextile Retaining Walls	Sept 19, 2003	July 26, 2013
		GBSP 51	Pipe Underdrain for Structures	May 17, 2000	Jan 22, 2010
		GBSP 53	Structural Repair of Concrete	Mar 15, 2006	Aug 29, 2014
		GBSP 55	Erection of Curved Steel Structures	June 1, 2007	
	ļ	GBSP 56	Setting Piles in Rock	Nov 14, 1996	April 19, 2012
		GBSP 57	Temporary Mechanically Stabilized Earth Retaining Walls	Jan 6, 2003	Dec 29, 2014
		GBSP 59	Diamond Grinding and Surface Testing Bridge Sections	Dec 6, 2004	Jan 3, 2014
		GBSP 60	Containment and Disposal of Non-Lead Paint Cleaning Residues	Nov 25, 2004	Mar 6, 2009
		GBSP 61	Slipform Parapet		Dec 29, 2014
		GBSP 62	Concrete Deck Beams	June 13, 2008	Oct 9, 2009
		GBSP 64	Segmental Concrete Block Wall	Jan 7, 1999	Oct 30, 2012
		GBSP 65	Precast Modular Retaining Walls	Mar 19, 2001	Dec 29, 2014
		GBSP 67	Structural Assessment Reports for Contractor's Means and Methods	Mar 6, 2009	
		GBSP 70	Braced Excavation	Aug 9, 1995	May 18, 2011
		GBSP 71	Aggregate Column Ground Improvement	Jan 15, 2009	Oct 15, 2011

		GBSP 72	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay	Jan 18, 2011	Jun 24, 2015
		GBSP 73	Cofferdams	Oct 15, 2011	
201	X	GBSP 74	Permanent Steel Sheet Piling (LRFD)	Jan 31, 2012	Aug 17, 2012
	·	GBSP 75	Bond Breaker for Prestressed Concrete Bulb-T Beams	April 19, 2012	
		GBSP 76	Granular Backfill for Structures	April 19, 2012	Oct 30, 2012
203	Х	GBSP 77	Weep Hole Drains for Abutments, Wingwalls, Retaining Walls And Culverts	April 19, 2012	Oct 22, 2013
		GBSP 78	Bridge Deck Construction	Oct 22, 2013	April 18, 2014
		GBSP 79	Bridge Deck Grooving (Longitudinal)	Dec 29, 2014	
		GBSP 80	Fabric Reinforced Elastomeric	Aug 29, 2014	

LIST ANY ADDITIONAL SPEC	CIAL PROVISIONS BELOW	

The following Guide Bridge Special Provisions have been incorporated into the 2012 Standard Specifications:

File	Title	Std Spec
Name		Location
GBSP22	Cleaning and Painting New Metal Structures	506
GBSP36	Surface Preparation and Painting Req. for Weathering Steel	506
GBSP50	Removal of Existing Non-composite Bridge Decks	501
GBSP58	Mechanical Splicers	508
GBSP63	Demolition Plans for Removal of Existing Structures	501
GBSP68	Piling	512
GBSP69	Freeze-Thaw Aggregates for Concrete Superstructures Poured on Grade	1004

The following Guide Bridge Special Provisions have been discontinued or have been superseded:

File	Title	Disposition:
Name		
GBSP37	Underwater Structure Excavation Protection	Replaced by GBSP73
GBSP11	Permanent Steel Sheet Piling	Replaced by GBSP74
GBSP47	High Performance Concrete Structures	Discontinued
GBSP52	Porous Granular Embankment (Special)	Replaced by GBSP76
GBSP66	Wave Equation Analysis of Piles	Discontinued

Allen Road over Hampshire Creek Kane County Contract No. 61B90

C.H. 45 Job. No. C-91-085-12 Sec. 11-00132-01-BR

STATE OF ILLINOIS SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2012, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways" and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein which apply to and govern the construction of Contract No. 61B90, Section 11-00132-01-BR, Project BROS-0089(166), Job No. C-91-085-12 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

The project is located along the centerline of Allen Road west of the Village of Hampshire in Hampshire Township, Kane County. The net and gross length of the improvement is 2,080 feet (0.394 mile).

DESCRIPTION OF PROJECT

The work consists of bridge removal, new twin 10' x 8' box culverts and end sections, pavement removal and reconstruction, steel sheet piling wall, placement of embankment, shoulder construction, guardrail installation, placement of pavement marking, landscaping and all incidental and collateral work necessary to complete the project as shown on plans and as described herein.

C.H. 45 Job. No. C-91-085-12

Sec. 11-00132-01-BR

START DATE WITH COMPLETION DATE PLUS WORKING DAYS

Because Allen Road is a primary route for the northern portion of Kane County's agricultural industry the Kane County Division of Transportation requires that the Allen Road remain open doing the planting season. The contractor will <u>not</u> be allowed to close Allen Road and execute the "Detour" for this project prior to <u>May 30, 2016</u>.

The Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 PM on <u>September 16, 2016</u> except as specified herein. This work shall include final surface courses with guardrail and end treatments.

The Contractor will be allowed to complete all seeding and tree planting operations requiring planting between October 15 to December 1, erosion control blanket for same, remaining clean-up work and punch list items within <u>10</u> working days after the completion date for opening the roadway to traffic. Under extenuating circumstances the Engineer may direct that certain items of work, not affecting the safe opening of the roadway to traffic, may be completed within the working days allowed for restoration which includes seeding and erosion control blanket, right-of-way and survey markers, cleanup work and punch list items. Temporary lane closures for this work may be allowed at the discretion of the Engineer.

Article 108.09 or the Special Provision for "Failure to Complete the Work on Time", if included in this contract, shall apply to both the completion date and the number of working days.

GEOTECHNICAL REPORT

Partial Geotechnical Reports have been included as part of the contract documents. The reports were completed by Wang Engineering, Inc. The partial reports included are as follows:

Roadway and Culvert: July 8, 2013

Permanent Steel Sheet Pile Wall and Clean Soil Disposal Assessment: May 28, 2014

Addendum to Structure Geotechnical Report - Undercuts: August 8, 2014

THOSE SEEKING THE FULL GEOTECHNICAL REPORT SHOULD CONTACT THE OWNER OF RECORD. TO MAKE ARRANGEMENTS FOR ACCESS TO THIS INFORMATION PLEASE CONTACT:

MICHAEL ZAKOSEK, PE CHIEF OF DESIGN 630-584-1170 zakosekmike@co.kane.il.us

EARTH EXCAVATION

This item shall be completed in accordance with the applicable portions of Section 202 of the Standard Specifications with the following general additions. This work shall include removal of all earth material shown on the cross sections or as directed by the Engineer. <u>Earth Excavation will also include all aggregate base courses, aggregate sub-bases and aggregate surfaces and shoulders.</u> Earth excavation will <u>not</u> include the excavation of topsoil, unsuitable materials, and removal items for existing bituminous and concrete pavements, driveways and shoulders.

C.H. 45 Job. No. C-91-085-12

Sec. 11-00132-01-BR

For this project, it is the intention of this specification to pay for the handling of earthwork material only once, regardless of staging or Contractor's operations. The Contractor shall be responsible for his earthwork operations for excavating and stockpile excavated materials for re-handling at a later date. This applies to all excavated material to be used in embankments, shoulders or as topsoil re-spread.

Temporary earth stockpiles will <u>not</u> be allowed on the adjacent properties without the permission of the owner and approval of the Engineer. It will be the contractor's responsibility to acquire permission from the appropriate owner prior to stock piling any materials on those properties. The contractor will provide the Engineer with a written statement from the property owner stating said permission has been granted. This work will be considered part of the contract. As such, if the Contractor chooses to do this work as part of the close out or punch list work, contract days will continue to be counted until all stockpiles are removed and all disturbed areas are restored to at least to their original condition.

A shrinkage Factor of 15% was used for this Project.

Overhaul will <u>not</u> be paid for separately but shall be INCLUDED in the unit price per Cubic Yard for EARTH EXCAVATION.

PIPE UNDERDRAIN 6" SPECIAL

<u>Description:</u> Underdrains shall be placed in an aggregate capsule at the center of all drainage ditches with slopes less than 1%. The pipe underdrain shall be in accordance with Section 601 of the Standard Specification. The underdrain locations and construction details are included in the plans.

<u>Materials</u>: The underdrain pipe shall be six (6) Perforated Corrugated Polyethylene Tubing encased in a fabric "sock". The fabric sock encasing for the perforated corrugated pipe underdrain may be either a knitted, woven, or non-woven fabric. The fabric sock shall be factory applied to the pipe underdrain.

The fabric "sock" and envelope shall meet the requirements of Section 1080.01 of the Standard Specifications.

The aggregate capsule shall be in accordance with the applicable portions of Section 209 shall meet IDOT gradation CA-16.

<u>Handling and Storage:</u> Knitted fabric sock shall be applied to the 6-inch Pipe Underdrain in the shop to maintain a uniform applied weight. Woven and non-woven fabric or tubing with knitted fabric sock shall be delivered to the job site in such manner as to facilitate handling and incorporation into the work without damage. Fabric sock materials shall be stored in UV-resistant bags until just prior to installation. In no case shall the fabric be stored or exposed to direct sunlight that might significantly diminish its strength or toughness. Torn or punctured fabric socks shall not be used.

Basis of Payment

This underdrain shall be paid for at the contract unit price per lineal foot of PIPE UNDERDRAINS 6" (SPECIAL). This price shall include the underdrain, fabric sock, connections and fittings as

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specified and all other materials, labor, tools, equipment and incidentals necessary to complete this item of work.

Aggregate backfill around the underdrain will be paid for at the contract unit price per Cubic Yard for POROUS GRANULAR BACKFILL. The volume shall be measured for payment per Article 209.04.

PRECAST REINFORCED CONCRETE FLARED END SECTIONS

<u>Description</u>: This work shall consist of providing new precast concrete flared end sections and grating at the location shown on the plans. Precast concrete flared end sections shall be of the size specified in the plans and meet the requirements of Section 542 and IDOT Standard 542301. The grating for concrete flared end sections shall be of the size specified in the plans and shall in accordance with Article 542.07 (b).

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per Each for PRECAST REINFORCED CONCRETE FLARED END SECTION of the size specified, which shall include payment in full for the flared end section, grating, bedding and all labor, grating, equipment and material necessary for the completion of the work.

GUARDRAIL MARKERS

<u>Description:</u> Furnishing and installing all Guardrail Mounted Delineators. The Kane County Division of Transportation pre-approved Guardrail Mounted Delineator "AKT-567" shall be provided for all proposed Steel Plate Beam Guardrail locations shown in plan. Terminal Markers — Direct Applied shall be provided and paid for separately and shall conform to the Standard Specifications.

- A. The reflective area shall be approximately nine (9) square inches of encapsulated lens reflective sheeting permanently mounted to the bracket by either pressure sensitive or heat. The sheeting shall be Hi-intensity grade reflective material and the color of the reflective sheeting to be chosen by the Engineer in the field. The delineator shall be mounted at each post location per the manufacturer's specifications and details.
- B. The bracket shall be 12 gauge galvanized steel. The bracket shall be of the same size and shape as the reflective sheeting that is mounted on it. The bracket shall have slotted holes in such a manner as to fit under the collars of the existing guardrail bolts when tightened down. There shall be no open area between the guardrail and the reflector so as to prohibit vandalism. The delineator shall mount within the channel section of the guardrail and shall not protrude further than the guardrail itself. No epoxy shall be used to install the delineator to the guardrail. The delineator shall be capable of holding reflective material for either one-way or two-way application. The galvanizing shall be G-90 or better.

Colors:

Permanent Guardrail – Guardrail markers shall be reflective on one (1) side of the reflector with the traffic side being white.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price Each for GUARDRAIL MARKERS, TYPE A, which price shall include the reflector, bracket, hardware, installation, labor, tools, equipment and incidentals required to complete the work as specified.

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EXISTING FIELD TILE REMOVAL

<u>Description</u>: When existing field tile has been replaced or repair the abandoned portion of field tile shall be removed or crushed in accordance with applicable portions of Section 611. The trench cuts for the purposes of removing or crushing the tile shall be backfilled with aggregate backfill material according to Section 208 and compacted according to Article 550.07.

<u>Basis of Payment:</u> The work to remove or crush the existing drain tile and trench backfill will be paid for per Foot for EXISTING FIELD TILE REMOVAL, which price shall include removal or crushing, aggregate trench backfill, compaction and all other materials, labor, tools, equipment and incidentals necessary to complete this item of work.

SURFACE REMOVAL, VARIABLE DEPTH (SPECIAL)

<u>Description</u>: This item shall consist of removing the existing hot-mix asphalt surface full depth of its thickness by milling the pavement with a self-propelled milling machine at the locations shown on the plans. The work shall be done in accordance with the applicable portions of Section 440.

It is the desire of the Kane County Division of Transportation to utilize as many existing material into the proposed project as possible. The grinding shall be used for the "capping" aggregate for the aggregate subgrade improvement. Grinding s may also be used in other locations allowed by the Standard Specifications or approved by the Engineer.

The contractor shall take precautions during the grinding operations to minimize contamination of the grindings with non-granular soil material form the underlying subbase or subgrade.

This item will include hauling and temporary stockpiling the material if it is to be used in a later construction task.

Pavement thicknesses were recorded from roadway borings and cores completed as part of the geotechnical field testing and investigation and are summarized below. Additional information can be found in the Geotechnical Reports.

<u>Core</u>	Overall Pavement Thickness
RB-01 RB-02	6.0 Inches 6.5 Inches
RB-03	7.0 Inches
RB-04 SB-01	7.0 Inches 7.5 Inches
SB-02	8.0 Inches
Average	7.0 inches

Basis of Payment: The surface removal, regardless of actual depth of the existing pavement being removed, will be paid for per Square Yard for SURFACE REMOVAL, VARIABLE DEPTH (SPECIAL), which price shall include removal, hauling, stock piling and all other materials, labor, tools, equipment and incidentals necessary to complete this item of work.

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Hauling and placing the grindings used for "capping" aggregate for the aggregate subgrade improvement will be included in the pay item for Aggregate Subgrade Improvement. If grinding are used in other locations they will not be measured separately for payment but shall be included in the pay item being constructed.

WASHOUT BASIN

<u>Description:</u> This item shall consist of constructing and maintaining a washout basin for concrete trucks and other construction vehicles. The washout basin will be as detailed on the plans.

The contractor shall provide a straw bale washout basin per the requirements shown in the detail for "Temporary Concrete Washout Facility – Straw Bale" in the erosion control plans. The straw bale washout basin is the minimum required by the Kane-DuPage Soil and Water Conservation District (KDSWCD). The contractor may request in writing to the Engineer to utilize alternate methods/designs for the washout basin. Any alternate will need to be approved by KDSWCD.

Any washouts constructed that do not meet the requirements of the plans or applicable IDOT and/or IUM standards will not be allowed.

The Contractor will be required to illustrate the location of the washout basin utilizing the applicable erosion control sheet from the plan set and submit the location to Kane-DuPage Soil and Water Conservation District for approval.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per Lump Sum for WASHOUT BASIN, which prices shall include, plan submittal and coordination with KDSWCD, general cleaning and removal of all construction debris when two-thirds full or as directed by the Engineer, general maintenance or reconstruct as necessary throughout the duration of use, and all material, labor, tools, equipment, disposal of surplus material, and incidentals necessary to complete this item of work. The washout basin will be measured for payment only once for the entire project duration.

If an alternate design for the washout basin has been submitted and approved for use in the project there shall be no additional compensation to the original unit bid price for Washout Basin.

STREAM GAUGE

<u>Description</u>: There is a Kane County Department of Environmental And Building Management crest stage gauge attached to the existing bridge structure. The Contractor will be required to remove and salvage the existing gauge and reinstall the gauge was the proposed culvert and sheet pile wall is completed.

There was coordination during the Phase I Preliminary Engineering with the Kane County Department of Environmental and Building Management and it was determined that the following actions should be taken during construction of this project.

- 1. No advanced notice will be required before removing the crest stage gauge.
- 2. The Contractor shall remove and salvage the crest stage gauge, brackets and other pertinent items required for re-installation or the gauge.
- 3. The contractor shall verify and document the survey gauge elevations prior to removing the gauge.

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- 3. The Contractor will coordinate with the Engineer and send e-mail to the Kane County Department of Environmental and Building Management is required once it is removed.
- 4. The Contractor, through the Engineer, shall e-mail the Kane County Department of Environmental and Building Management to coordinate the final location for re-installation of the gauge.
- 5. Once the location is verified the Contractor shall re-install the gauge to the previous elevations.
- 6. The Contractor, through the Engineer, shall email the Kane County Department of Environmental and Building Management to notify them that re-installation of the gauge is completed.

<u>Construction Methods:</u> The brackets may be attached to the concrete headwall or steel sheet piling wing wall. The locations are shown in the plans.

- Sheet Pile Attachment If the gauge is attached to the steel sheet pile wall the brackets shall be attached by 3/8" dia. stainless steel threaded stud ends welded to the sheet pile.
- Concrete Attachment If the gauge is attached to the concrete headwall the brackets shall be attached by 3/8" dia. stainless steel concrete expansion anchors.

<u>Contact</u>: The contact for the Kane County Department of Environmental and Building Management is:

Kenneth N. Anderson
Director of Environmental Management
630-208-3179
andersonken@co.kane.il,us

<u>Basis of Payment:</u> The work to remove, salvage and re-install the crest stage gauge will be paid for per Each for STREAM GAUGE, which price shall include removal, re-installation, modifications to existing mounting hardware or provide new mounting brackets and hardware, anchor bolts or welding (if applicable), and all other materials, labor, tools, equipment and incidentals necessary to complete this item of work.

EXPLORATION TRENCH, SPECIAL

<u>Description:</u> This work shall be as required in Section 213 of the Standard Specifications and shall also consist of excavating a trench of sufficient width, (minimum 48"), length and depth (as field determined) to expose existing utilities, potential utility conflicts, other utility obstructions, underdrains and/or field tiles shown on the plans or as determined by the Engineer.

The depth and width of trench shall be of adequate width to allow investigation of the item in the trench. The maximum depth shall be based on the depth of the proposed utility depth or to the point of potential utility conflict.

The exploration holes will also be completed at all locations where the proposed sewers, casing pipe, underdrains or culvert pipes cross an existing utility line where meeting clearance requirements are essential and adjustment to the existing utility may be necessary prior to starting construction operations to meet said clearance requirements. Other exploration trenches may be excavated at the locations noted on the plans or required by the Engineer.

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The depth of the inspection hole shall be as necessary to uncover the existing utilities or other obstructions and of adequate width to allow investigation of the investigated item in the hole. In no case does the inspection hole need to be deeper than the proposed invert elevation of the proposed work item being installed plus the clearance requirement.

After a determination of the condition and/or location adequacy and at the direction of the Engineer, in areas of proposed structural embankment or pavement structures, the Contractor shall backfill the trench with materials meeting the requirement of TRENCH BACKFILL in Section 208 of the Standard Specifications. All areas outside the improvements can be backfilled with the originally excavated material. All excess excavated material created by this work shall be disposed of offsite by the contractor.

Basis of Payment. This work will be paid for at the contract unit price per Foot for EXPLORATION TRENCH, SPECIAL regardless of depth for utility exploration and as specified in Section 213 for underdrain exploration, which will be payment in full for all required work as set forth above. Trench backfill will <u>not</u> be measured separately for payment but shall be INCLUDED in the cost of Exploration Trench, Special.

INTERSEEDING, CLASS 4 (SPECIAL)

<u>Description:</u> The work shall consist of seeding the existing turf along the top of channel of Hampshire Creek at the locations shown in the plans.

Construction Methods: The existing turf will need to be prepared in accordance with Article 250.06 (b) except that turf or weed trimming equipment may be used if the area to be mowed is not accessible to mechanical mowing equipment. The method of "mowing " and equipment shall be approved by the Engineer.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price per Acre for INTERSEEDING, CLASS 4 (SPECIAL), which shall include mowing, regardless of equipment used, removal of surplus materials, seeding, and all other materials, labor, tools, equipment, and incidentals necessary to complete this item of work.

CHANGEABLE MESSAGE SIGN, SPECIAL

<u>Description</u>. The project will require that electronic changeable message signs be placed on the east and west side of the project to warn the public of the pending road construction and road closures. The message boards will be placed on Allen Road only and will need to be placed and set out for seven (7) days in advance of the anticipated first day of construction. The changeable message signs will remain in place after the first day of setup for fourteen (14) calendar days (total) to warn of the construction activities and closures. The contractor will coordinate with the Engineer on the exact placement of the message boards and the message that is to be displayed.

Method of Measurement. Message board(s) will be paid for per Calendar Day for each message sign utilized (two are anticipated for this project).

<u>Basis of Payment.</u> The signs shall be removed after the specified duration of time. The contractor will coordinate with the Engineer on the exact placement of the message boards and the message that is to be displayed. The message boards will be paid for as CHANGEABLE MESSAGE SIGN, SPECIAL per Calendar Day for each message sign utilized. There will be <u>no</u> additional compensation for periodically changing the message.

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RECESSED REFLECTIVE PAVEMENT MARKERS

<u>Description:</u> This work shall include grooving, furnishing and installing all recessed pavement markers at the locations and as detailed as shown on the plans.

Materials: The materials are an approved proprietary item and shall be as follows:

A. The reflective pavement marker shall be a 3M 190 Series pavement marker reflector and the reflector holder shall be a Marker One Series R100.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price Each for RECESSED REFLECTIVE PAVEMENT MARKER, which price shall include the grooving, reflector, reflector holder, epoxy, installation, labor, tools, equipment and incidentals required to complete the work as specified.

DIVERSION STRUCTURE

<u>Description</u>: This work shall consist of furnishing all labor, tools, equipment, and materials to install, maintain, operate and remove all necessary diversions and dewatering systems to divert, remove water from the channel or designed to control sediment discharge in dewatering applications where water is being pumped for the construction of the proposed bridge, removal of the existing abutments, wings, pier and footings, stone rip rap channel lining and other work associated with the construction of the proposed bridge structure to ensure that work can be completed in the dry or in manageable conditions as approved by the Engineer.

For the purposes of this item diversion structure will mean a "diversion system" for isolation of the in-stream work area using a diversion system constructed of non-erodible materials such as steel sheets, aqua barriers, rip rap and geotextile liner or other material approved by the Engineer. Earthen cofferdams will not be permitted.

This item will also include constructing a dewatering filtering system consisting of filtration or sediment bags for collecting sediment from pumping operations within the coffered area and sump pits. Construction waters will include, but not be limited to, all waters generated from the removal of the bridge pier, channel grading, riprap placement, proposed drainage systems and aggregate base construction.

Prior to performing any in-stream work associated with the project, the Contractor shall identify the proposed dewatering and/or diversion/isolation method to be used and obtain approval from Kane DuPage Soil and Water Conservation District (KDSWCD) and Engineer prior to starting work. In-stream work shall take place only during low flow conditions unless otherwise allowed by the Kane DuPage Soil and Water Conservation District and Engineer. Concentrated flow shall be isolated from the work area. Dewatering shall comply with all requirements contained in the Storm Water Pollution Prevention Plan (SWPPP) contained in the plans.

The Contractor is ultimately responsible for the choice of the materials, product(s) and equipment; for the subsequent removal of the diversion structure(s) and dewatering systems and their safety and for conformity with local codes, regulations, and these Specifications, as well as "means and methods" for the Site Dewatering and Diversion Work to be performed. The Contractor's "means and methods" are subject to the review of the County and Kane-DuPage Soil and Water Conservation District. All products and "means and methods" selected shall be adequate for the

intended use/application within the construction limits represented on the plans. The Kane-DuPage Soil and Water Conservation District's and Engineer's review does not relieve the Contractor from compliance with the requirements of the Drawings, Standard Specifications, and the requirements of this special provision.

Submittal:

The Contractor shall submit for review to the Engineer for coordination with the Kane-DuPage Soil and Water Conservation District a description of the diversion system, dewatering techniques and equipment to be used, together with detailed drawings showing items such as, but not limited, to the location of the diversion structures by stage, type of pumps, pump size, lengths and sizes of discharge piping and points(s) of discharge including erosion control procedures. The approved site dewatering and diversion plan(s) shall become part of the SWPPP prior to implementation. Changes to the site dewatering and/or diversion plan(s) will need to be approved by the Engineer and the Kane DuPage Soil and Water Conservation District. The Agency review of dewatering techniques and equipment shall in no way be construed as creating any obligation on the part of County for same.

Dewatering and Filter Bag Material:

The material for the filtration bag shall meet the requirements of the material specification in Table 2, below for Class I with a minimum tensile strength of 180 lbs. The filtration bag shall be sized per manufacturer recommendations and based on the size of the pump. The pump shall be sized to be used with the filtration bag.

TABLE 2. REQUIREMENTS FOR NONWOVEN GEOTEXTILES

Property	Test method	Class I	Class II	Class III	Class IV 3/
Tensile strength (lb) 1/	ASTM D 4632 grab test	180 minimum	120 minimum	90 minimum	115 minimum
Elongation at failure (%) 1/	ASTM D 4632	50	50	50	50
Puncture (pounds)	ASTM D 4833	80 minimum	60 minimum	40 minimum	40 minimum
Ultraviolet light (% residual tensile strength)	ASTM D 4355 150-hr exposure	70 minimum	70 minimum	70 minimum	70 minimum
Apparent opening size (AOS)	ASTM D 4751	As specified max. #40 ^{2/}	As specified max.#40 ^{2/}	As specified max. #40 ^{2/}	As specified max. #40 ^{2/}
Permittivity sec-1	ASTM D 4491	0.70 minimum	0.70 minimum	0.70 minimum	0.10 minimum

^{1/} Minimum average roll value (weakest principal direction).

<u>Operation and Maintenance</u>: The frequency of inspections shall depend on the dewatering method, amount of discharge, potential damage, and quality of the receiving bodies of water. The frequency of inspections and specific tasks shall be identified.

^{2/} U.S. standard sieve size.

^{3/} Heat-bonded or resin-bonded geotextile may be used for classes III and IV. They are particularly well suited to class IV. Needle-punched geotextiles are required for all other classes.

1. The filtration bag must be placed on level ground with secondary containment provided to prevent sediment from accumulating on the bare ground and to protect the surrounding area in case the bag bursts or is no longer effective.

- 2. The Contractor shall provide certification or documentation that the bag meets the specification for materials and is suitable for the pump that it will be used with.
- 3. Inspections shall be conducted to ensure proper operation and compliance with any permits or water quality standards.
- 4. Accumulated sediment shall be removed from the flow area and temporary diversions shall be repaired, as required.
- 5. Outlet areas shall be checked and repairs shall be made in a timely manner, as needed.
- 6. Pump outlets shall be inspected for erosion and sumps shall be inspected for accumulated sediment. Sediment shall be removed as required.
- 7. Dewatering bags shall be removed and replaced when half full of sediment or when the pump discharge has reduced to an impractical rate.
- 8. If the receiving area is showing any signs of cloudy water, erosion, or sediment accumulation, discharges shall be stopped immediately once safety and property damage concerns have been addressed.
- 9. Sediment shall be disposed in accordance with all applicable laws and regulations.

The Contractor shall select the pumps he/she desires to use and the rate at which the pumps discharge, but adequate protection at the pump discharge shall be provided by the Contractor and will be subject to review by the Engineer and the Kane-DuPage Soil and Water Conservation District. The Contractor shall ensure that downstream water quality and further erosion will not be impaired.

Water pumped or drained from the work required for this Contract shall be disposed of in a safe and suitable manner without damage to adjacent property, streets or to other work under construction. Water shall not be discharged onto roadways without adequate protection of the surface at the point of discharge. Water shall not be discharged into sanitary sewers. Water containing settleable solids shall not be discharged without treatment to meet the requirements of the USACE 404 Permit and the KDSWCD requirements. Any and all damages caused by dewatering and/or diversion operations will be promptly repaired by the Contractor. Conditions and deficiency deductions as specified in Article 105.03(a) of the Standard Specifications shall apply. The Contractor is responsible for providing any and all labor, materials and equipment for the dewatering and/or diversion of waters in order to meet the scheduled completion of the project.

Removal of Diversion and Dewatering Facilities - The temporary diversion structure(s) and dewatering filtering system shall be removed after it has served its purpose and as directed by the Engineer. The dewatering areas shall be graded, stabilized and permanently restored with appropriate erosion control practices and as shown on the plans. The dewatering sites after removal shall not create any obstruction of the flow of water or any other interference with the operation of or access to the permanent works.

<u>Method of Measurement.</u> The diversion system will be measured only once per each for the duration of the construction as Diversion Structure, regardless of the type and quantity of materials required to construct the diversion system regardless of the number of times the diversion system may need to be relocated for staging. The payment under this item is for the duration of the contract, regardless of conditions encountered.

Basis of Payment. This work required for construction of diversion and dewatering systems necessary to construct the proposed culvert, wingwalls, riprap and related site work as shown in the plans shall be paid for on a per Each basis only once for entire duration of the project as DIVERSION STRUCTURE, which work shall include diversion system(s) (ie: cofferdams, barrier wall, etc), filter fabric, piping, pumping, foundation preparation, framing and supports, dewatering filtering system consisting of filtration or sediment bags, installation, maintenance, removal of systems and all labor, material, and equipment required to perform the work described herein and as specified on the plans.

HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 10"

<u>Description</u>: This work shall consist of constructing hot-mix asphalt driveway pavement on a prepared aggregate base course in accordance with the applicable portions of Section 406 of the Standard Specifications at the locations shown on the plans.

Materials: The materials for this project shall be:

Mix	Design Thickness	Max. Lift Thickness
Hot Mix Asphalt Binder Course, IL-19.0, N50	8"	4"
Hot Mix Asphalt Surface Course, Mix "D", N50	2"	2"
Bituminous Materials – Prime and Tack Coat		

Basis of Payment: The hot-mix asphalt driveway pavement will be paid for at the contract unit price per Square Yard for HOT-MI ASPHALT DRIVEWAY PAVEMENT, 10" which shall include all labor, equipment and material necessary for the completion of the work.

Subbase granular material for base course and bituminous materials will be measured separately for payment as SUBBASE GRANULAR MATERIAL, TYPE B 4" and BITUMINOUS MATERIALS (PRIME COAT), respectively.

PAVEMENT BREAKING

<u>Description</u>: This work shall consist of breaking the existing pavement according to Article 205.03(b)(1) of the Standard Specifications, except that all pavement that is not removed, but has greater than or equal to 12" fall from the bottom of the subbase to the existing pavement shall be broken.

<u>Basis of Payment:</u> All costs incurred in complying with the provisions shall be considered included in the contract unit price per Square Yard for PAVEMENT BREAKING.

STABILIZED CONSTRUCTION ENTRANCE

<u>Description:</u> The work shall consist of the construction of aggregate fill and filter fabric for the construction of the stabilized construction entrance. This work may <u>not</u> be required but has been included in the contract in the event it is deemed necessary by a change in Contractor operations, by the Kane-DuPage Soil & Water Conservation District, or as directed by the Engineer.

<u>Materials:</u> Materials for aggregate fill and bedding shall meet the requirements of Section 1004 of the Standard Specifications. The aggregate materials shall be gradations for CA-1, CA-2, CA-3, or CA-4.

The filter fabric shall be placed under the aggregate fill and shall conform to the requirements of Section 1080.03 of the Standard Specifications.

<u>Foundation Preparation:</u> Foundations for aggregate fill shall be stripped to remove vegetation and other unsuitable materials or shall be excavated as specified.

Except as otherwise specified, earth foundation surfaces shall be graded to remove surface irregularities, and test pits or other cavities shall be filled with compacted earth fill of approximately the same kind and density as the adjacent foundation material.

Placement and Compaction:

The aggregate fill shall be dumped and spread into position over the filter fabric in approximately horizontal layers not to exceed twelve (12) inches in thickness. It shall be placed in a manner to produce a reasonably homogeneous stable fill that contains no segregated pockets of large or small fragments or large unfilled spaces caused by bridging of the larger rock fragments.

Aggregate fill shall be compacted as described below:

Each layer of fill shall be compacted by a minimum of four (4) passes, over the entire surface, with a steel-drum vibrating roller having a minimum weight of five (5) tons and exerting a vertical vibrating force of not less than 20,000 pounds at a frequency not less than 1200 times per minute or,

Each layer of fill shall be compacted by a minimum of four (4) passes over the entire surface by a track of a crawler-type tractor weighing a minimum of twenty (20) tons.

Compaction by means of drop weights operating from a crane, hoist or similar equipment will not be permitted.

<u>Basis of Payment:</u> The work to construct the stabilized construction entrance will be paid for at the contract unit price Square Yard for STABILIZED CONSTRUCTION ENTRANCE, which price shall include excavation, bedding, aggregate fill, filter fabric, placing and compacting, labor, tools, equipment and incidentals required to complete the work as specified. There shall be no adjustment in contract cost if this work is <u>not</u> required.

TEMPORARY INFORMATION SIGNING

<u>Description</u>: Kane County requires that temporary information signing will be erected on the east and west side of the bridge to inform the public of the construction duration. The contractor will coordinate with the Engineer on the exact placement of the sign. The sign shall be in place for the entire duration of the contract or as directed by the Engineer. The temporary information sign shall be 68"x45" and have 6" black letters on an orange background and mounted a minimum of 7' above the existing ground line, or as detailed on the Detour Plan.

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

Materials:

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

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

- Note 1. The Contractor may use 5/8 inch instead of 3/4 inch thick plywood.
- Note 2. Type A sheeting can be used on the plywood base.
- Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.
- Note 4. The overlay panels shall be 0.08 inch thick.

General Construction Requirements:

Message and Location: The contractor will coordinate with the Engineer on the exact placement of the temporary information signing and the message that is to be displayed on the sign.

<u>Installation:</u> the Contractor prior to fabrication shall verify the sign sizes and legend sizes.

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

The Contractor shall place signs one (1) Week in advance of the start of any construction on each side of the project limits that will state construction starting here, the start date of construction and the number of months the construction is anticipated to last.

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

<u>Basis of Payment:</u> The signing, which includes post and mounting, will be paid as TEMPORARY INFORMATION SIGNING, per Square Feet for each sign erected, which shall be full compensation for all labor, equipment and materials required for performing the work as herein specified. All hardware, posts, or skids, supports, bases for ground-mounted signs, connections, which are required for mounting these signs, will be included.

SURVEY MONUMENT

<u>Description</u>: There is a Kane County Division of Transportation survey monument (marker) that will be removed as part of the construction operations. A proposed permanent survey monument (marker) shall be constructed as specified and as detailed in the plans. The marker shall be placed in undisturbed ground at or near sta. 101+45.00, 52' lt.

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Monument Construction: The principal component of this monument, referred to as NGS 3-D Monument, is a 9/16-inch stainless steel rod driven into the ground, utilizing a gasoline powered reciprocating hammer, until refusal or a reduced driving rate has been achieved. The rounded top of the rod is the survey datum point. The upper 3 feet of the rod is encased in a 1-inch greased filled plastic extruded fin sleeve that is held horizontally stable by back-filled, washed sand. The effects of up and down ground movement during freeze/thaw or wet/dry conditions are removed from the anchored rod by the grease filled sleeve promoting vertical stability. A 6-inch Polyvinyl Chloride (PVC) pipe with attached, standard, hinged access cover protects and identifies the top of the monument.

Complete procedures for setting the monument may be found I the "Bench Mark Reset Procedures" documented by Curtis L. Smith of the National Geodetic Survey, published in September 2010. (http://www.ngs.noaa.gov/PUBS LIB/Benchmark 4 1 2011.pdf)

The monument access cover will be Model BMAC6 manufactured by Bertsen International, Inc., Madison Wisconsin.

The survey monument will be established under the supervision of a registered Professional Land Surveyor in the State of Illinois.

<u>Survey Method and Accuracy</u>: The survey monument will be established with a "First Order" horizontal control accuracy and a "First Order" accuracy for the vertical control. The survey method to achieve the specified level of accuracy shall be any methods currently recognized and acceptable to the National Geodetic Survey for the specified level of accuracy unless otherwise approved by the Engineer.

The horizontal and vertical datum shall be field determined after the permanent survey monument is set and the concrete cured.

<u>Documentation</u>: All survey notes will be provided to the Kane County Division of Transportation after the work is completed.

Existing Monument: The existing monument shall be completely obliterated.

<u>Basis of Payment:</u> The work to set the survey monument as detailed in the plans and specified above will be paid at the contract unit price per Each for SURVEY MONUMENT, which price shall include access cover, PVC piping, control rod and installation, excavation, sand, concrete, survey equipment, land surveying services and documentation, removal of the existing monument, labor, tools, equipment and incidentals required to complete the work as specified.

AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012 Revised: March 3, 2015

Add the following Section to the Standard Specifications:

"SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

303.01 Description. This work shall consist of constructing an aggregate subgrade improvement.

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	1031

- Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradation CS 01 but shall not exceed 40 percent by weight of the total product. The top size of the Coarse RAP shall be less than 4 in. (100 mm) and well graded.
- Note 2. RAP having 100 percent passing the 1 1/2 in (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradation CS 01 is used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders. The final product shall not contain more than 40 percent by weight of RAP.
- Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- 303.03 Equipment. The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer. The calibration for the mechanical feeders shall have an accuracy of \pm 2.0 percent of the actual quantity of material delivered.
- **303.04 Soil Preparation.** The stability of the soil shall be according to the Department's Subgrade Stability Manual for the aggregate thickness specified.
- **303.05 Placing Aggregate.** The maximum nominal lift thickness of aggregate gradation CS 01 shall be 24 in. (600 mm).
- **303.06 Capping Aggregate.** The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not be permitted for use in capping. Capping aggregate will not be required when the aggregate subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.

303.07 Compaction. All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

- **303.08 Finishing and Maintenance of Aggregate Subgrade Improvement.** The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.
- **303.09 Method of Measurement.** This work will be measured for payment according to Article 311.08.
- **303.10** Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.

Add the following to Section 1004 of the Standard Specifications:

"1004.06 Coarse Aggregate for Aggregate Subgrade Improvement. The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. The top 12 inches of the aggregate subgrade improvement shall be 3 inches of capping material and 9 inches of crushed gravel, crushed stone or crushed concrete. In applications where greater than 36 inches of subgrade material is required, rounded gravel, meeting the CS01 gradation, may be used beginning at a depth of 12 inches below the bottom of pavement.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials. Non-mechanically blended RAP may be allowed up to a maximum of 5.0 percent.
- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01.

	COA	COARSE AGGREGATE SUBGRADE GRADATIONS			
Grad No.	Sieve Size and Percent Passing				
Clau No.	8"	6"	4"	2"	#4
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Grad No.	- AMANA	Sieve S	ize and Percer	nt Passing	
Giad No.	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20

(2) The 3 in. (75 mm) capping aggregate shall be gradation CA 6 or CA 10.

COARSE AGGREGATE FOR BACKFILL, TRENCH BACKFILL AND BEDDING (D-1)

Effective: November 1, 2011 Revised: November 1, 2013

This work shall be according to Section 1004.05 of the Standard Specifications except for the following:

Reclaimed Asphalt Pavement (RAP) maybe blended with gravel, crushed gravel, crushed stone crushed concrete, crushed slag, chats, crushed sand stone or wet bottom boiler slag. The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". The RAP shall be uniformly graded and shall pass the 1.0 in. (25 mm) screen. When RAP is blended with any of the coarse aggregate listed above, the blending shall be done mechanically with calibrated feeders. The feeders shall have an accuracy of \pm 2.0 percent of the actual quantity of material delivered. The final blended product shall not contain more than 40 percent by weight RAP.

The coarse aggregate listed above shall meet CA 6 and CA 10 gradations prior to being blended with the processed and uniformly graded RAP. Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

EMBANKMENT I

Effective: March 1, 2011 Revised: November 1, 2013

<u>Description</u>. This work shall be according to Section 205 of the Standard Specifications except for the following.

<u>Material</u>. All material shall be approved by the District Geotechnical Engineer. The proposed material must meet the following requirements.

- a) The laboratory Standard Dry Density shall be a minimum of 90 lb/cu ft (1450 kg/cu m) when determined according to AASHTO T 99 (Method C).
- b) The organic content shall be less than ten percent determined according to AASHTO T 194 (Wet Combustion).
- c) Soils which demonstrate the following properties shall be restricted to the interior of the embankment and shall be covered on both the sides and top of the embankment by a minimum of 3 ft (900 mm) of soil not considered detrimental in terms of erosion potential or excess volume change.
 - 1) A grain size distribution with less than 35 percent passing the number 75 um (#200) sieve.
 - 2) A plasticity index (PI) of less than 12.
 - 3) A liquid limit (LL) in excess of 50.
- d) Reclaimed asphalt shall not be used within the ground water table or as a fill if ground water is present.
- e) The RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications". Gradation deleterious count shall not exceed 10% of total RAP and 5% of other by total weight.

CONSTRUCTION REQUIREMENTS

<u>Samples</u>. Embankment material shall be sampled, tested, and approved before use. The contractor shall identify embankment sources, and provide equipment as the Engineer requires, for the collection of samples from those sources. Samples will be furnished to the Geotechnical Engineer a minimum of three weeks prior to use in order that laboratory tests for approval and compaction can be performed. Embankment material placement cannot begin until tests are completed and approval given.

<u>Placing Material</u>. In addition to Article 202.03, broken concrete, reclaimed asphalt with no expansive aggregate, or uncontaminated dirt and sand generated from construction or demolition activities shall be placed in 6 inches (150 mm) lifts and disked with the underlying lift until a uniform homogenous material is formed. This process also applies to the overlaying lifts. The disk must have a minimum blade diameter of 24 inches (600 mm).

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When embankments are to be constructed on hillsides or existing slopes that are steeper than 3H:1V, steps shall be keyed into the existing slope by stepping and benching as shown in the plans or as directed by the engineer.

<u>Compaction</u>. Soils classification for moisture content control will be determined by the Soils Inspector using visual field examination techniques and the IDH Textural Classification Chart.

When tested for density in place each lift shall have a maximum moisture content as follows.

- a) A maximum of 110 percent of the optimum moisture for all forms of clay soils.
- b) A maximum of 105 percent of the optimum moisture for all forms of clay loam soils.

<u>Stability.</u> The requirement for embankment stability in Article 205.04 will be measured with a Dynamic Cone Penetrometer (DCP) according to the test method in the IDOT Geotechnical Manual. The penetration rate must be equal or less than 1.5 inches (38 mm) per blow.

<u>Basis of Payment.</u> This work will not be paid separately but will be considered as included in the various items of excavation.

FRICTION AGGREGATE (D-1)

Effective: January 1, 2011 Revised: July 24, 2015

Revise Article 1004.01(a)(4) of the Standard Specifications to read:

- "(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.
 - a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).
 - b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase."

Revise Article 1004.03(a) of the Standard Specifications to read:

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Combination ^{5/} : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete

Use	Mixture	Aggregates Allowed	
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Combination ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}	
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Co Crushed Gravel Carbonate Crushed Sto Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	one ^{2/}
HMA High ESAL	D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface	Allowed Alone or in Co Crushed Gravel Carbonate Crushed Limestone) ^{2/} Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/} Other Combinations Al Up to 25% Limestone 75% Limestone	Stone (other than
HMA High ESAL	E Surface IL-9.5 SMA Ndesign 80 Surface	Allowed Alone or in Co Crystalline Crushed St Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	ombination ^{5/} :

Use	Mixture	Aggregates Allowed		
		Other Combinations Allowed:		
1		Up to	With	
1		50% Dolomite ^{2/}	Any Mixture E aggregate	
		75% Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	
		75% Crushed Gravel ^{2/} or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag	
HMA	F Surface	Allowed Alone or in Combination 5/:		
High ESAL	IL-9.5 SMA Ndesign 80 Surface	Crystalline Crushed S Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.		
		Other Combinations A	<u>Allowed</u> :	
		Up to	With	
		50% Crushed Gravel ^{2/} , Crushed Concrete ^{3/} , or Dolomite ^{2/}	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone	

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone and/or crushed gravel shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.

When combinations of aggregates are used, the blend percent measurements shall be by volume."

GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)

Effective: June 26, 2006 Revised: January 1, 2013

Add the following to the end of article 1032.05 of the Standard Specifications:

(c) Ground Tire Rubber (GTR) Modified Asphalt Binder. A quantity of 10.0 to 14.0 percent GTR (Note 1) shall be blended by dry unit weight with a PG 64-28 to make a GTR 70-28 or a PG 58-28 to make a GTR 64-28. The base PG 64-28 and PG 58-28 asphalt binders shall meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

Test	Asphalt Grade GTR 70-28	Asphalt Grade GTR 64-28
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois modified AASHTO T 27, a 50 g sample of the GTR shall conform to the following gradation requirements:

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 μm)	95 ± 5
No. 50 (300 μm)	> 20

Add the following to the end of Note 1. of article 1030.03 of the Standard Specifications:

"A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt

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binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of \pm 0.40 percent."

Revise 1030.02(c) of the Standard Specifications to read:

"(c) RAP Materials (Note 3)1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 3. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

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HEAT OF HYDRATION CONTROL FOR CONCRETE STRUCTURES (D-1)

Effective: November 1, 2013

Article 1020.15 shall not apply.

HMA MIXTURE DESIGN REQUIREMENTS (D-1)

Effective: January 1, 2013 Revised: November 1, 2014

1) Design Composition and Volumetric Requirements

Revise the last sentence of the first paragraph of Article 312.05 of the Standard Specifications to read:

"The minimum compacted thickness of each lift shall be according to Article 406.06(d)."

Delete the minimum compacted lift thickness table in Article 312.05 of the Standard Specifications.

Revise the second paragraph of Article 355.02 of the Standard Specifications to read:

"The mixture composition used shall be IL-19.0."

Revise Article 355.05(a) of the Standard Specifications to read:

"(a) The top lift thickness shall be 2 1/4 in. (60 mm) for mixture composition IL-19.0."

Revise the Leveling Binder table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder		
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition	
1 1/4 (32)	IL-4.75, IL-9.5, or IL-9.5L	
> 1 1/4 to 2 (32 to 50)	IL-9.5 or IL-9.5L	

The density requirements of Article 406.07(c) shall apply for leveling binder, machine method, when the nominal compacted thickness is: 3/4 in. (19 mm) or greater for IL-4.75 mixtures; and 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures."

Revise the table in Article 406.06(d) of the Standard Specifications to read:

"MINIMUM COMPACTED LIFT THICKNESS					
Mixture Composition Thickness, in. (mm)					
1L-4.75 3/4 (19)					
SMA-9.5, IL-9.5, IL-9.5L	1 1/2 (38)				
SMA-12.5	2 (50)				
IL-19.0, IL-19.0L	2 1/4 (57)"				

Revise the ninth paragraph of Article 406.14 of the Standard Specifications to read: "Test strip mixture will be evaluated at the contract unit price according to the following."

Revise Article 406.14(a) of the Standard Specifications to read:

"(a) If the HMA placed during the initial test strip is determined to be acceptable the mixture will be paid for at the contract unit price."

Revise Article 406.14(b) of the Standard Specifications to read:

"(b) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was not produced within 2.0 to 6.0 percent air voids or within the individual control limits of the JMF according to the Department's test results, the mixture will not be paid for and shall be removed at the Contractor's expense. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Revise Article 406.14(c) of the Standard Specifications to read:

"(c) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF according to the Department's test results, the mixture shall be removed. Removal will be paid according to Article 109.04. This initial mixture will be paid for at the contract unit price. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Delete Article 406.14(d) of the Standard Specifications.

Delete Article 406.14(e) of the Standard Specifications.

Delete the last sentence of Article 407.06(c) of the Standard Specifications.

Revise Note 2. of Article 442.02 of the Standard Specifications to read:

"Note 2. The mixture composition of the HMA used shall be IL-19.0 binder, designed with the same Ndesign as that specified for the mainline pavement."

Delete the second paragraph of Article 482.02 of the Standard Specifications.

Revise the first sentence of the sixth paragraph of Article 482.05 of the Standard Specifications to read:

"When the mainline HMA binder and surface course mixture option is used on resurfacing projects, shoulder resurfacing widths of 6 ft (1.8 m) or less may be placed simultaneously with the adjacent traffic lane for both the binder and surface courses."

Revise the second sentence of the fourth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 5 in. (125 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise the second sentence of the fifth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 8 in. (200 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

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. The fine aggregate gradation for SMA shall be FA/FM 20.

For mixture IL-4.75 and surface mixtures with an Ndesign = 90, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag meeting the FA 20 gradation.

For mixture IL-19.0, Ndesign = 90 the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 or FA 22 gradation. For mixture IL-19.0, Ndesign = 50 or 70 the fine aggregate fraction shall consist of at least 50 percent manufactured sand meeting FA 20 or FA 22 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof.

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

Delete the last sentence of the first paragraph of Article 1004.03(b) of the Standard Specifications.

Revise the table in Article 1004.03(c) of the Standard Specifications to read:

"Use	Size/Application	Gradation No.
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & 3	Cover	CA 14
HMA High ESAL	IL-19.0	CA 11 ^{1/}
	IL-9.5	CA 16, CA 13 ^{3/}
HMA Low ESAL	IL-19.0L	CA 11 ^{1/}
	IL-9.5L	CA 16
	Stabilized Subbase	
	or Shoulders	
SMA ^{2/}	1/2 in. (12.5mm)	CA13 ^{3/} , CA14 or CA16
	Binder & Surface	
	IL 9.5	CA16, CA 13 ^{3/}
	Surface	

- 1/ CA 16 or CA 13 may be blended with the gradations listed.
- 2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.
- 3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

Revise Article 1004.03(e) of the Supplemental Specifications to read:

"(e) Absorption. For SMA the coarse aggregate shall also have water absorption ≤ 2.0 percent."

Revise the nomenclature table in Article 1030.01 of the Standard Specifications to read:

"High ESAL	IL-19.0 binder;
	IL-9.5 surface; IL-4.75; SMA-12.5,
	SMA-9.5
Low ESAL	IL-19.0L binder; IL-9.5L surface;
	Stabilized Subbase (HMA) ^{1/} ;
	HMA Shoulders ^{2/}

- 1/ Uses 19.0L binder mix.
- 2/ Uses 19.0L for lower lifts and 9.5L for surface lift,"

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

"1030.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.03
(b) Fine Aggregate	1003.03
(c) RAP Material	
(d) Mineral Filler	1011
(e) Hydrated Lime	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

- Note 1. Slaked quicklime shall be according to ASTM C 5.
- Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.
- Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

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Note 4. Warm mix additives or foaming processes shall be selected from the current Bureau of Materials and Physical Research Approved List, "Warm Mix Asphalt Technologies"."

Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

"(1) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

High ESAL, MIXTURE COMPOSITION (% PASSING) 1/										
Sieve Size	IL-19.	0 mm	SM IL-12.		SM IL-9.5	A ^{4/} 5 mm	IL-9.5	5 mm	IL-4.7	5 mm
	min	max	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 ^{5/}	16	32 ^{5/}	34 ^{6/}	52 ^{2/}	70	90
#16 (1.18 mm)	15	30		·			10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 µm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 3/	7.5	9.53/	4	6	7	g 3/
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ The maximum percent passing the #635 (20 μm) sieve shall be 3 percent.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.

6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

Delete Article 1030.04(a)(3) of the Standard Specifications.

Delete Article 1030.04(a)(4) of the Standard Specifications.

Revise Article 1030.04(b)(1) of the Standard Specifications to read:

"(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent and for IL-4.75 it shall be 3.5 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

	VOLUMETRIC REQUIREMENTS High ESAL						
	Voids ir	n the Mineral Ag	gregate	Voids Filled			
		(VMA),		with Asphalt			
		% minimum		Binder			
Ndesign			IL-4.75 ^{1/}	(VFA),			
	IL-19.0	IL-9.5		%			
50	0 18.5 65 – 78 2/						
70	13.5	65 - 75					
90	13.0	15.0		05-75			

- 1/ Maximum Draindown for IL-4.75 shall be 0.3 percent
- 2/ VFA for IL-4.75 shall be 72-85 percent"

Revise the table in Article 1030.04(b)(2) of the Standard Specifications to read:

	"VOLUMETRIC REQUIREMENTS Low ESAL						
Mixture Composition	Design Compactive Effort	Design Air Voids Target %	VMA (Voids in the Mineral Aggregate), % min.	VFA (Voids Filled with Asphalt Binder), %			
IL-9.5L	N _{DES} =30	4.0	15.0	65-78			
IL-19.0L	N _{DES} =30	4.0	13.5	N/A"			

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Replace Article 1030.04(b)(3) of the Standard Specifications with the following:

"(3) SMA Mixtures.

	Volumetric Requirements SMA ^{1/}							
Ndesign	Ndesign Design Air Voids Voids in the Voids Filled Target % Mineral Aggregate (VMA), % min. (VFA), %							
80 ^{4/}	17.02/							

- 1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.
- 2/ Applies when specific gravity of coarse aggregate is ≥ 2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted. For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

Delete Article 1030.04(b)(4) of the Standard Specifications.

Delete Article 1030.04(b)(5) from the Supplemental Specifications.

Delete last sentence of the second paragraph of Article 1102.01(a) (13) a.

Add to second paragraph in Article 1102.01 (a) (13) a.:

"As an option, collected bag-house dust may be used in lieu of manufactured mineral filler, provided; 1) there is enough available for the production of the SMA mix for the entire project and 2) a mix design was prepared with collected bag-house dust."

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

	Frequency of Tests	Test Method
"Parameter	High ESAL Mixture Low ESAL Mixture	See Manual of Test Procedures for Materials
% passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 µm) No. 200 (75 µm)	1 washed ignition oven test on the mix per half day of production Note 3.	Illinois Procedure
Asphalt Binder Content by Ignition Oven	1 per half day of production	Illinois-Modified AASHTO T 308
Note 1.		
VMA Note 2.	Day's production 1200 tons:	Illinois-Modified AASHTO R 35
	1 per half day of production	
	Day's production < 1200 tons:	
	1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	
Air Voids Bulk Specific Gravity	Day's production 1200 tons: 1 per half day of	Illinois-Modified AASHTO T 312
of Gyratory Sample Note 4.	production Day's production	<u> </u>
	< 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	
Maximum Specific Gravity of Mixture	Day's production 1200 tons:	Illinois-Modified AASHTO T 209
	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)	

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Note 1. 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 2. 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 3. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident.
- Note 4. The WMA compaction temperature for mixture volumetric testing shall be 270 ± 5 °F (132 ± 3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270 ± 5 °F (132 ± 3 °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature, it shall be reheated to standard HMA compaction temperatures."

Revise the table in Article 1030.05(d)(2)b. of the Standard Specifications to read:

"Parameter	High ESAL Mixture Low ESAL Mixture
Ratio Dust/Asphalt Binder	0.6 to 1.2
Moisture	0.3 %"

Revise the Article 1030.05(d)(4) of the Supplemental Specifications to read:

"(4) Control Limits. Target values shall be determined by applying adjustment factors to the AJMF where applicable. The target values shall be plotted on the control charts within the following control limits.

"CONTROL LIMITS							
High ESAL			SMA		IL-4.75		
Parameter	Individual Test	Moving Avg. of 4	Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4	

% Passing: 1/						
1/2 in. (12.5 mm)	±6%	± 4 %	±6%	±4%	**	
3/8 in. (9.5mm)			±4%	±3%		
No. 4 (4.75 mm)	±5%	±4%	±5%	±4%		
No. 8 (2.36 mm)	±5%	±3%	±4%	±2%		
No. 16 (1.18 mm)			±4%	± 2 %	±4%	±3%
No. 30 (600 µm)	±4%	± 2.5 %	±4%	± 2.5 %		
Total Dust Content No. 200 (75 μm)	± 1.5 %	± 1.0 %			± 1.5 %	± 1.0 %
Asphalt Binder	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Content						
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
VMA	-0.7 % ^{2/}	-0.5 % ^{2/}	-0.7 % ^{2/}	-0.5 % ^{2/}	-0.7 % ^{2/}	-0.5 % ^{2/}

- 1/ Based on washed ignition oven
- 2/ Allowable limit below minimum design VMA requirement

DENSITY CONTROL LIMITS				
Mixture Composition	Parameter	Individual Test		
IL-4.75	Ndesign = 50	93.0 - 97.4 % 1/		
IL-9.5	Ndesign = 90	92.0 - 96.0 %		
IL-9.5,IL-9.5L	Ndesign < 90	92.5 - 97.4 %		
IL-19.0	Ndesign = 90	93.0 - 96.0 %		
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} - 97.4 %		
SMA	Ndesign = 80	93.5 - 97.4 %		

- 1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.
- 2/ 92.0 % when placed as first lift on an unimproved subgrade."

Revise the table in Article 1030.05(d)(5) of the Supplemental Specifications to read:

"CONTROL CHART	High ESAL,	
REQUIREMENTS	Low ESAL, SMA	
	& IL-4.75	
	% Passing Sieves:	
	1/2 in. (12.5 mm) ^{2/}	
Gradation 1/3/	No. 4 (4.75 mm)	
	No. 8 (2.36 mm)	
	No. 30 (600 μm)	
Total Dust Content 1/	No. 200 (75 μm)	
	Asphalt Binder Content	
	Bulk Specific Gravity	
	Maximum Specific	
	Gravity of Mixture	
	Voids	

Density
VMA

- 1/ Based on washed ignition oven.
- 2/ Does not apply to IL-4.75.
- 3/ SMA also requires the 3/8 in. (9.5 mm) sieve."

Delete Article 1030.05(d)(6)a.1.(b.) of the Standard Specifications.

Delete Article 1030.06(b) of the Standard Specifications.

Delete Article 1102.01(e) of the Standard Specifications.

2) Design Verification and Production

<u>Description</u>. The following states the requirements for Hamburg Wheel and Tensile Strength testing for High ESAL, IL-4.75, and Stone Matrix Asphalt (SMA) hot-mix asphalt (HMA) mixes during mix design verification and production.

Mix Design Testing. Add the following below the referenced AASHTO standards in Article 1030.04 of the Standard Specifications:

AASHTO T 324 Hamburg Wheel Test

AASHTO T 283 Tensile Strength Test

Add the following to Article 1030.04 of the Standard Specifications:

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (IL mod AASHTO T-324) and the Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make the necessary changes to the mix and resubmit compacted specimens to the Department for verification. If the mix fails again, the mix design will be rejected.

All new and renewal mix designs will be required to be tested, prior to submittal for Department verification and shall meet the following requirements:

(1)Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements 1/

Asphalt Binder Grade	# Repetitions	Max Rut Depth (mm)
PG 70 -XX (or higher)	20,000	12.5
PG 64 -XX (or lower)	10,000	12.5

1/ When produced at temperatures of 275 ± 5 °F (135 ± 3 °C) or less, loose Warm Mix Asphalt shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.

For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

(2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

Production Testing. Revise Article 1030.06(a) of the Standard Specifications to read:

"(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture with a quantity of 3000 tons (2750 metric tons) or more according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures".

Before start-up, target values shall be determined by applying gradation correction factors to the JMF when applicable. These correction factors shall be determined from previous experience. The target values, when approved by the Engineer, shall be used to control HMA production. Plant settings and control charts shall be set according to target values.

Before constructing the test strip, target values shall be determined by applying gradation correction factors to the JMF when applicable. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows.

Parameter	Adjustment
1/2 in. (12.5 mm)	± 5.0 %
No. 4 (4.75 mm)	± 4.0 %
No. 8 (2.36 mm)	± 3.0 %
No. 30 (600 µm)	*
No. 200 (75 µm)	*
Asphalt Binder	± 0.3 %
Content	

^{*} In no case shall the target for the amount passing be greater than the JMF.

Any adjustments outside the above limitations will require a new mix design.

Mixture sampled to represent the test strip shall include additional material sufficient for the Department to conduct Hamburg Wheel testing according to Illinois Modified AASHTO T324 (approximately 60 lb (27 kg) total).

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria is being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

The Department may conduct additional Hamburg Wheel tests on production material as determined by the Engineer."

Revise the title of Article 1030.06(b) of the Standard Specifications to read:

"(b) Low ESAL Mixtures."

Add the following to Article 1030.06 of the Standard Specifications:

"(c) Hamburg Wheel Test. All HMA mixtures shall be sampled within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract.

The Department may conduct additional Hamburg Wheel Tests on production material as determined by the Engineer. If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria are being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

Method of Measurement:

Add the following after the fourth paragraph of Article 406.13 (b):

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's G_{mb}."

Basis of Payment.

Replace the seventh paragraph of Article 406.14 of the Standard Specifications with the following:

"For all mixes designed and verified under the Hamburg Wheel criteria, the cost of furnishing and introducing anti-stripping additives in the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the anti-stripping additive."

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MAINTENANCE OF ROADWAYS

Effective: September 30, 1985 Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

C.H. 45 Job. No. C-91-085-12

Sec. 11-00132-01-BR

PUBLIC CONVENIENCE AND SAFETY (DIST 1)

Effective: May 1, 2012 Revised: July 15, 2012

Add the following to the end of the fourth paragraph of Article 107.09:

"If the holiday is on a Saturday or Sunday, and is legally observed on a Friday or Monday, the length of Holiday Period for Monday or Friday shall apply."

Add the following sentence after the Holiday Period table in the fourth paragraph of Article 107.09:

"The Length of Holiday Period for Thanksgiving shall be from 5:00 AM the Wednesday prior to 11:59 PM the Sunday After"

Delete the fifth paragraph of Article 107.09 of the Standard Specifications:

"On weekends, excluding holidays, roadways with Average Daily Traffic of 25,000 or greater, all lanes shall be open to traffic from 3:00 P.M. Friday to midnight Sunday except where structure construction or major rehabilitation makes it impractical."

C.H. 45 Job. No. C-91-085-12 Sec. 11-00132-01-BR

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1)

Effective: November 1, 2012

Revise: July 24, 2015

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

1031.01 Description. Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve. RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
 - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
 - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

1031.02 Stockpiles. RAP and RAS stockpiles shall be according to the following.

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc.).
 - (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in.

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(12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.

- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 inch single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of type 1 RAS with type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type and lot number shall be maintained by project contract number and kept for a minimum of three years.

1031.03 Testing. FRAP and RAS testing shall be according to the following.

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(a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.

- (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
- (2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
- (3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

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

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
 - (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.
 - (2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

The Contractor shall obtain and make available all test results from start of the initial stockpile sampled and tested at the shingle processing facility in accordance with the facility's QC Plan.

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

1031.04 Evaluation of Tests. Evaluation of tests results shall be according to the following.

(a) Evaluation of FRAP Test Results. All test results shall be compiled to include asphalt binder content, gradation and, when applicable (for slag), G_{mm}. A five test average of results from the original pile will be used in the mix designs. Individual extraction test results run thereafter, shall be compared to the average used for the mix design, and will be accepted if within the tolerances listed below.

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	± 0.3 %
G _{mm}	± 0.03 ^{1/}

1/ For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, "Determination of Reclaimed Asphalt Pavement Aggregate Bulk Specific Gravity".

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

The Contractor shall maintain a representative moving average of five tests to be used for Hot-Mix Asphalt production.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)" or Illinois Modified AASHTO T-164-11, Test Method A.

(b) Evaluation of RAS Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. A five test average of results from the original pile will be used in the mix designs. Individual test results run thereafter, when compared to the average used for the mix design, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	±5%
No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	±4%

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No. 200 (75 μm)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the RAS shall not be used in Hot-Mix Asphalt unless the RAS representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

(c) Quality Assurance by the Engineer. The Engineer may witness the sampling and splitting conduct assurance tests on split samples taken by the Contractor for quality control testing a minimum of once a month.

The overall testing frequency will be performed over the entire range of Contractor samples for asphalt binder content and gradation. The Engineer may select any or all split samples for assurance testing. The test results will be made available to the Contractor as soon as they become available.

The Engineer will notify the Contractor of observed deficiencies.

Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits.

Test Parameter	Acceptable Limits of Precision	
% Passing:1/	FRAP	RAS
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	3.0%
No. 200	2.2%	2.5%
Asphalt Binder Content	0.3%	1.0%
G _{mm}	0.030	

1/ Based on washed extraction.

In the event comparisons are outside the above acceptable limits of precision, the Engineer will immediately investigate.

(d) Acceptance by the Engineer. Acceptable of the material will be based on the validation of the Contractor's quality control by the assurance process.

1031.05 Quality Designation of Aggregate in RAP and FRAP.

(a) RAP. The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows. Allen Road over Hampshire Creek Kane County Contract No. 61B90

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- (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
- (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
- (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
- (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

1031.06 Use of FRAP and/or RAS in HMA. The use of FRAP and/or RAS shall be a Contractor's option when constructing HMA in all contracts.

- (a) FRAP. The use of FRAP in HMA shall be as follows.
 - (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
 - (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.
 - (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
 - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and

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Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.

- (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.

When FRAP is used alone or FRAP is used in conjunction with RAS, the percent of virgin asphalt binder replacement (ABR) shall not exceed the amounts indicated in the table below for a given N Design.

HMA Mixtures 1/2/4/	Maximum % ABR		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified ^{3/}
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
4.75 mm N-50			40
SMA N-80			30

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the percent asphalt binder replacement shall not exceed 50% of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 percent for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 percent, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 percent or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 percent.

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1031.07 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

- (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

1031.08 HMA Production. HMA production utilizing FRAP and/or RAS shall be as follows.

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

If during mix production, corrective actions fail to maintain FRAP, RAS or QC/QA test results within control tolerances or the requirements listed herein the Contractor shall cease production of the mixture containing FRAP or RAS and conduct an investigation that may require a new mix design.

- (a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.
- (b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.
 - (1) Dryer Drum Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
 - e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
- Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
- i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
- j. Accumulated mixture tonnage.
- k. Dust Removed (accumulated to the nearest 0.1 ton)
- (2) Batch Plants.
 - a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - f. RAS and FRAP weight to the nearest pound (kilogram).
 - g. Virgin asphalt binder weight to the nearest pound (kilogram).
 - h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used to construct aggregate surface course and aggregate shoulders shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications"
- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 in accordance with Art.1004.01 (c), except the requirements for the minus No. 200 (75µm)

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sieve will not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

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SLIPFORM PAVING (D-1)

Effective: November 1, 2014

Revise Article 1020.04 Table 1, Note (5) of Standard Specifications to read:

"The slump range for slipform construction shall be 1/2 to 1 1/2 in."

Revise Article 1020.04 Table 1 (metric), Note (5) of Standard Specifications to read:

"The slump range for slipform construction shall be 13 to 40 mm."

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STATUS OF UTILITIES TO BE ADJUSTED

Effective: January 30, 1987 Revised: January 24, 2013

Utilities companies involved in this project have provided the following estimated durations:

Name of Utility	Туре	Location	Estimated Duration of Time for the Completion of Relocation or Adjustments
AT&T Distribution Kate Peters Legal Mandate Engineer 1000 Commerce Drive Oak Brook, IL 60523 630-573-5759	1- 100 pair buried copper cable telephone	On westerly/southerl y side of roadway Sta. 85+70 to Sta. 106+50 (RT. of CL) with only overhead on two poles crossing at Hampshire Creek.	Verified 1 copper cable and determined the overhead cable and poles are in conflict with the project. AT&T will move poles away from grading limits. AT&T applied for Permit with KDOT and will commence work once ROW acquisition is complete. 10 working days to complete work

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

In accordance with 605 ILCS 5/9-113 of the Illinois Compiled Statutes, utility companies have 90 days to complete the relocation of their facilities after receipt of written notice from the Department. The 90-day written notice will be sent to the utility companies after the following occurs:

- 1) Proposed right of way is clear for contract award.
- 2) Final plans have been sent to and received by the utility company.
- 3) Utility permit is received by the Department and the Department is ready to issue said permit.
- 4) If a permit has not been submitted, a 15 day letter is sent to the utility company notifying them they have 15 days to provide their permit application. After allowing 15 days for submission of the permit the 90 day notice is sent to the utility company.
- 5) Any time within the 90 day relocation period the utility company may request a waiver for additional time to complete their relocation. The Department has 10 days to review and respond to a waiver request.

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TEMPORARY ACCESS (FIELD ENTRANCE)

<u>Description:</u> The contractor shall construct and maintain aggregate surface course for temporary access to field entrances according to Article 402.07 and as directed by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades specified below, except as modified by the plans or as directed by the Engineer.

(a) Field Entrance. The minimum width shall be 20 ft. The minimum compacted thickness shall be 12 inches. The maximum grade shall be eight percent, except as required to match the existing grade or any new pavement constructed.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface coarse for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it.

When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

<u>Method of Measurement</u>: Aggregate surface course for temporary access will be measured for payment as each for every field constructed for the purpose of temporary access.

<u>Basis of Payment</u>: Aggregate surface course for temporary access will be paid for at the contract unit price per Each for TEMPORARY ACCESS (FIELD ENTRANCE), which shall include excavation, aggregate, maintenance, disposal, labor, and equipment required to perform the work as herein specified.

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TRAFFIC CONTROL PLAN

Effective: September 30, 1985 Revised: January 1, 2007

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

Special attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Quality Standard for Work Zone Traffic Control Devices, Recurring Special Provisions and Special Provisions contained herein, relating to traffic control.

The Contractor shall contact the District One Bureau of Traffic at least 72 hours in advance of beginning work.

STANDARDS:

701001-02 701006-05 701011-04 701301-04 701311-03 701901-04

DETAILS:

- a. Traffic Control and Protection for Side Roads, Intersections, and Driveways (TC-10)
- b. District One Typical Pavement Markings (TC-13)
- c. Detour Signing For Closing State Highways (TC-21)

SPECIAL PROVISIONS:

- a. Retroreflective Sheeting For Highway Signs (BDE)
- b. Maintenance of Roadways
- c. Public Convenience and Safety (District 1)
- d. Traffic Control and Protection (Arterials)
- e. Changeable Message Sign, Special
- f. Temporary Information Signing
- g. Work Zone Traffic Control Surveillance (LRS 3)

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TRAFFIC CONTROL AND PROTECTION (ARTERIALS)

Effective: February 1, 1996 Revised: March 1, 2011

Specific traffic control plan details and Special Provisions have been prepared for this contract. This work shall include all labor, materials, transportation, handling and incidental work necessary to furnish, install, maintain and remove all traffic control devices required as indicated in the plans and as approved by the Engineer.

When traffic is to be directed over a detour route, the Contractor shall furnish, erect, maintain and remove all applicable traffic control devices along the detour route according to the details shown in the plans.

<u>Method of Measurement</u>: All traffic control (except Traffic Control and Protection (Expressways) and temporary pavement markings) indicated on the traffic control plan details and specified in the Special Provisions will be measured for payment on a lump sum basis.

<u>Basis of Payment</u>: All traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

Temporary pavement markings will be paid for separately unless shown on a Standard.



EALL 0000

Storm Water Pollution Prevention Plan

Route	PAU 2329	Marked Rte.	Allen Road (C.H. 46)
Section	11-00132-01-BR	Project No.	BROS-0089(164)
County	Kane	Contract No.	61B90
Permit No	has been prepared to comply with the provisions of p. ILR10 (Permit ILR10), issued by the Illinois Environtation site activities.	the National Pollut onmental Protection	ant Discharge Elimination System (NPDES) Agency (IEPA) for storm water discharges
submitted gathering am aware	under penalty of law that this document and all attace with a system designed to assure that qualified. Based on my inquiry of the person or persons who the information, the information submitted is, to the be that there are significant penalties for submitting falsing violations. Carl Schoedel, PE	d personnel proper o manage the syste est of my knowledo	ly gathered and evaluated the information em, or those persons directly responsible for ae and belief, true, accurate and complete.
	Print Name		Signature
*****	County Engineer Title		3-13-15 Data
	Kane County Division of Transportation		Date
	Agency		

I. Site Description:

A. Provide a description of the project location (include latitude and longitude):

The Allen Road Bridge over Hampshire Creek project is located in unincorpirated Kane County in Section 20 of Hampshire Township (T42N, R6E) west of the Village of Hampshire (42.1082705N and 88.5567207W). The bridge is located approximately 0.8 mile east of Walker Road (C.H. 46). The land of both sides of the project is agricutural land.

B. Provide a description of the construction activity which is the subject of this plan:

The purpose of the project is to replace the existing bridge over Hampshire Creek with a new twin cell box culvert because the existing bridge is aging and determined to be structurally deficient.

This work consists of replacing the existing bridge with a new twin cell 10'x8' box culvert. The proposed roadway improvements consist of raising the profile approximately 2.5 feet to meet hydraulic requirements, widening roadway to accommodate 5' shoulders, regrading the ditches to provide compensatory storage for the floodplain fill, and providing erosion control for the culvert and wingwall constrcution. All disturbed areas that are not being paved or covered with aggregate will be seeded with the appropriate vegetation and erosion protection.

The proposed soil erosion and sediment controls for this project include temporary ditch checks, perimeter erosion barrier (silt fence), erosion control blanket, temporary inlet protection, turbidity barrier, core logs, diversion, filtering bag systems, streambank protection, and temporary and permanent seeding.

C. Provide the estimated duration of this project:

Five (5) months.

D. The total area of the construction site is estimated to be <u>3.9</u> acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 3.7 acres.

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

0.56

F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

The USDA SSURGO Soil Data (February 2010) was reviewed for hydric soils on the property (Exhibit 3). Hydric soils may indicate wetland conditions exist. The following soils are mapped on the property:

67A Harpster Silty Clay Loam 152A Drummer Silty Clay Loam 369B Waupecan Silt Loam

G. Provide an aerial extent of wetland acreage at the site:

WBK identified 0.21 acres of wetlands and 0.34 acres of waters of the US within the project boundary. The identified resources include Hampshire Creek and one area of wetland fringe abutting the creek.

H. Provide a description of potentially erosive areas associated with this project:

During construction activities, the areas with the greatest potential for erosion are the ditches, side slopes, and exposed channel adjacent to the culvert. After construction, the culvert wingwalls and channel will be covered with riprap to prevent erosion. The ditches and side slopes will be vegetated and covered with temporary erosions control blanket.

1. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):

The ground will be disturbed for the entire length of the project due to the removal of current stabilization (vegetation and asphalt) to replace the bridge and roadway. During the replacement of the bridge, the channel will be shaped, then the riprap protection will be placed. Filter bag systems will be utilized to control sediment release to the creek for all dewatering processes required to contruct the culvert sections. Turbidity barriers or core logs will be in place to prevent erosion of the bare banks and water quality impacts of the active construction. During the grading and shaping of of the ditches, the bare soil will be protected by temporary ditch checks prior to final stabilization. The potential for erosion in the ditches is moderate due to the short lengths and flatter longitudinal ditch slopes. The embankments will be protected from erosion by vegetation and erosion control blankets. The slopes vary in steepness from 2:1 to 4:1. The embankment slopes per side are between 8 and 20 feet in width.

- J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.
- K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Since the drainage system currently lies within the Kane County right of way, Kane County Division of Transportation is the agency responsible for the system.

L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located.

Kane County will have reporting jurisdiction for this project location.

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

Hampshire Creek is the receiving waters of the project. Hampshire Creek is tributary to Coon Creek which is tributary to the Kishwaukee River and then the Rock River which is a Section 10 waterway.

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

Areas outside of the project area are to be protected by perimeted erosion barrier. Hampshire Creek will require turbidity barriers or core logs to prevent work from flowing water and reduce the potential for erosion and water quality impacts. There are no additional areas to be preserved within the project limits.

).	The following sensitive environmental resources are associated with this project, and may have the poten impacted by the proposed development:			sociated with this project, and may have the potential to be		
		Floodplain Wetland Riparian Threatened and Endangered Species Historic Preservation 303(d) Listed receiving waters for suspended solids, turbidity, or siltation Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation Applicable Federal, Tribal, State or Local Programs Other				
	1.	303(d) Listed receiving waters (fill out this sec	tion i	if checked above):	
		a.	The name(s) of the listed water body, a	nd id	lentification of all pollutants causing impairment:	
		b.			d sediment control practices will prevent a discharge of I to or greater than a twenty-five (25) year, twenty-four (24)	
		c.	Provide a description of the location(s body:	s) of	direct discharge from the project site to the 303(d) water	
		d.	Provide a description of the location(s)	of ar	ny dewatering discharges to the MS4 and/or water body:	
	2.	TMD	DL (fill out this section if checked above)			
		a.	The name(s) of the listed water body:			
		b.	Provide a description of the erosion an design that is consistent with the assur		diment control strategy that will be incorporated into the site and requirements of the TMDL:	
		C.	If a specific numeric waste load allo discharges, provide a description of the		n has been established that would apply to the project's cessary steps to meet that allocation:	
Р.	The	follow	ring pollutants of concern will be associat	ed w	ith this construction project:	
		Co Co Sol Pai Sol	il Sediment concrete concrete Truck Waste concrete Curing Compounds lid Waste Debris cints clivents crtilizers / Pesticides		Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Antifreeze / Coolants Waste water from cleaning construction equipment Other (specify) Other (specify) Other (specify) Other (specify) Other (specify)	

II. Controls:

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor, and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

- A. Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed and maintained to:
 - 1. Minimize the amount of soil exposed during construction activity;
 - 2. Minimize the disturbance of steep slopes;
 - 3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
 - 4. Minimize soil compaction and, unless infeasible, preserve topsoil.
- B. Stabilization Practices: Provided below is a description of interim and permanent stabilization practices, including site-specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated immediately where construction activities have temporarily or permanently ceased, but in no case more than one (1) day after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.
 - 1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - 2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

\boxtimes	Preservation of Mature Vegetation	\boxtimes	Erosion Control Blanket / Mulching
	Vegetated Buffer Strips		Sodding
	Protection of Trees		Geotextiles
\times	Temporary Erosion Control Seeding		Other (specify)
\boxtimes	Temporary Turf (Seeding, Class 7)		Other (specify)
	Temporary Mulching		Other (specify)
X	Permanent Seeding		Other (specify)

Describe how the stabilization practices listed above will be utilized during construction:

Mature vegetation in areas that will not be disturbed will be preserved to provide additional protection from erosion and sediment deposition in Hampshire Creek. Temporary erosion control seeding will be utilized if the project requires a prolonged, but temporary pause in work greater than 14 days.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

Areas that are disturbed by construction that will not be paved will be stabilized with permanent seeding and erosion control blanket.

C. Structural Practices: Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following structural practices will be used for this project: Perimeter Erosion Barrier Rock Outlet Protection 冈 \boxtimes Temporary Ditch Check Riprap 冈 Storm Drain Inlet Protection Gabions Sediment Trap Slope Mattress Temporary Pipe Slope Drain Retaining Walls П Temporary Sediment Basin Slope Walls Temporary Stream Crossing Concrete Revetment Mats M Stabilized Construction Exits Level Spreaders \Box **Turf Reinforcement Mats** \boxtimes Other (specify) Filter Bag Systems ☐ Permanent Check Dams \boxtimes Other (specify) Core Logs Permanent Sediment Basin Other (specify) ☐ Aggregate Ditch Other (specify) ☐ Paved Ditch Other (specify) Describe how the structural practices listed above will be utilized during construction: Perimeter Erosion Barrier will be installed along the perimeter of the project area to prevent sediment from leaving the site. Temporary Ditch Checks will be placed in the ditches at the beginning of the project and may require adjusting during grading. The checks will remain in place until final stabilization has been achieved in the ditches. Storm Drain Inlet Protection will be utilized around the upstream end of culverts at field entrances or driveways. The protection will be in place from project initiation until final stabilization in the ditches has been achieved. Describe how the structural practices listed above will be utilized after construction activities have been completed: The Riprap will remain in place after construction to prevent erosion of the abutments and bridge cones. Riprap will also be left in place at the outlet of proposed culverts. **Treatment Chemicals** Will polymer flocculants or treatment chemicals be utilized on this project: Yes X No. If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project. E. Permanent Storm Water Management Controls: Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act. 1. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices). The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

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

Description of permanent storm water management controls:

The roadside ditches will be vegetated to promote infiltration and filtration of stormwater runoff.

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

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

In accordance with the current Kane County Stormwater Management Ordinance, Kane-DuPage Soil & Water Conservation District, and the US Army Corps of Engineers.

- G. Contractor Required Submittals: Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
 - 1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
 - · Approximate duration of the project, including each stage of the project
 - Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - Mobilization timeframe
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operations
 - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
 - Permanent stabilization activities for each area of the project
 - 2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
 - Vehicle Entrances and Exits Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
 - Material Delivery, Storage and Use Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
 - Stockpile Management Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
 - Waste Disposal Discuss methods of waste disposal that will be used for this project.
 - Spill Prevention and Control Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
 - Concrete Residuals and Washout Wastes Discuss the location and type of concrete washout facilities
 to be used on this project and how they will be signed and maintained.
 - Litter Management Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
 - Vehicle and Equipment Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.

- Vehicle and Equipment Cleaning and Maintenance Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals Identify the use and dosage of treatment chemicals and
 provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the
 chemicals will be used and identify who will be responsible for the use and application of these
 chemicals. The selected individual must be trained on the established procedures.
- Additional measures indicated in the plan.

III. Maintenance:

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

Vegetative soil erosion measures - the vegetative growth of temporary and permanent seeding, vegetative filters, etc., shall be maintained periodically and supplied adequate watering and fertilizer. The vegetative cover shall be removed and reseeded as necessary.

Water treatment system and/or turbitity barriers will be cleaned and items replaced as recommended by the designer of the system. Sediment accumulation will be removed at a minimum when the height is equal to 50% of the height of the baffle or curtain.

Perimeter erosion barrier, temporary ditch checks, and rolled excelsior logs will be examined regularly and repaired as necessary. Sediment shall be removed when it reaches a height equal to 50% of the height of the barrier.

Stabilized access road and stabilized construction entrances (if required) shall have sediment build up removed as necessary.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

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

Additional Inspections Required:

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.



Contractor Certification Statement

Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.G of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractor/subcontractor completing this form.

Route	FAU 2329	Marked Rte.	Allen Road (C.H. 46)
Section	11-00132-01-BR	Project No.	BROS-0089(164)
County	Kane	Contract No.	61B90
Permit N I certify u associate In addition	tification statement is a part of SWPPP for the pro- lo. ILR10 issued by the Illinois Environmental Protect under penalty of law that I understand the terms of the ed with industrial activity from the construction site in on, I have read and understand all of the information I have received copies of all appropriate maintenant compliance with the Permit ILR10 and SWPPP and	ction Agency. the Permit No. IL dentified as part of and requirements ace procedures;	R 10 that authorizes the storm water discharges of this certification. ents stated in SWPPP for the above mentioned and, I have provided all documentation required
☐ Con	ntractor		
☐ Sub	o-Contractor		
	Print Name		Signature
	Title		Date
	Name of Firm		Telephone
	Street Address		City/State/ZIP
Items wh	nich this Contractor/subcontractor will be responsible	e for as required	in Section II.G. of SWPPP:



Illinois Environmental Protection Agency

1021 North Grand Avenue East

P.O. Box 19276 • Springfield • Illinois • 62794-9276

Division of Water Pollution Control Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Site Activities

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at the above address. For Office Use Only

OWNER INFORMATION Company/Owner Name: Kane County Division of Transportation	Permit No. ILR10
Mailing Address: 41W011 Burlington Road Phon	e: 630-584-1170
Oit to Ot Ot of	630-584-5265
	vid@co.kane.il.us
Owner Type (select one) County	
CONTRACTOR INFORMATION MS4 Co.	mmunity: 🗸 Yes 🗌 No
Contractor Name:	
	le:
City: State: Zip: Fax:	
CONSTRUCTION SITE INFORMATION	
Select One: X New Change of information for: ILR10	
	ty: Kane
Street Address: Allen Road City: Unincorporated Kane	IL Zip:
Latitude: <u>42 06 29.77</u> Longitude: <u>88 33 24.19</u>	20 42N 6E
(Deg) (Min) (Sec) (Deg) (Min) (Sec) Se	ection Township Range
Approximate Construction Start Date Apr 1, 2016 Approximate Construction E	ind Date Aug 19, 2016
Total size of construction site in acres: 3.2	ee Schedule for Construction Sites
If less than 1 acre, is the site part of a larger common plan of development?	ess than 5 acres - \$250 or more acres - \$750
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)	
las the SWPPP been submitted to the Agency? (Submit SWPPP electronically to: epa.constilr10swppp@illinois.gov)	☐ No
Location of SWPPP for viewing: Address: Field Trailer at the Site	City:
SWPPP contact information:	Inspector qualifications:
Contact Name:	mopostor quantoutons.
Phone: E-mail:	
Project inspector, if different from above	Inspector qualifications:
Inspector's Name:	,
Phone: Fax: E-mail:	
This Agency is authorized to require this information under Section 4 and Title X of the Environmenta disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and a each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continues (415 II CS 544) and an each day during which the violation continue	al Protection Act (415 ILCS 5/4, 5/39). Failure to an additional civil penalty of not to exceed \$10.000

Rev 5/10

the violation continues (415 ILCS 5/42) and may also prevent this form from being processed and could result in your application being denied. This form has been approved by the Forms Management Center.

TYPE OF CONSTRUCTION (select one) Construction Type Reconstruction			
SIC Code:			
Type a detailed description of the project:			
This project involves the replacement of the existing bridge over Hampshire Creek with new twin 10'x'8' box culverts			
and end sections, pavement removal and reconstruction, steel sheet piling wall, placement of embankment, shoulder			
construction, guardrail installation, placement of pavement marking, landscaping and all incidental and collateral work			
necessary to complete the project			
HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with			
Illinois law on:			
Historic Preservation Agency ✓ Yes ☐ No			
Endangered Species			
RECEIVING WATER INFORMATION			
Does your storm water discharge directly to: 🗸 Waters of the State or 🗌 Storm Sewer			
Owner of storm sewer system:			
Name of closest receiving water body to which you discharge: Hampshire Creek			
Mail completed form to: Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891			
Or submit electronically to: epa.constilr10swppp@illinois.gov			
I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.			
Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))			
S-15-15			
Owner Signature: Date:			
CARL SCHOEDEL COUNTY ENGINEER Printed Name: Title:			
i inited radiie.			

Title: \

INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the upper right hand corner of the first page.

This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at:

Illinois Environmental Protection Agency Division of Water Pollution Control Permit Section Post Office Box 19276 Springfield, Illinois 62794-9276 or call (217) 782-0610 FAX: (217) 782-9891

Or submit electronically to: epa.constilr10swppp@illinois.gov

Reports must be typed or printed legibly and signed.

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.

Use the formats given in the following examples for correct form completion.

	Example	Format
Section	12	1 or 2 numerical digits
Township	12N	1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

Construction sites with less than 5 acres of land disturbance - fee is \$250.

Construction sites with 5 or more acres of land disturbance - fee is \$750.

SWPPP should be submitted electronically to: epa.constilr10swppp@illinois.gov When submitting electronically, use Project Name and City as indicated on NOI form.



Illinois Department of Natural Resources

One Natural Resources Way Springfield, Illinois 62702-1271 http://dnr.state.il.us

Pat Quinn, Governor Marc Miller, Director

Office of Water Resources • 2050 West Stearns Road • Bartlett, Illinois 60103

February 21, 2014

SUBJECT: Permit No. NE2014018

Allen Road Reconstruction and Bridge Replacement

Hampshire Creek

Kane County, Application No. 2013067

Carl Schoedel Kane County Division of Transportation 41W011 Burlington Road St. Charles, Illinois 60175

Dear Mr. Schoedel:

Enclosed is Illinois Department of Natural Resources, Office of Water Resources Permit No. NE2014018 authorizing the subject project. This permit does not supersede any other federal, state or local authorizations that may be required for the project.

Please be advised that the Illinois Department of Natural Resources, Office of Realty and Environmental Planning (OREP) participates in the regulatory programs of the U.S. Army, Corps of Engineers (USACE) and may review this project if a USACE Section 10 or 404 permit is required. Issuance of a permit by the Office of Water Resources does not preclude OREP's provision of comments and/or recommendations, primarily related to biological effects of the proposed action, to the USACE and other federal agencies concerning your project.

If any changes of the permitted work are found necessary, revised plans should be submitted promptly to this office for review and approval. Also, this permit expires on the date indicated in Condition (13). If unable to complete the work by that date, the permittee may make a written request for a time extension.

Please call me at 847/608-3100, ext. 32025 if you have any questions.

Sincerely,

RECEIVED

FEB 2 4 2014

Gary W. Jereb, P.E., Chief

Northeastern Illinois Regulatory Programs Section

Wills Burke Kelsey Associates

GJ:crw Enclosure

CC:

Chicago District, U.S. Army Corps of Engineers

Paul Schuch, Kane County

John Witte, Wills Burke Kelsey Associates, Ltd. --



PERMIT NO. NE2014018 DATE: February 21, 2014

State of Illinois

Department of Natural Resources, Office of Water Resources

Permission is hereby granted to:

Kane County Division of Transportation 41W011 Burlington Road St. Charles, Illinois 60175

to reconstruct the roadway and construct a replacement twin 75 ft. long, 10 ft. x 8 ft. (1.0 ft. embedded) box culvert in the floodway of Hampshire Creek in the Northeast Quarter of Section 20, Township 42 North, Range 6 East of the Third Principal Meridian in Kane County,

in accordance with an application dated April 9, 2013, and the plans and specifications entitled:

ALLEN ROAD OVER HAMPSHIRE CREEK, STRUCTURE REPLACEMENT, SITE LOCATION MAP, EXHIBIT 1, DATED MAY 7, 2012, RECEIVED APRIL 11, 2013, ALLEN ROAD OVER HAMPSHIRE CREEK, PLAN AND PROFILE, SHEETS 1 TO 3 OF 3, UNDATED, RECEIVED JUNE 26, 2013, GENERAL PLAN, ALLEN ROAD OVER HAMPSHIRE CREEK, SECTION 11-00132-01-BR, KANE COUNTY, SHEETS 1 AND 2 OF 2, UNDATED, RECEIVED FEBRUARY 18, 2014.

Examined and Recommended:

Gary W. Jereb, Chief

Northeastern IL Regulatory

Programs Section

Approval Recommended:

Arlan R. Juhl, Director

Office of Water Resources

Approved:

Marc Miller, Director

Department of Natural Resources

This PERMIT is subject to the terms and special conditions contained herein.

Marc Miller Dy pay

THIS PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

- 1) This permit is granted in accordance with the Rivers, Lakes and Streams Act "615 ILCS 5."
- This permit does not convey title to the permittee or recognize title of the permittee to any submerged or other lands, and furthermore, does not convey, lease or provide any right or rights of occupancy or use of the public or private property on which the activity or any part thereof will be located, or otherwise grant to the permittee any right or interest in or to the property, whether the property is owned or possessed by the State of Illinois or by any private or public party or parties.
- 3) This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit, and does not authorize any injury to private property or invasion of private rights.
- 4) This permit does not relieve the permittee of the responsibility to obtain other federal, state or local authorizations required for the construction of the permitted activity; and if the permittee is required by law to obtain approvals from any federal or state agency to do the work, this permit is not effective until the federal and state approvals are obtained.
- The permittee shall, at the permittee's own expense, remove all temporary piling, cofferdams, false work, and material incidental to the construction of the project. If the permittee fails to remove such structures or materials, the Department may have removal made at the expense of the permittee.
- In public waters, if future need for public navigation or other public interest by the state or federal government necessitates changes in any part of the structure or structures, such changes shall be made by and at the expense of the permittee or the permittee's successors as required by the Department or other properly constituted agency, within sixty (60) days from receipt of written notice of the necessity from the Department or other agency, unless a longer period of time is specifically authorized.
- 7) The execution and details of the work authorized shall be subject to the review and approval of the Department. Department personnel shall have the right of access to accomplish this purpose.
- 8) Starting work on the activity authorized will be considered full acceptance by the permittee of the terms and conditions of the permit.
- 9) The Department in issuing this permit has relied upon the statements and representations made by the permittee; if any substantive statement or representation made by the permittee is found to be false, this permit will be revoked; and when revoked, all rights of the permittee under the permit are voided.
- 10) In public waters, the permittee and the permittee's successors shall make no claim whatsoever to any interest in any accretions caused by the activity.
- In issuing this permit, the Department does not ensure the adequacy of the design or structural strength of the structure or improvement.
- 12) Noncompliance with the conditions of this permit will be considered grounds for revocation.
- 13) If the construction activity permitted is not completed on or before <u>December 31, 2017</u> this permit shall cease and be null and void.

DEPARTMENT OF THE ARMY



CHICAGO DISTRICT, CORPS OF ENGINEERS 231 SOUTH LA SALLE STREET CHICAGO, ILLINOIS 60604-1437

September 18, 2015

Technical Services Division Regulatory Branch LRC-2014-142

SUBJECT: Permit Authorization for the Replacement of Allen Road over Hampshire Creek project, Located East of Walker Road and West of Harmon Road, Hampshire Township, Kane County, Illinois (NE ¼ of Section 20, T42N R6E)

Carl Schoedel Kane County Division of Transportation 41W011 Burlington Road St. Charles, Illinois 60175

Dear Mr. Schoedel:

This office has verified that your proposed activity complies with the terms and conditions of Regional Permits 3 (Transportation Projects) and 7 (Temporary Construction Activities) under Category I of the Regional Permit Program (RPP). The activity may be performed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP. Enclosed is your copy of the executed RPP permit authorization.

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the plans titled, "C.H. 45 (Allen Road) Over Hampshire Creek Bridge Rehabilitation Section 11-00132-01-BR Project BROS-0089 (166) Hampshire Township Kane County Job No. C-91-085-12", prepared by Wills Burke Kelsey Associates, Ltd. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

The activity may be completed without further authorization from this office provided the activity is conducted in compliance with the terms and conditions of the RPP, including conditions of water quality certification issued under Section 401 of the Clean Water Act by the Illinois Environmental Protection Agency (IEPA). If the design, location, or purpose of the project is changed, you should contact this office to determine the need for further authorization.

This office is in receipt of a letter from the Blackberry Creek Headwaters Wetland Mitigation Bank or confirming your purchase of 0.237 certified mitigation credits.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Ms. Kimberly Kubiak of my staff by telephone at 312-846-5541, or email at kimberly.j.kubiak@usace.army.mil.

Sincerely,

Keith L. Wozniak Chief, West Section

Jems wyman

Regulatory Branch

Enclosures

Copy Furnished:

Illinois Department of Natural Resources/OWR (Gary Jereb)
Kane County Division of Environmental Management (Ken Anderson)
Kane County Development and Resource Management Department (Jodie Wollnik)
Kane/DuPage SWCD (Candice Jacobs)
Wills Burke Kelsey Associates, Ltd. (Natalie Paver)

PERMIT COMPLIANCE

CERTIFICATION

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Perm	- 1	NI111	mber:
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LRC-2014-142

Permittee:

Carl Schoedel

Kane County Division of Transportation

Date:

September 18, 2015

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of said permit and if applicable, compensatory wetland mitigation was completed in accordance with the approved mitigation plan.¹

PERMITTEE

DATE

Upon completion of the activity authorized by this permit and any mitigation required by the permit, this certification must be signed and returned to the following address:

U.S. Army Corps of Engineers Chicago District, Regulatory Branch 231 South LaSalle Street, Suite 1500 Chicago, Illinois 60604-1437

Please note that your permitted activity is subject to compliance inspections by Corps of Engineers representatives. If you fail to comply with this permit, you may be subject to permit suspension, modification, or revocation.

If compensatory mitigation was required as part of your authorization, you are certifying that the mitigation area has been graded and planted in accordance with the approved plan. You are acknowledging that the maintenance and monitoring period will begin after a site inspection by a Corps of Engineers representative or after thirty days of the Corps' receipt of this certification. You agree to comply with all permit terms and conditions, including additional reporting requirements, for the duration of the maintenance and monitoring period.



REGIONAL PERMIT PROGRAM

AUTHORIZATION

PERMITTEE:

Carl Schoedel

Kane County Division of Transportation

APPLICATION:

LRC-2014-00142

ISSUING OFFICE: U.S. Army Corps of Engineers, Chicago District

DATE:

You are hereby authorized to perform work in accordance with the terms and conditions specified below.

Note: The term "you" and its derivatives, as used in this authorization, means the permittee or any future transferee. The term "this office" refers to the U.S. Army Corps of Engineers, Chicago District.

PROJECT DESCRIPTION: Allen Road over Hampshire Creek project, as described in your notification and as shown on the plans titled, entitled "C.H. 45 (Allen Road) Over Hampshire Creek Bridge Rehabilitation Section 11-00132-01-BR Project BROS-0089 (166) Hampshire Township Kane County Job No. C-91-085-12", prepared by WBK.

To offset project impacts, 0.237 acres of credit shall be purchased from a Corps approved Wetland Mitigation Bank.

PROJECT LOCATION: Allen Road Over Hampshire Creek, Kane County, Illinois, Section 20, Township 42 N, Range 6 E.

GENERAL CONDITIONS: The above described work is authorized under the terms, conditions and requirements of Regional Permit 3 and 7 and shall follow the General Conditions outlined in the Regional Permit Program dated April 1, 2012

SPECIAL CONDITIONS: To ensure that the activity has minimal individual and cumulative impacts, the following special conditions are required: The following special conditions are a requirement of your authorization:

- 1. This authorization is based on the materials submitted as part of application number LRC-2014-00142. Failure to comply with the terms and conditions of this authorization may result in suspension and revocation of your authorization.
- You shall undertake and complete the project as described in the plans titled, "C.H. 45
 (Allen Road) Over Hampshire Creek Bridge Rehabilitation Section 11-00132-01-BR
 Project BROS-0089 (166) Hampshire Township Kane County Job No. C-91-085-12",
 prepared by WBK and, including all relevant documentation to the project plans as
 proposed.
- 3. You shall provide evidence that 0.237 acres of mitigation credits has been purchased from a Corps approved Wetland Mitigation Bank when you return the signed copies of the RPP authorization to this office. This office will not counter-sign the authorization until such evidence has been received.
- 4. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the Kane-DuPage Soil and Water Conservation District's (SWCD) written and verbal recommendations regarding the soil erosion and sediment control (SESC) plan and the installation and maintenance requirements of the SESC practices on site.
 - a. You shall schedule a preconstruction meeting with SWCD to discuss the SESC plan and the installation and maintenance requirements of the SESC practices on the site.
 - b. You shall notify the SWCD of any changes or modifications to the approved plan set. Field conditions during project construction may require the implementation of additional SESC measures. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable.
 - c. Prior to commencement of any in-stream work, you shall submit constructions plans and a detailed narrative to the SWCD that disclose the contractor's preferred method of cofferdam and dewatering method. Work in the waterway shall NOT commence until the SWCD notifies you, in writing, that the plans have been approved.
- 5. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
- 6. A copy of this authorization must be present at the project site during all phases of construction.
- 7. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is

performed.

- 8. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions. The transferee must sign the authorization in the space provided and forward a copy of the authorization to this office.
- 9. Work in the waterway should be timed to take place during low or no-flow conditions. Low flow conditions are flow at or below the normal water elevation.
- 10. The plan will be designed to allow for the conveyance of the 2-year peak flow past the work area without overtopping the cofferdam. The Corps has the discretion to reduce this requirement if documented by the applicant to be infeasible or unnecessary.
- 11. Water shall be isolated from the in-stream work area using a cofferdam constructed of non-erodible materials (steel sheets, aqua barriers, rip rap and geotextile liner, etc.). Earthen cofferdams are not permissible.
- 12. The cofferdam must be constructed from the upland area and no equipment may enter flowing water at any time. If the installation of the cofferdam cannot be completed from shore and access is needed to reach the area to be coffered, other measures, such as the construction of a causeway, will be necessary to ensure that equipment does not enter the water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.
- 13. If bypass pumping is necessary, the intake hose shall be placed on a stable surface or floated to prevent sediment from entering the hose. The bypass discharge shall be placed on a non-erodible, energy dissipating surface prior to rejoining the stream flow and shall not cause erosion. Filtering of bypass water is not necessary unless the bypass water has become sediment-laden as a result of the current construction activities.
- 14. During dewatering of the coffered work area, all sediment-laden water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers systems, dewatering bags, or other appropriate methods. Water shall have sediment removed prior to being re-introduced to the downstream waterway. A stabilized conveyance from the dewatering device to the waterway must be identified in the plan. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
- 15. The portion of the side slope that is above the observed water elevation shall be stabilized as specified in the plans prior to accepting flows. The substrate and toe of slope that has been disturbed due to construction activities shall be restored to proposed or preconstruction conditions and fully stabilized prior to accepting flows.

OTHER INFORMATION:

- 1. This office has authority to determine if an activity complies with the terms and conditions of the Regional Permit Program (RPP).
- 2. Limits of RPP authorization:
- a. This authorization does not obviate the need to obtain other federal, state, or local authorizations required by law.
 - b. This authorization does not grant any property rights or exclusive privileges.
 - c. This authorization does not authorize any injury to the property or rights of others.
- d. This authorization does not permit interference with any existing or proposed Federal project.
- 3. Limits of Federal Liability. The Federal Government does not assume any liability for the following:
- a. Damages to the authorized project or uses thereof as a result of other authorized activities or from natural causes.
- b. Damages to the authorized project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by this authorized activity.
 - d. Design or construction deficiencies associated with the authorized work.
- e. Damage claims associated with any future modifications, suspension, or revocation of this authorization.
- 4. Reliance on Applicant's Data. The determination by the issuing office that this activity complies with the terms and conditions of the RPP was made in the reliance on the information you provided.
- 5. Reevaluation of Permit Decision. This office may reevaluate its decision on this authorization at any time the circumstances warrant. In addition, this office may reevaluate the determination that the project qualifies under a RPP. Circumstances that could require a reevaluation include, but are not limited to, the following:
 - a. You fail to comply with the terms and conditions of this authorization.
 - b. The information provided by you in support of your application proves to have been false,

incomplete or inaccurate (see 4 above).

c. Significant new information surfaces which was not considered in reaching the original interest decision.

Such a reevaluation may result in a determination that it is appropriate to suspend, modify or revoke your authorization.

Your signature below, as permittee, indicates that y and conditions of this authorization.	ou accept and agree to comply with the terms
delal	10.16.2014
PERMITTEE Carl Schoedel Kane County Division of Transportation LRC-2014-00142	DATE
This authorization becomes effective when the Fed Secretary of the Army, has signed below.	eral official, designated to act for the
Keny lynne	09-18-2015
For and on behalf of Christopher T. Drew Colonel, U.S. Army District Commander	DATE
If the structures or work authorized by this authorized property is transferred, the terms and conditions of on the new owner(s) of the property. To validate the liabilities associated with compliance to its terms a date below.	this authorization will continue to be binding the transfer of this authorization, and the
TRANSFEREE	DATE
ADDRESS	TELEPHONE

Kane – DuPage Soil & Water Conservation District

September 8, 2014

Natalie Paver Wills Burke Kelsey Associates, Ltd. 116 West Main Street, Suite 201 St. Charles, IL 60174

Corps Number: LRC 2014 00 142

KDSWCD File: 14e056

Final Plan Set Dated: 9/4/2014 KDSWCD Approved: 9/8/2014

Dear Ms. Paver:

I received your revised soil erosion and sedimentation control plan submittal for the Allen Road over Hampshire Creek project located in Kane County, Illinois. Thank you for incorporating our comments into the plan, it will improve the quality of protection for the natural resources, both on and off site. This letter and a set of stamped plans located at the construction office on site, will serve to certify that the erosion and sediment control plans meet Technical Standards.

I will visit the site several times during the course of construction to assess compliance with the specifications and will be glad to address specific issues that may arise during the course of construction.

Sincerely,

Candice Jacobs, CPESC Resource Conservationist

Kane-DuPage Soil and Water Conservation District

ECC: Keith Wozniak, USACE





116 West Main Street, Suite 201 St. Charles, Illinois 60174 Phone: 630.443.7755 Fax: 630.443.0533 www.wbkengineering.com

WILLS BURKE KELSEY ASSOCIATES

May 7, 2015

Mr. Mike Zakosek, P.E. Kane County Division of Transportation 41W011 Burlington Road St Charles, IL 60175

Subject:

13-0140

Allen Road over Hampshire Creek

Sec. 11-00132-01-BR Proj. BROS-0089(166) Job No. C-91-085-12

Kane County Stormwater Report Submittal - Independent Review

Dear Mr. Zakosek:

Wills Burke Kelsey Associates, Ltd has prepared a Kane County Stormwater Management Application for the replacement of the Allen Road Bridge over Hampshire Creek in a report dated May 8, 2015. As part of WBK's Quality Assurance plan, I have performed an independent technical review of the stormwater permit application to verify that it meets the requirements of the latest edition of the Kane County Stormwater Ordinance.

I find the application meets the requirements of the Ordinance and recommend approval of the application.

Sincerely,

Kristine Meyer, P.E., CFM

Senior Engineer

cc: File

STRUCTURAL GEOTECHNICAL REPORT CULVERT ALLEN ROAD OVER HAMPSHIRE CREEK EXISTING SN 047-3035, PROPOSED SN 045-3181 SECTION 11-00132-01-BR KANE COUNTY, ILLINOIS

for Wills Burke Kelsey Associates, Ltd. 116 West Main Street, Suite 201 St. Charles, IL 60174 (630) 443-7755

submitted by
Wang Engineering, Inc.
1145 North Main Street
Lombard, IL 60148
(630) 953-9928

Technical Report Documentation Page				
Title and Subtitle Structure Geotechnical Report, Culvert, Allen Road over Hampshire Creek		2. Report Date July 8, 2013 3. Report Type ⊠ SGR □ RGR		
1.0		☐ Draft ☐ Final ☐ Revised		
4. Route / Section / County CH-15/11-00132-01-BR/ Kai	ne	5. IDOT Job / Contract No. NA/NA		
6. PTB / Item No. NA	5. Existing Structure Number(s) S.N. 045-3035	6. Proposed Structure Number(s) S.N. 045-3181		
7. Prepared by Wang Engineering, Inc.	Contributor(s) Author; Andri Kurnia P.E.	Contact Phone Number (630) 953-9928 ext 25		
1145 N Main Street	QC/QA: Jerry W.H. Wang, PhD, P.E.	akurnia@wangeng.com		
Lombard, IL 60148 9. Prepared for	PM: Liviu Iordache, P.G. Design / Structural Engineer	Contact Phone Number		
Wills Burke Kelsey Associates, Ltd.	Andy Underwager S.E. P.E.	(630) 443-7755		
116 West Main Street				
Suite 201 St. Charles, IL 60174				
10. Abstract				
A new double-box culvert with wingwalls will be constructed to carry Allen Road over Hampshire Creek. In addition, Allen Road will be reconstructed between Stations 87+00 and 106+00. The proposed improvements will include widening and rising the existing profile grade by 2.5 to 3.0 feet and adding permanent steel sheet pile wall on the north side of the road from Station 91+50 to Station 96+46. This report provides geotechnical recommendations for the design of the proposed culvert barrels and vertical T-type cantilever wingwalls shown in the preliminary TSL plan as well as recommendations for roadway reconstruction. In descending order, the general lithologic succession encountered beneath the pavement or topsoil includes 1) man-made ground fill; 2) medium dense gravelly sand; 3) medium dense silt to silty loam; and 4) stiff to very stiff silty clay to silty clay loam. Design scour elevations are proposed at the bottom of the cutoff walls; a scour table is provided for T-type wingwalls. The proposed wingwalls have total heights of approximately 14.0 feet with an exposed height of 9.0 feet. The barrels and wingwalls could be supported on shallow foundations. We recommend riprap protection to 849.0 feet elevation in the upstream end and 848.5 feet elevation in the downstream end in order to obtain the minimum factor of safety of 1.5 for global stability. Since the proposed roadway subgrade will be constructed on top of the existing pavement, the existing pavement should be broken into pieces not to exceed 3 square feet. The critical FOS against global stability of the widened side slopes at Station 94+00 are 3.8 for short term condition and 2.1 for long term condition, which meet the IDOT criteria of 1.5				
11. Path to archived file				
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1

EXHIBITS

- 1. Site Location Map
- 2. Site and Regional Geology
- 3. Boring Location Plan
- 4. Soil Profile
- 5. Topsoil Measurements and DCP Results
- 6. DCP Test Location Map

APPENDIX A

Boring Logs

APPENDIX B

Laboratory Test Results

APPENDIX C

Global Stability Analysis

APPENDIX D

Pavement Cores Photograph



STRUCTURE GEOTECHNICAL REPORT CULVERT ALLEN ROAD OVER HAMPSHIRE CREEK EXISTING SN 047-3035, PROPOSED SN 045-3181 SECTION 11-00132-01-BR KANE COUNTY, ILLINOIS WILLS BURKE KELSEY ASSOCIATES, LTD.

1.0 INTRODUCTION

This report presents the results of Wang Engineering, Inc (Wang) subsurface investigation, laboratory testing, and geotechnical evaluations for the design and construction of a culvert replacing the existing bridge carrying Allen Road over Hampshire Creek and roadway reconstruction including an associated retaining wall in Kane County, Illinois. On the USGS "Hampshire Quadrangle 7.5 Minute Series" map, the proposed box culvert is located in the NE ¼ of Section 20, Tier 42N, Range 6E of the Third Principal Meridian. A *Site Location Map* is presented as Exhibit 1.

The purpose of our investigation was to characterize the site soil and groundwater conditions, perform geotechnical analyses, and provide recommendations for the design and construction of the new culvert barrel and wingwalls together with recommendations for the roadway reconstruction including a retaining wall.

1.1 Existing Structure

The existing structure is a bridge structure built in 1946 as a single span 14-inch reinforced concrete slab superstructure with reinforced concrete closed abutments on spread footings. The existing bridge length is 24'-10" back-to-back abutment and 28'-6" out-to-out deck width. The bridge is skewed 45° ahead right.

1.2 Proposed Structure

The proposed structure will be 79'-5.5" long (out to out headwall) culvert on 45° skew to the Allen Road centerline. The proposed invert elevation at the upstream end is 848.0 feet and at the downstream end is 847.5 feet with the flow directed from south to north. Vertical cantilever T-type wingwalls and permanent steel sheet pile wall will support roadway embankment slopes. The wingwalls will be founded at approximate elevations of 843.5 feet downstream and 844.0 feet upstream, which are 4 feet



below the invert elevations. A retaining wall is proposed between Station 91+50 to Station 96+46, offset 21.25 feet left. The proposed wall maximum height is approximately 3.2 feet. Wang understands no stage construction or temporary soil retention systems will be required.

2.0 SITE CONDITIONS AND GEOLOGICAL SETTING

The following review of the published geologic data, with emphasis on factors that might influence the design and construction of the proposed engineering works, is meant to place the project area within a geological framework and, thus, to confirm the dependability and consistency of the present subsurface investigation results. For the study of the regional geologic framework, Wang considered northeastern Illinois area in general and Kane County in particular. Exhibit 2 illustrates the *Site and Regional Geology*.

2.1 Physiography

The project area is part of the Rock River Hill Country physiographic section. The project area is situated in the "V" shape section just northwest of the Wisconsin Episode moraines of Marengo moraine, Bloomington Morainic System and Elburn Complex. The meltwater shaped the glacial relief of this area creating outwash plains, deltas and bars. Our project area is located along the Hampshire Creek carving its valley through the outwash deposits which dominates the northwestern corner the Hampshire Quadrangle. Today a 160-foot thick glacial drift covers the bedrock (Curry 2008). Generally the surface elevation slopes gently from southeast to northwest.

The Hampshire Creek runs through a well-defined channel of 5 to 15 feet wide, and crosses Allen Road at Station 96+85. After that, the creek meanders along north side of Allen Road for the remaining 850 feet of the project limits. The ground elevation along the project varies from 862 feet to 853 feet. At the proposed culvert location the water surface elevation measure approximately 850 feet.

2.2 Surficial Cover

The surficial cover is the result of Wisconsinan-age and Illinoian-age glacial activity, and it rests unconformably over Paleozoic bedrock. The glacial deposits were emplaced during pulsating advances and retreats of an ice-sheet lobe responsible for the formation of end moraines and associated low-relief till and lake plains (Hansel and Johnson 1996). The 160-foot thick glacial cover is made up predominantly of sand and gravel outwash deposit of the Henry Formation, sand and gravel outwash of the Pearl Formation, and peabbly and loamy diamicton of the Glasford Formation (Curry 2008).



2.3 Bedrock

The bedrock that underlies the Hampshire Quadrangle includes a discontinuous cap of cherty dolomite classified as the Silurian Elwood Formation, which overlies about 200 feet of shale, fossiliferous and vuggy dolomite, and shaly dolomite of the Ordovician Maquoketa Group (Curry 2008).

Our subsurface investigation results fit into the local geologic context. The borings drilled in the project area revealed the native sediments consists of sand and gravel outwash deposits with silt, clay and diamicton beds (Henry Formation and Pearl Formation) overlie the loamy diamicton of Glasford Formation. The borings drilled during our subsurface investigation did not reached the top of the bedrock.

3.0 METHODS OF INVESTIGATION

The following section outlines the subsurface and laboratory investigations performed by Wang.

3.1 Subsurface Investigation

The subsurface investigation was performed by Wang on April 23 and April 24, 2012. The investigation consisted of two structure borings, four roadway borings, and one scour boring. The structure borings, designated as SB-01 and SB-02, were drilled from elevations 855.5 and 858.1 feet to depths of 70.0 and 80.0 feet below ground surface (bgs). The roadway borings, designated as RB-01 through RB-04, were drilled from elevations 854.6 to 860.9 feet to depths of 11.0 bgs. The scour boring, designated as SC-01, was drilled from elevation 849.0 to depth of 10 feet bgs. In addition, Dynamic Cone Penetrometer (DCP) testing was performed at eight locations within the roadway area. The as-drilled boring locations are shown in Exhibit 3, *Boring Location Plan* and in Appendix A, *Boring Logs*.

A truck-mounted drilling rig, equipped with hollow stem augers, was used to advance and maintain an open borehole. Soil sampling was performed according to AASHTO T 206, "Penetration Test and Split Barrel Sampling of Soils." The soil was continuously sampled in the roadway borings. In structure borings, soil was sampled at 2.5-foot intervals to a depth of 30 feet bgs and at 5.0-foot intervals to the termination depths. In scour boring, a jack hammer geoprobe and hand operated piston sampler was used to advance soil borings and soil was sampled continuously for the full depth of the boring. The samples from each interval were placed in sealed jars for further examination and laboratory testing.



Pavement cores were obtained at Boring SB-01 and near Boring SB-02. Upon retrieval, the pavement cores were measured and photographed.

Field boring logs prepared and maintained by a Wang geologist, included lithological descriptions, visual-manual soil classifications (IDH textural classification), results of pocket penetrometer or Rimac unconfined compressive strength testing on cohesive soils, and Standard Penetration Test (SPT) results recorded as blows per 6 inches of penetration.

Groundwater observations were made during and at completion of drilling operations. The boreholes were backfilled with soil cuttings and bentonite chips after completion, and the surface was restored as close as possible to its original condition.

3.2 Laboratory Testing

All soil samples were tested in the laboratory for moisture content (AASHTO T-265). Organic matter by wet combustion method (AASHTO T 194), pH of soil (AASHTO T289), Atterberg limits (AASHTO T 89/T 90) and particle size (AASHTO T 88) analyses were also performed on selected samples. Field visual descriptions of the soil samples were verified in the laboratory and classified according to the IDH Soil Classification System. Laboratory test results are shown in the *Boring Logs* (Appendix A) and in the *Laboratory Test Results* (Appendix B).

4.0 RESULTS OF FIELD AND LABORATORY INVESTIGATIONS

Detailed descriptions of the soil conditions encountered during the subsurface investigation are presented in the attached *Boring Logs* (Appendix A) and in the *Soil Profile* (Exhibit 4). Please note that strata contact lines represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in horizontal and vertical directions.

4.1 Soil Conditions

The existing roadway pavement near the proposed culvert location consists of 6 to 8 inches asphalt. Boring SB-02 which was performed outside the existing pavement encountered 36 inches of black gravelly loam topsoil. In descending order, the general lithologic succession encountered beneath the pavement or topsoil includes 1) man-made ground fill; 2) medium dense gravelly sand; 3) medium dense silt to silty loam; and 4) stiff to very stiff silty clay to silty clay loam.



1) Man-Made Ground Fill

Below the pavement or topsoil, the borings encountered 1.0 to 6.3 feet granular and cohesive fill. The granular fill is described as loose to medium dense, brown fine to medium sand characterized by SPT N values of 5 to 19 blows/foot and moisture content (MC) values of 2 to 10%. The cohesive fill consists of stiff, brown silty clay to sandy clay loam characterized by unconfined compressive strength (Qu) values of 1.5 tsf and MC values of 14 to 22%. Below the fill, two borings encountered 1.4 to 1.8 feet of dark brown silty clay to clay loam buried topsoil.

2) Medium dense gravelly sand

At elevations of 849.0 to 854.4 feet (0.0 to 8.0 feet bgs), the borings advanced through up to 45.7 feet medium dense, brown to gray fine to coarse gravelly sand. This soil has SPT N-values of 10 to 24 blows/foot, averaging 15 blows/foot and MC values of 6 to 31%, averaging 16%.

3) Medium Dense Silt to Silty Loam

At elevations of 806.8 to 816.1 feet (42.0 to 48.7 feet bgs), the borings encountered 3.3 to 20.0 feet medium dense, gray silt to silty loam. This soil layer has SPT N-values of 14 to 23 blows/foot, averaging 18 blows/foot and MC values of 9 to 22%, averaging 14%. Below this silty soil, Boring SB-02 encountered 7.8 feet of medium dense gravelly sand with SPT N-values of 11 to 18% and MC values of 10 to 11%

3) Stiff to Very Stiff Silty Clay to Silty Clay Loam.

At elevations of 795.7 to 796.1 feet (59.8 to 62.0 feet bgs), the borings encountered stiff to very stiff, gray silty clay to silty clay loam. The clayey soil shows Qu values of 1.2 to 3.2 tsf, averaging 2.6 tsf and MC values of 10 to 14%, averaging 11%.

4.2 Groundwater Conditions

While drilling the groundwater table was recorded at elevations ranging from 848.7 to 853.9 feet (0.0 to 8.0 feet bgs); and at the completion of drilling the water level was recorded at elevation of 789.5 to 853.6 feet (0.0 to 66.0 bgs).

4.3 Scour Considerations

The preliminary TSL plan provided by Wills Burke Kelsey Associates, LTS (WBKA) indicates a design high water elevation (DHWE) of 855.8 feet. Our subsurface investigation including the scour boring SC-01 driller on river bed shows the streambed soils are comprised primarily of medium dense



gravelly sand (Layer 1). For culverts plans, the design scour elevations are typically taken as the base of the cutoff wall which is usually located at or above the bottom of T-type wingwalls (IDOT, 2012), as this elevation represents the tolerable soil loss that can be sustained without impacting the factor of safety (FOS) or performance of the box and wingwalls. For horizontal cantilever and L-type wingwalls, the cutoff walls will be established 3.0 feet below the invert elevations; whereas for T-type wingwalls, the cutoff walls will be established 4.0 feet below the invert elevations. The design scour elevations for vertical T-type wingwalls are summarized in Table 1. We recommend providing riprap at both ends of the culvert. The riprap is necessary to provide overall slope stability, prevent sediments from entering and accumulating in the culvert, minimize long-term maintenance, and protect streambed against scour.

Table 1: Design Scour Elevations

10011 11 2 10 81 11		
	Upstream	Downstream
Design Scour Elevations (feet)	844.00	843.50

5.0 FOUNDATION ANALYSIS AND RECOMMENDATIONS

Geotechnical evaluations and recommendations for the culvert barrels and wingwalls are included in the following sections. The preliminary TSL plan provided by WBKA shows a cast-in-place, doublebox culvert with vertical cantilever T-type wingwalls.

5.1 Culvert and Wingwalls Foundations

Wang has performed bearing capacity, settlement, and global stability analyses for the culvert barrel and wingwalls based on the preliminary TSL plan provided by WBKA. Based on the results of our analyses, we recommend a riprap protection, as shown in the preliminary TSL plan, to be added in the front face of T-type wingwall. The riprap should be added to the elevation of 849.0 feet in the upstream end and 848.5 feet in the downstream end in order to obtain the minimum factor of safety of 1.5 for global stability.

5.1.1 Bearing Capacity

The vertical wingwalls should be installed at a minimum depth of 3.0 feet bgs for L-type and 4.0 feet bgs for T-type walls. The recommended allowable bearing capacity for culvert barrels and L-type wingwalls is 4,000 psf for a FOS of 3.0.



Wingwalls and culvert barrels should be designed based on a lateral earth pressure diagram determined according to IDOT *Culvert Manual* (IDOT, 2000). Alternatively, backfill parameters recommended in Table 4 can be used to estimate lateral pressures on the side of the barrels and wingwalls.

The estimated friction angle between the base of a concrete wingwall and the underlying gravelly sand is 29°. The corresponding coefficient is 0.55. Cast-in-place wingwalls on shallow foundations are designed for a minimum FOS of 1.5 against sliding and 2.0 against overturning (AASHTO, 2002).

5.1.2 Settlement

The foundation soils consist of medium dense gravelly sand. The proposed culvert will support a maximum fill height of approximately 3.0 feet. We estimate a total settlement and a differential settlement will be less than 0.5 inch. The majority of the settlement is expected to be completed by the end of construction.

5.1.3 Global Stability

The global stability of the wingwalls was analyzed based on the soil profile described in Section 4.1 and the preliminary TSL plan. The maximum total height of wingwall is approximately 14.0 feet with exposed height of approximately 9.0 feet. The TSL shows a maximum slope of 1:2.5 behind the wingwalls.

The minimum required FOS for both short-term and long-term conditions is 1.5 (IDOT, 1999). Analyses were performed with Slide v5.0, and the results of slope stability evaluations are shown in Appendix C. We estimate FOS of 1.4. without riprap protection. In order to obtain a minimum factor of safety of 1.5, we recommend a riprap protection to be added in the front face of T-type waingwall as shown in the preliminary TSL plan. The riprap protection should be added to Elevation 849.0 in the upstream end and to Elevation 848.5 in the downstream end. After adding this riprap protection, we estimate undrained (short-term) and drained (long-term) FOS of 1.8 and 1.6, respectively (Appendix C-1 and C-2).

5.1.4 Permanent Steel Sheet Pile Wall

Based on the preliminary TSL and cross section drawings, permanent steel sheet pile wall is proposed to be constructed from Station 91+50 to Station 96+46 (northwest corner of the proposed culvert barrel). The proposed wall maximum height is approximately 3.2 feet.



The proposed wall will retain mainly new fill from increasing the profile grade elevation. Below the ground line, at the front face, the wall will be supported by medium dense gravelly sand. Based on the soil conditions encountered along the proposed wall, Wang estimates the soil conditions are appropriate for the support of sheet pile wall. The wall should be designed under drained (long term) condition. Geotechnical parameters for design are presented in Table 2.

Table 2: Recommended Soil Parameters for Steel Sheet Pile Wall Design

	Moist	Shear	Strength Pro	perties	Estimated	Estimated
Soil Description	Unit Weight	Short Cohesion	Friction	Long Term Friction	Lateral Soil Modulus	Soil Strain Parameter,
		Cu	Angle, φ	Angle, φ'	Parameter (Static), k	E ₅₀
	(pcf)	(psf)	(Degree)	(Degree)	(pci)	
Medium Stiff Cohesive	115	550	0	28	65	0.015
(Qu 0.5 to .99 tsf)						***************************************
Stiff Cohesive (Qu 1.0 to 1.99 tsf)	120	1300	0	30	450	0.0075
Very Stiff Cohesive (Qu 2.0 to 3.99 tsf)	120	2800	0	32	1000	0.0055
Loose Granular -						
Submerged (N 4 to 9)	120	0	29	29	10	-
Medium Dense Granular - Submerged (N 10 to 29)	125	0	32	32	45	-

According to the AASHTO LRFD Bridge Design Specifications (AASHTO, 2012), the lateral pressure on permanently flexible walls should be estimated using the effective stress method analysis and the drained shear strength parameters of the soils. In addition, three feet of the embedded portion below the finished grade in front of the wall should not be considered as providing any passive lateral support. The simplified earth pressure distributions shown in AASHTO (AASHTO, 2012) or other suitable earth pressure distributions should be used. Difficult pile driving condition during installation might be experienced in the medium dense gravelly sand soil.



The soil parameters provided in Table 2 were estimated from the soil borings performed by Wang near Station 96+46 (Borings SB-01 and SB-02). IDOT geotechnical manual recommend borings be taken at 75 feet interval along the proposed wall alignment for retaining wall. Thus, for approximately 496.0-foot long wall, we recommend taking seven additional borings for the proposed steel sheet pile wall structure.

5.2 Stage Construction Considerations

Wang does not anticipate the use of temporary support since the existing bridge will be closed during the construction and the traffic will be detoured. If any changes to the footing geometry or construction staging are made, Wang should be notified to provide revised recommendations.

6.0 ROADWAY

Phase I drawing provided by WBKA in January 2012, indicate the Allen Road reconstruction will begin at Station 87+00 and end at Station 106+00. Wang understands the proposed roadway reconstruction will consist of widening and increasing the elevation of existing roadway to be higher than 100-year flood elevation. Based on the preliminary cross section drawing, the centerline profile grade will be increased by 2.5 to 3.0 feet to raise the roadway to 854.0 to 862.0 feet elevation.

6.1 Surface Conditions

Structure and roadway borings performed on the pavement showed the existing pavement structure consists of 6.0- to 8.0-inch thick asphalt pavement overlying loose to medium dense sand. The average thickness of the asphalt (surface and binder course) is 7.0 inches. Wang performed two pavement cores on opposite sides of the existing bridge. Table 3 summarizes the existing pavement structure information. Pavement core photographs are shown in Appendix D, *Pavement Cores*.

Table 3: Existing Pavement Measurements

Core ID	Overall Pavement Thickness (in)	Surface Course (in)	Binder Course (in)
SB-01	7.5	5.0	2.5
SB-02	8.0	5.5	2.5



In addition, topsoil measurements and Dynamic Cone Penetrometer (DCP) tests were performed at eight locations outside the existing pavement. Topsoil thickness measured between 5.0 to 10 inches with an average of 8.1 inches. Topsoil measurements and DCP results are shown in Exhibit 5 and DCP Test Location Map is presented as Exhibit 6.

Wang understands WBKA wants to identify if topsoil within ROW meets IDOT Standard Specifications for Roadway and Bridge Construction Art. 1081.05. Laboratory test results performed on topsoil show grain size with 65.8% passing the No. 10 (2.00 mm) sieve, organic content of 3.4 and 5.6 % and pH of 6.4 and 6.6. Even though the organic content and pH of the topsoil meet the criteria; the topsoil did not meet the grain size criteria of 90% passing No. 10 (2.00 mm) sieve.

6.2 Roadway Analysis and Recommendation

It is recommended that the topsoil be stripped within the limits of the proposed pavement, shoulders, and grading. For estimating purpose, the average topsoil thickness to be removed is 8.0 inches. Existing pavement should be treated according to IDOT Section 205.03. Based on IDOT District One policy, we recommend a shrinkage factor of 15% to measure borrowed and furnished excavation quantities. Since the proposed subgrade will be constructed on top of the existing pavement, the existing pavement shall be broken into pieces not to exceed 3 square feet.

The stability of the exposed subgrade should be observed for the presence of any unsuitable and unstable soils immediately after excavation of overlying material to determine if remedial treatment is necessary. Boring RB-04 shows buried topsoil from 1.5 to 3.0 feet bgs. If this topsoil is exposed during the subgrade preparation, it should be removed within the limits of the proposed pavement. The subgrade should be proofrolled according to IDOT *Subgrade Stability Manual* (IDOT, 2005) to observe the amount of deflection and rutting taking place under the wheels of heavy construction equipment. Using either static or dynamic cone penetrometer, all soft areas should be tested and evaluated also according to IDOT *Subgrade Stability Manual* (IDOT, 2005). In the widening area, the existing embankment slopes should be deeply plowed or benched in accordance with IDOT Section 205.03

The frost depth for pavement design in northeastern Illinois is 42 inches. None of samples collected from within the frost depth have shown silt contents greater that 60%; therefore, Wang estimates the subgrade soil will exhibit low frost susceptibility.



The proposed embankment along Allen Road will have 1:3 (V:H) to 1:4 (V:H) slopes on both sides except where steel sheet pile wall is proposed. We have analyzed the global stability of the embankments at critical Station 94+00. The analyses were performed for both short-term (undrained) and long-term (drained) soil conditions. The required IDOT factor of safety for fill sections is 1.5. We estimate the embankment has undrained FOS of 3.8 and drained FOS of 2.1 (Appendix C-3 and C-4). These conditions meet the IDOT's minimum requirement. We estimate a total settlement and a differential settlement on the order of less than 0.5 inch. Therefore, settlement is not a concern.

7.0 CONSTRUCTION CONSIDERATIONS

7.1 Site Preparation and Drainage

All vegetation, surface topsoil, and debris should be cleared and stripped where fills and structures will be placed. The exposed subgrade should be prooffolled. To aid in locating unstable and unsuitable materials, the prooffolling should be observed by a qualified engineer. Any unstable or unsuitable materials should be removed and replaced with compacted structural fill as described in Section 7.3.

During the subsurface investigation, groundwater was encountered at elevation ranging from 848.7 to 853.9 feet. The proposed barrel and T-type wall will be established at 843.5 to 847.0 feet elevation which is below the encountered groundwater. Therefore, groundwater may be encountered in conjunction with some of the subgrade soil materials, and temporary dewatering of foundation excavation will be required, such as a cofferdam. Contractor should be prepared for dewatering measures should groundwater be encountered above the proposed excavation depth. Depending upon prevailing climate conditions and the time of year when culvert construction takes place, control runoff and maintenance of existing flows may require temporary water diversion and control.

7.2 Excavation and Utilities

Excavations should be performed in accordance with local, state, and federal regulations. Excavations for the construction of wingwall footings and placement of the barrel including the removal and replacement of unstable soils should be sloped at no greater than 1:2. The potential effect of ground movements upon nearby utilities should be considered during construction.

No utility conflicts were identified that would impact the foundation design. However, the Contractor should ensure there are no utility conflicts with the final design and construction program.



7.3 Filling and Backfilling

Fill material to attain the final design elevations should be structural fill material. Coarse aggregate of IDOT gradation CA-6 or pre-approved, compacted, cohesive or granular soil conforming to IDOT Section 204 would be acceptable as structural fill (IDOT, 2012). The fill material should be free of organic matter and debris. Structural fill should be placed in lifts and compacted according to Section 205, *Embankment* (IDOT, 2012).

All backfill materials must be pre-approved by the site engineer. To backfill the barrels and wingwalls we recommend porous granular material, such as crushed stone or crushed gravel that conforms to the gradation requirements specified in the standard specifications Section 1004 (IDOT, 2012). Backfill material should be placed and compacted in accordance with the Section 205, *Embankment* (IDOT, 2012) and the *Culvert Manual* (IDOT, 2000). Estimated design parameters for granular structural backfill materials are presented in Table 4.

Table 4: Estimated Granular Backfill Parameters

Soil Description	Porous Granular Material		
	Backfill		
Unit Weight	125 pcf		
Angle of Effective Internal Friction	32°		
Active Earth Pressure Coefficient	0.31		
Passive Earth Pressure Coefficient	3.26		
At-Rest Earth Pressure Coefficient	0.5		

7.4 Earthwork Operations

The required earthwork can be accomplished with conventional construction equipment. Moisture and traffic will cause deterioration of exposed subgrade soils. Precautions should be taken by the contractor to prevent water erosion of the exposed subgrade. A compacted subgrade will minimize water runoff erosion.

Earth moving operations should be scheduled to not coincide with excessive cold or wet weather (early spring, late fall or winter). Any soil allowed to freeze or soften due to the standing water should be removed. Wet weather can cause problems with subgrade compaction.



It is recommended that an experienced geotechnical engineer be retained to inspect the exposed subgrade, monitor earthwork operations, and provide material inspection services during the construction phase of this project.

8.0 QUALIFICATIONS

The analysis and recommendations submitted in this report are based upon the data obtained from the borings drilled at the locations shown on the boring logs and in Exhibit 3. This report does not reflect any variations that may occur between the borings or elsewhere on the site, variations whose nature and extent may not become evident until the course of construction. In the event that any changes in the design and/or location of the culvert are planned, we should be timely informed so that our recommendations can be adjusted accordingly.

It has been a pleasure to assist Wills Burke Kelsey Associates, Ltd and Kane County on this project. Please call if there are any questions, or if we can be of further service.

Respectfully Submitted,

WANG ENGINEERING, INC.

Andri Kurnia, P.E.

Geotechnical Engineer

Corina T. Farez, P.E., P.G.

Principal

Jerry WH Wang / CIF Jerry W.H. Wang, PhD., P.E.

QA/QC Reviewer

LETTER REPORT ALLEN ROAD PHASE II PERMANENT STEEL SHEET PILE WALL AND CCDD AND CLEAN SOIL DISPOSAL ASSESMENT KANE COUNTY, ILLINOIS

for
Wills Burke Kelsey Associates, Ltd.
116 West Main Street, Suite 201
St. Charles, IL 60174

(630) 443-7755

submitted by
Wang Engineering, Inc.
1145 North Main Street
Lombard, IL 60148
(630) 953-9928

June 19, 2014



June 19, 2014

To: Mr. Andy Underwager, P.E., S.E.
Wills Burke Kelsey Associates, Ltd.
116 West Main Street, Suite 201
St. Charles, IL 60174

Re: Geotechnical Investigation Report
Permanent Steel Sheet Pile Wall and
CCDD and Clean Soil Disposal Assessment
Allen Road Phase II, Kane County, Illinois
Wang No. 412-07-02

Dear Mr. Underwager:

Wang Engineering, Inc. (Wang) is pleased to present the results of our subsurface investigation, laboratory testing, and geotechnical evaluations for the proposed permanent steel sheet pile in Hampshire, Kane County, Illinois. On the USGS "Hampshire Quadrangle 7.5 Minute Series" map, the proposed wall is located in the NE ¼ of Section 20, Tier 42N, Range 6E of the Third Principal Meridian. A Site Location Map is presented as Exhibit 1.

Wang submitted a Structure Geotechnical Report (dated July 8, 2013) for culvert replacement at Allen Road over Hampshire Creek. As part of the Phase II Design, Wills Burke Kelsey Associates, Ltd. (WBKA) requested Wang to provide recommendations for the design of the permanent steel sheet pile wall located at the northeast corner of the culvert, from Station 91+50 to Station 96+46. In addition, Wang has performed a Clean Construction and Demolition Debris (CCDD) and clean soil disposal investigation.

The purpose of our investigation was to characterize the site soil and groundwater conditions, perform geotechnical analyses, and provide recommendations for the design and construction of the proposed permanent steel sheet pile wall. An abbreviated preliminary site environmental soil assessment is included in the report.



Field and Laboratory Investigations

The subsurface investigation was performed by Wang on April 9 and April 10, 2014. The investigation consisted of four structure borings and three environmental borings. The structure borings, designated as RW-01 through RW-04, were drilled from elevations of 852.8 to 853.5 feet to a depth of 20 feet below ground surface (bgs). The environmental borings, designated as HA-01 through HA-03, were drilled from elevations 855.0 to 856.8 feet to a depth of 10 feet bgs. The boring coordinates were surveyed by Wang using a mapping-grade GPS unit. The boring locations are shown in the *Boring Logs* (Appendix A) and in the *Boring Location Plan* (Exhibit 2).

An ATV-mounted drilling rig, equipped with hollow stem augers, was used to advance and maintain an open borehole. Soil sampling was performed according to AASHTO T 206, "Penetration Test and Split Barrel Sampling of Soils." The soil was continuously sampled in the environmental borings. In structure borings, soil was sampled at 2.5-foot intervals to the termination depths.

Field boring logs prepared and maintained by a Wang soil inspector, included lithological descriptions, visual-manual soil classifications (IDH textural classification), results of pocket penetrometer or Rimac unconfined compressive strength testing on cohesive soils, and Standard Penetration Test (SPT) results recorded as blows per 6 inches of penetration. The soil inspector used a photo-ionization detector (PID) to measure the presence of any volatile organic compounds (VOC) and observed the soils for other contaminants. Suspected contaminated soil samples were collected in special 4 oz. environmental jars and sent to an analytical testing laboratory.

Soil samples were tested in our geotechnical laboratory for moisture content (AASHTO T-265). Field visual descriptions of the soil samples were verified in the laboratory and classified according to the IDH Soil Classification System. Laboratory test results are shown in the *Boring Logs* (Appendix A).

Results of Subsurface Investigation

Detailed descriptions of the soil conditions encountered during the subsurface investigation are presented in the attached Boring Logs (Appendix A) and in the Soil Profile (Exhibit 3). Please note that strata contact lines represent approximate boundaries between soil types. The actual transition between soil types in the field may be gradual in horizontal and vertical directions.

Soil borings encountered 3- to 7-inch thick of black silty clay to silty clay loam topsoil. In descending order, the general lithologic succession encountered beneath the pavement or topsoil includes 1) manmade ground fill; and 2) loose to dense gravelly sand.



1) Man-Made Ground Fill

Below the topsoil, the borings encountered 1.5 to 5.1 feet of mostly cohesive fill. The cohesive fill consists of stiff, brown silty clay to silty clay loam characterized by unconfined compressive strength (Qu) values of 1.0 to 1.8 tsf, with an average of 1.5 tsf and moisture content values of 14 to 29%, with an average of 22%. Boring RW-01 encountered 2.7 feet of granular fill described as loose, brown loam characterized by SPT N value of 7 blows/foot and moisture content value of 13%.

2) Loose to dense gravelly sand

At elevations of 843.7 to 854.8 feet (2.0 to 5.5 feet bgs), the borings advanced through loose to dense, brown to gray fine to coarse gravelly sand. This soil has SPT N-values of 9 to 31 blows/foot, with an average of 20 blows/foot and moisture content values of 6 to 21%, with an average of 12%. Out of 37 samples, only one sample encountered loose and one sample encountered dense granular soil. The majority relative density of the granular soil is medium dense.

While drilling the groundwater table was recorded at elevations ranging from 847.3 to 852.5 feet (4.0 to 4.5 feet bgs); and at the completion of drilling the water level was recorded at elevations of 846.8 to 850.5 feet (6.0 feet bgs).

Engineering Analysis and Recommendations

Based on the preliminary TSL and cross section drawings provided by WBKA for the proposed culvert replacement, permanent steel sheet pile wall is proposed to be constructed from Station 91+50 to Station 96+46 at the northwest corner of the proposed culvert barrel. The proposed wall maximum height is approximately 3.2 feet.

The proposed wall will retain mainly new fill from increasing the profile grade elevation. Below the ground line, at the front face, the wall will be supported by stiff silty clay loam underlain by medium dense gravelly sand. Based on the soil conditions encountered along the proposed wall, Wang estimates the soil conditions are appropriate for the support of sheet pile wall. The wall should be designed under drained (long term) condition. Geotechnical parameters for design are presented in Table 1.



Table 1: Recommended Soil Parameters for Steel Sheet Pile Wall Design

Layer Elevation/ Soil Description	Moist Unit Weight	Shear Short ' Cohesion Cu	r Strength Pro Term Friction Angle, φ	perties Long Term Friction Angle, φ'	Estimated Lateral Soil Modulus Parameter	Estimated Soil Strain Parameter, 850
	(pcf)	(psf)	(Degree)	(Degree)	(Static), k (pci)	
New Fill* Cohesive/ Granular Fill	120	250	0	28	20	-
853 to 849 Stiff Cohesive	120	1300	0	30	450	0.0075
849 to 816 Medium Dense Granular - Submerged	125	0	32	32	50	-

^{*} The parameters for new fill represent conservative values.

According to the AASHTO LRFD Bridge Design Specifications (AASHTO, 2012)¹, the lateral pressure on permanently flexible walls should be estimated using the effective stress method analysis and the drained shear strength parameters of the soils. In addition, three feet of the embedded portion below the finished grade in front of the wall should not be considered as providing any passive lateral support. The simplified earth pressure distributions shown in AASHTO (AASHTO, 2012) or other suitable earth pressure distributions should be used. Some difficult pile driving condition during installation might be experienced in the medium dense gravelly sand soil.

Construction Considerations

Excavations should be performed in accordance with local, state, and federal regulations. The potential effect of ground movements upon nearby utilities should be considered during construction. No utility conflicts were identified that would impact the foundation design. However, the Contractor should ensure there are no utility conflicts with the final design and construction program.

Fill material to attain the final design elevations should be structural fill material. Coarse aggregate of IDOT gradation CA-6 or pre-approved, compacted, cohesive or granular soil conforming to IDOT

¹ American Associatoopn of State Highway Transportation Official, 2012, AASHTO LRFD Bridge Design Specifications. United States Department of Transportation, Washington, D.C.



Section 204 would be acceptable as structural fill (IDOT, 2012)². The fill material should be free of organic matter and debris. Structural fill should be placed in lifts and compacted according to Section 205, Embankment (IDOT, 2012)

Preliminary Environmental Assessment

To determine the type, mode, and characteristics of the soils disposal necessary during construction, Wang has sampled the subgrade soils in four borings (Borings RW-03, HA-01 through HA-03), for environmental purposes. During the entire investigation, Wang's field geologist inspected each soil sample for staining, odor or other signs of contamination. Soil samples were also monitored in the field for total organic vapors using a calibrated photoionization detector (PID). The PID readings are shown in the in the *Boring Logs* included in Appendix A and in Table 2.

Table 2 – Summary of PID readings

Boring ID	Sample number	Sampling Interval	PID readings
	SI	0.0-2.0	2.0
	S2	2.0-4.0	1.2
HA-01	S3 .	4.0-6.0	1.0
	S4	6.0-8.0	0.8
	S5	8.0-10.0	0.6
	St	0.0-2.0	23.4
	S2	2.0-4.0	4.6
HA-02	S 3	4.0-6.0	3.2
	S4	6.0-8.0	2.1
	\$5	8.0-10.0	1.8
	S1	0.0-2.0	0.8
	S2	2.0-4.0	1.1
HA-03	\$3	4.0-6.0	0.4
	\$4	6.0-8.0	0.2
	S5	8.0-10.0	0.0

² Illinois Department of Transportation, 2012, Standard Specifications for Road and Bridge Construction. IDOT Dicision of Highways, Springfield, IL.



	\$1	1.0-1.5	0.4
RW-03	S2	3.5-5.0	0.3
	S3	6.0-7.5	0.3
	\$4	8.5-10.0	0.2

Field sampling of soils collected for analytical testing was performed in accordance with SW 846 Method 5035. Soil sample containers were labeled, placed in an ice-filled cooler, and submitted under chain-of-custody to First Environmental Laboratory, Inc. in Naperville, Illinois (IL EPA Accreditation #100292).

Analytical testing was performed on soil sample collected from the top 2 feet of Borings HA-02. The selected soil samples were analyzed for Volatile Organic Compounds (VOCs, IL EPA Method 5035A/8260B), Semi VOCs (Method 8270C), Polychlorinated Biphenyls (PCBs, Method 8081A/8082), Total Metals (Method 6010B), and pH (Method 9045C). A summary table of the laboratory results, showing only the concentrations above the Practical Quantitation Limit (PQL), is provided in Appendix B. The concentrations are expressed on a dry unit weight basis. The complete laboratory analytical report is attached as Appendix C.

Based on the analytical test results of a sample obtained during our investigation, Wang considered that soil is uncontaminated and it can be disposed of to landfills accepting uncontaminated soils. However, suggestions of clean versus contaminated soils cannot be done exclusively on PID readings and/or few scattered chemical tests, additional investigation should be done during the construction phase.

Waste Classification

Our preliminary environmental analyses suggest that the soils along the proposed improvement should be treated as clean as per *Maximum Allowable Concentrations (MAC)* (35 Ill. Adm. Code 1100.Subpart F) and soil can be disposed of at designated CCDD landfills. The permit for disposal of clean soils could be based on CCDD certification PE/PG signed or a Clean Soil Certification form provided by the landfill operation. A CCDD form LPC-663 and example of landfill own certification form are shown in Appendix E.

However, if during construction the soils along the improvement are identified as contaminated, then they will be considered special waste, according to Section 22.8 of the Illinois Environmental Protection Act (Act). Even though the evaluation may find contaminants, certain non-liquid, non-



hazardous special wastes can be excluded from the definition of special waste if the generator produces a certificate in accordance with the process from Section 3.475(c) of the Act (Appendix D). The generator non-special waste certificate must show the waste as 1) non-hazardous, 2) non-liquid, 3) not containing asbestos materials, 4) not containing PCBs, 5) not formerly hazardous waste rendered non-hazardous, and 6) not resulting from shredded recyclable metals. In addition, for obtaining a disposal operating permit, a composite soil sample shall be collected during construction and analyzed for Paint Filter, Open Cup Flash Point, Total Cyanide, Reactive Sulfide and Phenols. This testing and certification allows pollution-control special waste to be shipped as Non-Special Waste to properly permitted facilities without manifesting or using special-waste haulers. Non-special Waste Certification Process is shown in Appendix D.

Qualifications

The analyses and recommendations presented in this report are based upon the data obtained from the borings drilled at the locations shown in Exhibit 2, and Boring Logs. This report does not reflect any variations that may occur between the borings or elsewhere on the site, variations whose nature and extent may not become evident until the course of construction. In the event that any changes in the design and/or location of the culvert, we should be timely informed so that our recommendation can adjusted accordingly.

It has been a pleasure to assist Wills Burke Kelsey Associates, Ltd and Kane County on this project. Please call if there are any questions, or if we can be of further service.

Respectfully Submitted,

WANG ENGINEERING, INC.

Andri Kurnia, P.E.

Project Engineer

Jerry W. H. Wang, PhD, P.E.

QA/QC Reviewer

Cornelia L. Marin

Engineering Geologist

Geotechnical

Construction

Environmental

Quality Engineering Services Since 1982



Illinois Environmental Protection Agency

Bureau of Land • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

Uncontaminated Soil Certification

by Licensed Professional Engineer or Licensed Professional Geologist for Use of Uncontaminated Soil as Fill in a CCDD or Uncontaminated Soil Fill Operation LPC-663

Revised in accordance with 35 III. Adm. Code 1100, as amended by PCB R2012-009 (eff. Aug. 27, 2012)

This certification form is to be used by professional engineers and professional geologists to certify, pursuant to 35 III. Adm. Code 1100.205(a)(1)(B), that soil (i) is uncontaminated soil and (ii) is within a pH range of 6.26 to 9.0. If you have questions about this form, please telephone the Bureau of Land Permit Section at 217/524-3300.

This form may be completed online, saved locally, printed and signed, and submitted to prospective clean construction or demolition debris (CCDD) fill operations or uncontaminated soil fill operations.

. Source Location Information			
Describe the location of the source of the un	contaminated so	oil)	
Project Name: Allan Road Phase II		Office Phone Nu	umber, if available:
Physical Site Location (address, inclduding n Allen Road	umber and stree	et):	
ity: Hampshire State:	<u>!L</u>	Zip Code:	
County: <u>Kane</u>		Township: Hampshire	
.at/Long of approximate center of site in dec	imal degrees (D	D.ddddd) to five decimal p	laces (e.g., 40.67890, -90.12345):
Latitude: 42.106519 Longitude:	- -88,554838		
(Decimal Degrees)	(-Decimal Deg	rees)	
Identify how the lat/long data were determ	ined:	,	
GPS Map Interpolation F		on ☐ Survey ☒ Of	:her
ISGS - Public Land Survey System (PLSS	•	_ , _	
	L:	BOW:	BOA;
<i>、,,</i>	· · · · · · · · · · · · · · · · · · ·		
I. Owner/Operator Information for	Source Site		
Site Owner			Site Operator
lame: Kane County Division of Tra	insportation	Name:	
Street Address: 41W011 Burlington Road		Street Address:	
O Box:		PO Box:	
City: St. Charles	State: IL	City:	State:
Zip Code: <u>60175</u> Phone: _		Zip Code:	Phone:
Contact: Carl Schoedel, PE		Contact:	
Email if available: schoedelcarl@co kane il		Email if available:	

This Agency is authorized to require this information under Section 4 and Title X of the Environmental Protection Act (415 ILCS 5/4, 5/39). Failure to disclose this information may result in: a civil penalty of not to exceed \$50,000 for the violation and an additional civil penalty of not to exceed \$10,000 for each day during which the violation continues (415 ILCS 5/42). This form has been approved by the Forms

Project Name: Allan Road Phase II

Latitude: 42,106519 Longitude: --88,554838

Uncontaminated Site Certification

III. Basis for Certification and Attachments

For each item listed below, reference the attachments to this form that provide the required information.

a. A Description of the soil sample points and how they were determined to be sufficient in number and appropriately located 35 III. Adm. Code 1100.610(a)]:

Soil samples were collected along improvement, within the excavation sections. Samples were analyzed for specific contaminants of concern. Based on analytical results, the concentrations were below Maximum Allowable Concentrations (MAC) pursuant to Subpart F of CCDD regulations, 35 IL Adm. Code 1100. See attached Wang's Report dated June 19, 2014.

b. Analytical soil testing results to show that soil chemical constituents comply with the maximum allowable concentrations established pursuant to 35 III. Adm. Code Part 1100, Subpart F and that the soil pH is within the range of 6.25 to 9.0, including the documentation of chain of custody control, a copy of the lab analysis; the accreditation status of the laboratory performing the analysis; and certification by an authorized agent of the laboratory that the analysis has been performed in accordance with the Agency's rules for the accreditation of environmental and the scope of the accreditation [35 III. Adm. Code 1100.201(g), 1100.205(a), 1100.610]:

Please refer to attached Wang's "Permanent Steel Sheet Pile Wall and CCDD and Clean Soil Disposal Assessment" letter report dated June 19, 2014, for Summary of analytical results (Table A in Appendix B). The Laboratory Analytical Reports performed by accredited laboratory with the State of Illinois are included in Appendix C.

IV. Certification Statement, Signature and Seal of Licensed Professional Engineer or Licensed Professional Geologist

In Corina T. Farez, LPG (name of licensed professional engineer or geologist) certify under penalty of law that the information submitted, including but not limited to, all attachments and other information, is to the best of my knowledge and belief, true, accurate and complete. In accordance with the Environmental Protection Act [415 ILCS 5/22.51 or 22.51a] and 35 Ill. Adm. Code 1100.205(a), I certify that the soil from this site is uncontaminated soil. I also certify that the soil pH is within the range of 6.25 to 9.0. In addition, I certify that the soil has not been removed from the site as part of a cleanup or removal of contaminants. All necessary documentation is attached.

Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))

Company Name:	Wang Engineering, Inc.	
Street Address:	1145 North Main Street	
City:	Lombard	State: IL Zip Code: 60148
Phone:	(630) 953-9928	70010
Corina T Farez, LPG /) Printed N	ame:	QROFESSIONAL QR
CONT:	Fanj	7/24/2015 (CORINA T. FAREZ)
Licensed Profession Licensed Profession	onal Engineer or onal Geologist Signature:	Date: 196-000607 (C)



August 8, 2014

Mr. S. Brent Pottorff, P.E.

Wills Burke Kelsey Associates

116 West Main Street, Suite 201

St. Charles, Illinois 60174

RE:

Addendum to Structure Geotechnical Report dated July 8, 2013

Allen Road over Hampshire Creek

Kane County, Illinois

Wang No. 412-07-01

Dear Mr. Pottorff:

Following the submittal of our Structure Geotechnical Report (RGR) dated July 8, 2013, Wang Engineering Inc. (Wang) presents this addendum regarding the proposed roadway reconstruction at Allen Road over Hampshire Creek. Based on the most current drawings provided by Wills Burke Kelsey Associates (WBK) on July 29, 2014, Wang reassessed the site condition for any potential undercuts. Wang understands the entire roadway will be raised, and the proposed pavement structure will consist of 2-inch thick HMA surface course, 8.75-inch thick HMA binder course, and 12-inch thick aggregate subgrade improvement.

Wang understands WBK is considering removing the existing HMA pavement. After pavement removal, we recommend the exposed subgrade should be proofrolled as mentioned in Section 7.1 of the SGR. Boring RB-04 shows buried topsoil from 1.5 to 3.0 feet bgs (at elevations 859.3 to 857.9 feet). If this topsoil is exposed during the subgrade preparation of the widening portion, it should be removed within the proposed widening area. The possible area requiring treatment is shown in table 1.



Limits	Treatment	Treatment	Boring	
(Station to Station)	Elevation (feet)	Width	Reference	
		(feet)		

Wang recommends the installation of underdrains to remove the surface water that enters the pavement, especially if the additional fill for raising the grade is going to be cohesive. However, if the fill is granular, the underdrains might not be necessary.

It has been a pleasure to assist Wills Burke Kelsey Associates on this project. Please contact us if there are any questions, or if we can be of further service.

Respectfully Submitted,

WANG ENGINEERING, INC.

Andri Kurnia, P.E. Geotechnical Engineer Jerry W.H. Wang, Ph.D., P.E. QA/QC Reviewer

Corina T. Farez, P.E., P.G.

Principal

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

SPECIAL PROVISION FOR INSURANCE

Effective: February 1, 2007 Revised: August 1, 2007

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

The Contractor shall name the following entities as additional insured under the Contractor's

general liability insurance policy in accordance with Article 107.27:

KANE COUNTY

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.

BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID)

Effective: November 2, 2006

Revised: July 1, 2015

<u>Description</u>. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and preventative maintenance type surface treatments that are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, joint filling/sealing, or extra work paid for at a lump sum price or by force account.

Method of Adjustment. Bituminous materials cost adjustments will be computed as follows.

 $CA = (BPI_P - BPI_L) \times (\%AC_V / 100) \times Q$

Where: CA = Cost Adjustment, \$.

BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/ton (\$/metric ton).

%AC_V = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.

Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = A x D x (G_{mb} x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x (G_{mb} x 1) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_{V_c}

For bituminous materials measured in gallons: Q, tons = $V \times 8.33$ lb/gal x SG / 2000 For bituminous materials measured in liters: Q, metric tons = $V \times 1.0$ kg/L x SG / 1000

Where: A = Area of the HMA mixture, sq yd (sq m).

D = Depth of the HMA mixture, in. (mm).

 G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

Percent Difference = $\{(BPI_L - BPI_P) \div BPI_L\} \times 100$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

ILLINOIS DEPARTMENT OF TRANSPORTATION

80173

OPTION FOR BITUMINOUS MATERIALS COST ADJUSTMENTS

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.:					
Company Name:_					
Contractor's Optic	<u>on</u> :				
Is your company op	ting to include	this spe	cial provision	as part of the contract?	
Yes		No			
Signature:				Date:	

COARSE AGGREGATE QUALITY (BDE)

Effective: July 1, 2015

Revise Article 1004.01(b) of the Standard Specifications to read:

"(b) Quality. The coarse aggregate shall be according to the quality standards listed in the following table.

COARSE AGGREGATE QUALITY							
QUALITY TEST	CLASS						
QOALITY TEOT	Α	В	C	D			
Na₂SO₄ Soundness 5 Cycle,	15	15	20	25 ^{2/}			
ITP 104 ¹ /, % Loss max.							
Los Angeles Abrasion,	40 ^{3/}	40 ^{4/}	40 5/	45			
ITP 96 11/, % Loss max.							
Minus No. 200 (75 μm) Sieve	1.0 ^{6/}		2.5 7/				
Material,	'''			1			
ITP 11							
Deleterious Materials 10/							
Shale, % max.	1.0	2.0	4.0 8/				
Clay Lumps, % max.	0.25	0.5	0.5 8/				
Coal & Lignite, % max.	0.25						
Soft & Unsound Fragments, %	4.0	6.0	8.0 8/				
max.							
Other Deleterious, % max.	4.0 9/	2.0	2.0 8/				
Total Deleterious, % max.	5.0	6.0	10.0 8/				
Oil-Stained Aggregate 10/, % max	5.0						

- 1/ Does not apply to crushed concrete.
- 2/ For aggregate surface course and aggregate shoulders, the maximum percent loss shall be 30.
- 3/ For portland cement concrete, the maximum percent loss shall be 45.
- 4/ Does not apply to crushed slag or crushed steel slag.
- 5/ For hot-mix asphalt (HMA) binder mixtures, except when used as surface course, the maximum percent loss shall be 45.
- 6/ For crushed aggregate, if the material finer than the No. 200 (75 μm) sieve consists of the dust from fracture, essentially free from clay or silt, this percentage may be increased to 2.5.

- 7/ Does not apply to aggregates for HMA binder mixtures.
- 8/ Does not apply to Class A seal and cover coats.
- 9/ Includes deleterious chert. In gravel and crushed gravel aggregate, deleterious chert shall be the lightweight fraction separated in a 2.35 heavy media separation. In crushed stone aggregate, deleterious chert shall be the lightweight fraction separated in a 2.55 heavy media separation. Tests shall be run according to ITP 113.
- 10/ Test shall be run according to ITP 203.
- 11/ Does not apply to crushed slag.

All varieties of chert contained in gravel coarse aggregate for portland cement concrete, whether crushed or uncrushed, pure or impure, and irrespective of color, will be classed as chert and shall not be present in the total aggregate in excess of 25 percent by weight (mass).

Aggregates used in Class BS concrete (except when poured on subgrade), Class PS concrete, and Class PC concrete (bridge superstructure products only, excluding the approach slab) shall contain no more than two percent by weight (mass) of deleterious materials. Deleterious materials shall include substances whose disintegration is accompanied by an increase in volume which may cause spalling of the concrete."

CONCRETE BOX CULVERTS WITH SKEWS > 30 DEGREES AND DESIGN FILLS ≤ 5 FEET (BDE)

Effective: April 1, 2012 Revised: April 1, 2015

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

"Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-inplace concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577."

Add the following after the seventh paragraph of Article 540.06 of the Standard Specifications:

"Precast concrete box culverts with skews greater than 30 degrees and having design covers less than or equal to 5 feet are not covered by the standard design table shown in ASTM C 1577. The design table provided herein is provided to address this design range. The same notes, reinforcement configurations, clearances, and requirements of ASTM C 1577 apply to this special design table. A box designated 7 x 6 x 8 indicates a span of 7 ft, a rise of 6 ft, and top slab, bottom slab, walls and haunches of 8 in. unless otherwise noted on the tables.

				3 ft x 2 ff	x 4 in.							
Design	Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1 As2 As3 As4 As5 As6 As7 As8 "M", in											
0<2*	0.17	1.10	0.30	0.10	0.28	0.17	0.92	0.14				
2<3	0.14	0.18	0.19	0.10					31			
3-5	0.10	0.12	0.12	0.10					29			

^{*}top slab 7.0 in., bottom slab 6.0 in.

3 ft x 3 ft x 4 in.												
	Design		7. 30	Circumfe	erential R	einforcem	ent Areas	, sq in./ ft				
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
1	0<2*	0.17	1.17	0.33	0.10	0.31	0.17	0.92	0.14			
	2<3	0.10	0.22	0.22	0.10					31		
	3-5	0.10	0.14	0.14	0.10					31		

^{*}top slab 7.0 in., bottom slab 6.0 in.

				4 ft x 2 ft	x 5 in.				
 Design			Circumfe	erential R	einforcem	ent Areas	s, sq in./ fl		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2*	0.21	0.88	0.26	0.12	0.28	0.18	0.89	0.14	
2<3	0.20	0.21	0.20	0.12					33
3-5	0.13	0.13	0.14	0.12					32

^{*}top slab 7.5 in., bottom slab 6.0 in.

	4 ft x 3 ft x 5 in.											
Des	_		(Circumfere	ential Reir	nforcemer	nt Areas,	sq in./ ft.		maknran		
Ear Cove		As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	2*	0.18	1.02	0.31	0.12	0.32	0.18	0.87	0.14			
2<	3	0.16	0.25	0.24	0.12					38		
3-	5	0.12	0.16	0.17	0.12					34		

^{*}top slab 7.5 in., bottom slab 6.0 in.

				4	ft x 4 ft x	5 in.				
	Design		C	ircumfere	ntial Rein	forcemer	nt Areas,	sq in./ ft.		
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2*	0.18	1.08	0.34	0.12	0.34	0.18	0.86	0.14	
1	2<3	0.13	0.28	0.27	0.12					38
	3-5	0.12	0.18	0.19	0.12					38

^{*}top slab 7.5 in., bottom slab 6.0 in.

5 ft x 2 ft x 6 in.													
Design		Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	s1 As2 As3 As4 As5 As6 As7 As8 "M", in.											
0<2*	0.27	0.63	0.23	0.14	0.24	0.19	0.19	0.17	 				
2<3	0.25	0.22	0.20	0.14					37				
3-5	0.17	0.15	0.15	0.14					35				

^{*}top slab 8.0 in., bottom slab 7.0 in.

				5	ft x 3 ft x	6 in.				· · · · · · · · · · · · · · · · · · ·		
	Design		C	Circumfere	ntial Rein	forcemer	nt Areas,	sq in./ ft.				
C	Earth Cover, ft. As1 As2 As3 As4 As5 As6 As7 As8 "N											
	0<2*	0.20	0.72	0.27	0.14	0.29	0.19	.0.71	0.17			
	2<3	0.21	0.26	0.25	0.14					37		
[3-5	0.14	0.18	0.18	0.14					35		

^{*}top slab 8.0 in., bottom slab 7.0 in.

			5	ft x 4 ft x	6 in.								
Design		Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.				
0<2*	0.19	0.78	0.30	0.14	0.31	0.19	0.70	0.17	AA				
2<3	0.18	0.30	0.28	0.14					45				
3-5	0.14	0.20	0.21	0.14					40				

^{*}top slab 8.0 in., bottom slab 7.0 in.

			·	5	ft x 5 ft x	6 in.				
	Design		(Circumfere	ential Rei	nforceme	nt Areas,	sq in./ ft	•	
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2*	0.19	0.82	0.33	0.14	0.34	0.19	0.69	0.17	
	2<3	0.16	0.33	0.32	0.14					45
	3-5	0.14	0.22	0.23	0.14					45

^{*}top slab 8.0 in., bottom slab 7.0 in.

			6	ft x 2 ft x	7 in.				·····			
Design	Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2*	0.33	0.51	0.21	0.17	0.23	0.19	0.61	0.17				
2<3	0.31	0.22	0.22	0.17					42			
3-5	0.22	0.17	0.17	0.17					41			

^{*}top slab 8.0 in.

1			6	ft x 3 ft x	7 in.			VF. 11.01111					
Design		Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.				
0<2*	0.27	0.58	0.26	0.17	0.27	0.19	0.58	0.17					
2<3	0.26	0.27	0.27	0.17					41				
3-5	0.18	0.19	0.20	0.17					39				

^{*}top slab 8.0 in.

6 ft x 4 ft x 7 in.											
	Design		(Circumfe	ential Re	inforceme	ent Areas	, sq in./ ft	•		
ł	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
	0<2*	0.25	0.64	0.30	0.17	0.30	0.19	0.57	0.17		
	2<3	0.23	0.31	0.31	0.17					42	
	3-5	0.17	0.22	0.23	0.17					41	

^{*}top slab 8.0 in.

			+	3 ft x 5 ft	x 7 in.			s and the critical			
Design		(Circumfer	ential Re	inforceme	ent Areas	, sq in. / f				
Earth Cover, ft.	As1 As2 As3 As4 As5 As6 As7 As8										
0<2*	0.23	0.68	0.33	0.17	0.32	0.19	0.56	0.17			
2<3	0.20	0.34	0.35	0.17					52		
3-5	0.17	0.17 0.24 0.25 0.17									

^{*}top slab 8.0 in.

			(6 ft x 6 ft :	x 7 in.					
Design		(Circumfe	ential Re	inforceme	ent Areas	, sq in./ ft			
Earth Cover, ft.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0									
0<2*	0.21	0.72	0.37	0.17	0.34	0.19	0.55	0.17		
2<3	0.18	0.37	0.38	0.17					52	
3-5	0.17 0.26 0.28 0.17									

^{*}top slab 8.0 in.

				7 ft x 2 ft :	x 8 in.						
Design		(Circumfe	ential Re	inforceme	ent Areas	, sq in./ ft				
Earth Cover, ft.	As1	As1 As2 As3 As4 As5 As6 As7 As8									
0<2	0.38	0.60	0.26	0.19	0.22	0.19	0.75	0.19			
2<3	0.38	0.24	0.24	0.19					46		
3-5	5 0.27 0.19 0.19										

			•	7 ft x 3 ft :	x 8 in.				
Design		ı	Circumfe	rential Re	inforceme	ent Areas	, sq in./ ff		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.36	0.57	0.32	0.19	0.25	0.19	0.71	0.19	
2<3	0.33	0.29	0.30	0.19					44
3-5	0.23	0.21	0.21	0.19					42

1				•	7 ft x 4 ft :	x 8 in.				
	esign		•	Circumfer	ential Re	inforceme	ent Areas	, sq in./ ft		
	Earth ver, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2	0.34	0.61	0.37	0.19	0.27	0.19	0.70	0.19	
	2<3	0.29	0.34	0.34	0.19					44
1	3-5	0.21	0.24	0.25	0.19					42

			•	7 ft x 5 ft :	x 8 in.					
Design		RANGE IN THE STATE OF THE STATE	Circumfe	ential Re	inforceme	ent Areas	, sq in./ ft	•		
Earth Cover, ft.	arth Act Act Act Act Act Act									
0<2	0.32	0.65	0.42	0.19	0.30	0.19	0.69	0.19		
2<3	0.26	0.37	0.38	0.19					49	
3-5	0.19	0.27	0.28	0.19					46	

				7 ft x 6 ft :	x 8 in.					
Design			Circumfe	rential Re	inforceme	ent Areas	, sq in./ ft	•		
Earth Cover, ft.	Earth As1 As2 As3 As4 As5 As6 As7 As8									
0<2	0.29	0.69	0.46	0.19	0.32	0.19	0.67	0.19		
2<3	0.23	0.40	0.42	0.19					59	
3-5	0.19	0.29	0.30	0.19					55	

			-	7 ft x 7 ft x	8 in.				
Design		!	Circumfer	ential Rei	nforceme	nt Areas,	sq in./ ft.		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.27	0.73	0.50	0.19	0.34	0.19	0.65	0.19	
2<3	0.21	0.43	0.45	0.19					59
3-5	0.19	0.31	0.33	0.19					59

				8 ft x 2 ft :	x 8 in.						
Design Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.47	0.50	0.29	0.19	0.23	0.19	0.61	0.19			
2<3	0.51	0.30	0.31	0.19					50		
3-5	0.36	0.22	0.22	0.19					48		

1			(3 ft x 3 ft	x 8 in.						
Design			Circumfe	rential Re	inforceme	ent Areas	, sq in./ ft				
Earth Cover, ft.	As1	As1 As2 As3 As4 As5 As6 As7 As8									
0<2	0.43	0.49	0.35	0.19	0.26	0.19	0.58	0.19			
2<3	0.45	0.36	0.37	0.19					48		
3-5	0.32	0.26	0.27	0.19					45		

				8	3 ft x 4 ft x	8 in.				
_	Design			Circumfer	ential Rei	nforceme	nt Areas,	sq in./ ft.		
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2	0.40	0.52	0.40	0.19	0.29	0.19	0.57	0.19	
	2<3	0.40	0.42	0.43	0.19					45
	3-5	0.28	0.30	0.31	0.19					45

	8 ft x 5 ft x 8 in.												
Design	Circumferential Reinforcement Areas, sq in./ ft.												
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.				
0<2	0.37	0.56	0.45	0.19	0.31	0.19	0.56	0.19					
2<3	0.36	0.46	0.47	0.19					48				
3-5	0.26	0.33	0.34	0.19					45				

	Design	Circumferential Reinforcement Areas, sq in./ ft.											
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
	0<2	0.34	0.61	0.49	0.19	0.33	0.19	0.56	0.19				
	2<3	0.33	0.50	0.52	0.19					56			
	3-5	0.24	0.36	0.37	0.19					50			

	8 ft x 7 ft x 8 in.											
	Design		(Circumfer	ential Re	inforceme	ent Areas	, sq in./ ft				
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
	0<2	0.32	0.65	0.53	0.19	0.35	0.19	0.56	0.19			
	2<3	0.30	0.53	0.56	0.19					65		
1_	3-5	0.22	0.38	0.40	0.19					61		

1			(8 ft x 8 ft :	x 8 in.				
Design		(Circumfer	ential Re	inforceme	ent Areas	, sq in./ ft		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.30	0.69	0.57	0.19	0.36	0.19	0.55	0.19	
2<3	0.28	0.56	0.59	0.19					65
3-5	0.20	0.40	0.43	0.19					65

				,	9 ft x 2 ft :	x 9 in.				
	Design		•	Circumfe	ential Re	inforceme	ent Areas	, sq in./ ft	•	
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2	0.46	0.35	0.26	0.22	0.22	0.22	0.47	0.22	
	2<3	0.58	0.32	0.32	0.22					55
	3-5	0.41	0.23	0.23	0.22					52

	9 ft x 3 ft x 9 in.											
Design		!	Circumfe	ential Re	inforceme	ent Areas	, sq in <i>./</i> ft					
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.42	0.35	0.32	0.22	0.23	0.22	0.47	0.22				
2<3	0.52	0.38	0.39	0.22					52			
3-5	0.37	0.27	0.28	0.22					49			

1			(9 ft x 4 ft :	x 9 in.			W	
Design Circumferential Reinforcement Areas, sq in./ ft.									
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.38	0.38	0.36	0.22	0.25	0.22	0.47	0.22	
2<3	0.47	0.44	0.45	0.22					52
3-5	0.33	0.31	0.32	0.22					49

1			!	9 ft x 5 ft :	x 9 in.				. ,
Design		!	Circumfe	ential Re	inforceme	ent Areas	, sq in./ ft.		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.35	0.41	0.41	0.22	0.28	0.22	0.47	0.22	
2<3	0.43	0.49	0.50	0.22					49
3-5	0.30	0.35	0.36	0.22					49

				(9 ft x 6 ft :	x 9 in.				
	Design		(Circumfer	ential Rei	nforceme	ent Areas,	sq in. / ft		
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2	0.32	0.44	0.44	0.22	0.29	0.22	0.47	0.22	
	2<3	0.39	0.53	0.54	0.22					55
	3-5	0.28	0.38	0.39	0.22					52

				(9 ft x 7 ft	x 9 in.				
	Design		(Circumfer	ential Re	inforceme	ent Areas,	sq in. / ft		
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2	0.30	0.46	0.48	0.22	0.31	0.22	0.45	0.22	
	2<3	0.36	0.56	0.59	0.22					64
	3-5	0.26	0.40	0.42	0.22					58

1			9	ft x 8 ft x	9 in.				
Design		(Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.28	0.49	0.52	0.22	0.33	0.22	0.45	0.22	
2<3	0.33	0.60	0.63	0.22					72
3-5	0.24	0.43	0.45	0.22					72

l			9	ft x 9 ft x	9 in.				
Design		(Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.27	0.51	0.55	0.22	0.34	0.22	0.45	0.22	
2<3	0.31	0.63	0.66	0.22					72
3-5	0.23	0.45	0.48	0.22					72

10 ft x 2 ft x 10 in.												
Design	Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.46	0.29	0.24	0.24	0.24	0.24	0.34	0.24				
2<3	0.66	0.33	0.34	0.24					59			
3-5	0.46	0.24	0.24	0.24					59			

	10 ft x 3 ft x 10 in.											
Design	Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.44	0.33	0.30	0.24	0.24	0.24	0.24	0.24				
2<3	0.59	0.40	0.41	0.24					59			
3-5	0.42	0.29	0.29	0.24					56			

				10	Oft x 4 ft :	x 10 in.				
	Design		(Circumfer	ential Re	inforceme	ent Areas	, sq in./ ft		
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2	0.40	0.36	0.35	0.24	0.24	0.24	0.24	0.24	
	2<3	0.54	0.46	0.47	0.24					56
	3-5	0.38	0.33	0.34	0.24					52

			10 in.						
Design		(Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.37	0.39	0.39	0.24	0.26	0.24	0.24	0.24	
2<3	0.49	0.51	0.52	0.24					52
3-5	0.35	0.36	0.38	0.24					52

			10	ft x 6 ft x	10 in.		,		
Design		(Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.34	0.42	0.43	0.24	0.28	0.24	0.42	0.24	
2<3	0.45	0.55	0.57	0.24					56
3-5	0.33	0.40	0.41	0.24					52

			10	ft x 7 ft x	10 in.			·	
Design		(Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.		
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.32	0.44	0.46	0.24	0.30	0.24	0.24	0.24	
2<3	0.42	0.59	0.62	0.24					59
3-5	0.31	0.42	0.45	0.24					56

			10 ft x 8 ft x 10 in.											
	Design		C	Circumfere	ential Rein	forcemer	nt Areas,	sq in. / ft.						
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.				
	0<2	0.30	0.47	0.50	0.24	0.31	0.24	0.24	0.24					
	2<3	0.39	0.63	0.66	0.24					75				
1_	3-5	0.29	0.45	0.48	0.24					66				

			10	ft x 9 ft x	10 in.							
Design	Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.28	0.49	0.53	0.24	0.33	0.24	0.24	0.24				
2<3	0.37	0.66	0.70	0.24					79			
3-5	0.27	0.47	0.51	0.24					79			

1_				10	ft x 10 ft x	10 in.				
	Design		(Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.	"	
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2	0.27	0.51	0.56	0.24	0.34	0.24	0.24	0.24	
	2<3	0.35	0.69	0.74	0.24					79
	3-5	0.26	0.50	0.54	0.24					79

]			1	1 ft x 2 ft	x 11 in.				***************************************			
Design	Circumferential Reinforcement Areas, sq in./ ft.											
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.			
0<2	0.50	0.27	0.26	0.26	0.26	0.26	0.26	0.26				
2<3	0.73	0.35	0.35	0.26					67			
3-5	0.52	0.26	0.26	0.26					63			

			1	1 ft x 3 ft	x 11 in.				
Design		ı	inforceme	nforcement Areas, sq in./ ft.					
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.45	0.31	0.29	0.26	0.26	0.26	0.26	0.26	
2<3	0.67	0.42	0.43	0.26					63
3-5	0.47	0.30	0.31	0.26					60

11 ft x 4 ft x 11 in.											
Design		(Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.				
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.		
0<2	0.41	0.34	0.33	0.26	0.26	0.26	0.26	0.26			
2<3	0.61	0.48	0.49	0.26					60		
3-5	0.43	0.35	0.35	0.26					56		

				11	ft x 6 ft x	11 in.	**************************************	***************************************		
	Design		(Circumfere	ential Reir	nforceme	nt Areas,	sq in./ ft.		
	Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
1	0<2	0.35	0.40	0.40	0.26	0.26	0.26	0.26	0.26	
	2<3	0.52	0.58	0.60	0.26					56
	3-5	0.37	0.42	0.43	0.26					56

11 ft x 8 ft x 11 in.									
Design									
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.31	0.45	0.47	0.26	0.30	0.26	0.26	0.26	
2<3	0.45	0.66	0.69	0.26					67
3-5	0.33	0.47	0.50	0.26					63

11 ft x 10 ft x 11 in.										
Design	Circumferential Reinforcement Areas, sq in./ ft.									
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.28	0.49	0.53	0.26	0.33	0.26	0.26	0.26		
2<3	0.41	0.73	0.77	0.26					86	
3-5	0.30	0.52	0.56	0.26					86	

11 ft x 11 ft x 11 in.									
Design	Circumferential Reinforcement Areas, sq in./ ft.								
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.27	0.51	0.56	0.26	0.34	0.26	0.26	0.26	
2<3	0.39	0.76	0.81	0.26					86
3-5	0.29	0.55	0.59	0.26					86

			12	2 ft x 2 ft :	x 12 in.				
Design		Circumferential Reinforcement Areas, sq in./ ft.							
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.51	0.29	0.29	0.29	0.29	0.29	0.29	0.29	
2<3	0.81	0.37	0.37	0.29					71
3-5	0.57	0.29	0.29	0.29					68

			12	2 ft x 3 ft	x 12 in.				
Design		Circumferential Reinforcement Areas, sq in./ ft.							
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.46	0.29	0.29	0.29	0.29	0.29	0.29	0.29	
2<3	0.74	0.44	0.44	0.29					68
3-5	0.53	0.32	0.32	0.29					64

	12 ft x 4 ft x 12 in.									
	Design									
(Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
	0<2	0.42	0.33	0.31	0.29	0.29	0.29	0.29	0.29	
	2<3	0.68	0.50	0.51	0.29					64
	3-5	0.49	0.36	0.37	0.29					60

	12 ft x 6 ft x 12 in.									
Design	Circumferential Reinforcement Areas, sq in./ ft.									
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.36	0.38	0.38	0.29	0.29	0.29	0.29	0.29		
2<3	0.59	0.60	0.62	0.29					60	
3-5	0.42	0.44	0.45	0.29					56	

12 ft x 8 ft x 12 in.									
Design	Circumferential Reinforcement Areas, sq in./ ft.								
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.
0<2	0.32	0.43	0.45	0.29	0.29	0.29	0.29	0.29	
2<3	0.52	0.69	0.72	0.29					67
3-5	0.38	0.50	0.52	0.29					64

	12 ft x 10 ft x 12 in.									
Design	Circumferential Reinforcement Areas, sq in./ ft.									
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.29	0.48	0.50	0.29	0.30	0.29	0.29	0.29		
2<3	0.46	0.76	0.80	0.29					93	
3-5	0.34	0.55	0.59	0.29					79	

	12 ft x 12 ft x 12 in.									
Design	Circumferential Reinforcement Areas, sq in./ ft.									
Earth Cover, ft.	As1	As2	As3	As4	As5	As6	As7	As8	"M", in.	
0<2	0.29	0.52	0.56	0.29	0.33	0.29	0.29	0.29		
2<3	0.43	0.83	0.89	0.29					93	
3-5	0.32	0.60	0.65	0.29					93"	

CONSTRUCTION AIR QUALITY - DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 1/	600-749	2002
**************************************	750 and up	2006
June 1, 2011 ^{2/}	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 ^{2/}	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

^{1/} Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) Verified Retrofit
 Technology List (http://www.epa.gov/cleandiesel/verification/verif-list.htm),
 or verified by the California Air Resources Board (CARB)
 (http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

^{2/} Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

Diesel Retrofit Deficiency Deduction

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

CONTRACT CLAIMS (BDE)

Effective: April 1, 2014

Revise the first paragraph of Article 109.09(a) of the Standard Specifications to read:

"(a) Submission of Claim. All claims filed by the Contractor shall be in writing and in sufficient detail to enable the Department to ascertain the basis and amount of the claim. As a minimum, the following information must accompany each claim submitted."

Revise Article 109.09(e) of the Standard Specifications to read:

"(e) Procedure. The Department provides two administrative levels for claims review.

Level I Engineer of Construction

Level II Chief Engineer/Director of Highways or Designee

- (1) Level I. All claims shall first be submitted at Level I. Two copies each of the claim and supporting documentation shall be submitted simultaneously to the District and the Engineer of Construction. The Engineer of Construction, in consultation with the District, will consider all information submitted with the claim and render a decision on the claim within 90 days after receipt by the Engineer of Construction. Claims not conforming to this Article will be returned without consideration. The Engineer of Construction may schedule a claim presentation meeting if in the Engineer of Construction's judgment such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. If a Level I decision is not rendered within 90 days of receipt of the claim, or if the Contractor disputes the decision, an appeal to Level II may be made by the Contractor.
- (2) Level II. An appeal to Level II shall be made in writing to the Engineer of Construction within 45 days after the date of the Level I decision. Review of the claim at Level II shall be conducted as a full evaluation of the claim. A claim presentation meeting may be scheduled if the Chief Engineer/Director of Highways determines that such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. A Level II final decision will be rendered within 90 days of receipt of the written request for appeal.

Full compliance by the Contractor with the provisions specified in this Article is a contractual condition precedent to the Contractor's right to seek relief in the Court of Claims. The Director's written decision shall be the final administrative action of the Department. Unless the Contractor files a claim for adjudication by the Court of Claims within 60 days after the date of the written decision, the failure to file shall constitute a release and waiver of the claim."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: November 2, 2015

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR Part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR Part 26 and listed in the 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, which may include, but is not limited to:

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

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. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform 15.00 % of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for 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.

DBE LOCATOR REFERENCES. Bidders shall 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 website at:

http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index.

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

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on completed Department forms SBE 2025 and 2026.
 - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting.

(2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to <u>DOT.DBE.UP@illinois.gov</u> or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five business day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the original certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation Bureau of Small Business Enterprises Contract Compliance Section 2300 South Dirksen Parkway, Room 319 Springfield, Illinois 62764

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration or to extend the time for award.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of Utilization 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 scanned or 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 Utilization 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; the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract.

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 that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, 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 documents sufficient commercially useful DBE work 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 document 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. In accordance with subsection (c)(6) of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

- (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 or 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 for the determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period in order to cure the deficiency.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the 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 A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and 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 consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration

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

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. 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 is 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 of 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 DBE regular dealer or DBE 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. All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the DBE Participation Commitment Statement.

- (a) NO AMENDMENT. 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) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. 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. 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 or AER 260A, must be signed and submitted. 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.

- (c) <u>SUBCONTRACT</u>. The Contractor must provide DBE subcontracts to IDOT upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable 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) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor,

with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident 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 (h) of this part.
- (g) ENFORCEMENT. 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.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my 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. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

80029

EQUAL EMPLOYMENT OPPORTUNITY (BDE)

Effective: April 1, 2015

<u>FEDERAL AID CONTRACTS</u>. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

"EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

- (1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- (2) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (according to the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- (3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.
- (4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the

Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

- (5) That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- (6) That it will permit access to all relevant books, records, accounts, and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- (7) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations."

<u>STATE CONTRACTS</u>. Revise Section II of Check Sheet #5 of the Recurring Special Provisions to read:

"II. EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

That it will not discriminate against any employee or applicant for employment because
of race, color, religion, sex, sexual orientation, marital status, order of protection status,
national origin or ancestry, citizenship status, age, physical or mental disability unrelated
to ability, military status, or an unfavorable discharge from military service; and further

that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

- 2. That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (according to the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- 3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service.
- 4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- 5. That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- 6. That it will permit access to all relevant books, records, accounts and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.
- 7. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights

Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations."

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

Effective: April 1, 2009 Revised: July 1, 2015

<u>Description</u>. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel 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 fuel cost adjustments for all categories of work. Failure to indicate "Yes" for any category of work will make that category of work exempt from fuel cost adjustment.

General. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and extra work paid for by agreed unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Extra work paid for at a lump sum price or by force account will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

(a) Categories of Work.

- (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
- (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

(b) Fuel Usage Factors.

English Units		
Category	Factor	Units
A - Earthwork	0.34	gal / cu yd
B – Subbase and Aggregate Base courses	0.62	gal / ton
C - HMA Bases, Pavements and Shoulders	1.05	gal / ton
D – PCC Bases, Pavements and Shoulders	2.53	gal / cu yd
E – Structures	8.00	gal / \$1000
Metric Units		
Category	Factor	Units
A - Earthwork	1.68	liters / cu m
B – Subbase and Aggregate Base courses	2.58	liters / metric ton
C – HMA Bases, Pavements and Shoulders	4.37	liters / metric ton
D – PCC Bases, Pavements and Shoulders	12.52	liters / cu m
E – Structures	30.28	liters / \$1000

(c) Quantity Conversion Factors.

Category	Conversion	Factor
В	sq yd to ton sq m to metric ton	0.057 ton / sq yd / in depth 0.00243 metric ton / sq m / mm depth
С	sq yd to ton sq m to metric ton	0.056 ton / sq yd / in depth 0.00239 m ton / sq m / mm depth
D	sq yd to cu yd sq m to cu m	0.028 cu yd / sq yd / in depth 0.001 cu m / sq m / mm depth

Method of Adjustment. Fuel cost adjustments will be computed as follows.

 $CA = (FPI_P - FPI_L) \times FUF \times Q$

Where: CA = Cost Adjustment, \$

FPI_P = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)

FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/gal (\$/liter)

FUF = Fuel Usage Factor in the pay item(s) being adjusted

Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

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

Percent Difference = $\{(FPI_L - FPI_P) \div FPI_L\} \times 100$

Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

ILLINOIS DEPARTMENT OF TRANSPORTATION

80229

OPTION FOR FUEL 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 fuel cost adjustments in all categories. Failure to indicate "Yes" for any category of work at the time of bid will make that category of work exempt from fuel 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 following categories of work?	ı as paı	rt of the contract plans	for the
Category A Earthwork.	Yes		
Category B Subbases and Aggregate Base Courses	Yes		
Category C HMA Bases, Pavements and Shoulders	Yes		
Category D PCC Bases, Pavements and Shoulders	Yes		
Category E Structures	Yes		
Signature:		Date:	

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010 | Revised: April 1, 2012

<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 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 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-4.75	Ndesign = 50	93.0 - 97.4%	91.0%
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 – PRIME COAT (BDE)

Effective: November 1, 2014

Revise Note 1 of Article 406.02 of the Standard Specifications to read:

"Note 1. The bituminous material used for prime coat shall be one of the types listed in the following table.

When emulsified asphalts are used, any dilution with water shall be performed by the emulsion producer. The emulsified asphalt shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion.

Application	Bituminous Material Types
Prime Coat on Brick, Concrete, or HMA Bases	SS-1, SS-1h, SS-1hP, SS-1vh, RS-1, RS-2, CSS-1, CSS-1h, CSS-1hp, CRS-1, CRS-2, HFE-90, RC-70
Prime Coat on Aggregate Bases	MC-30, PEP"

Add the following to Article 406.03 of the Standard Specifications.

"(i)	Vacuum Sweeper	1101.1	9
(i)	Spray Paver	1102.06	3"

Revise Article 406.05(b) of the Standard Specifications to read:

- "(b) Prime Coat. The bituminous material shall be prepared according to Article 403.05 and applied according to Article 403.10. The use of RC-70 shall be limited to air temperatures less than 60 °F (15 °C).
 - (1) Brick, Concrete or HMA Bases. The base shall be cleaned of all dust, debris and any substance that will prevent the prime coat from adhering to the base. Cleaning shall be accomplished by sweeping to remove all large particles and air blasting to remove dust. As an alternative to air blasting, a vacuum sweeper may be used to accomplish the dust removal. The base shall be free of standing water at the time of application. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface as specified in the following table.

Type of Surface to be Primed	Residual Asphalt Rate
	lb/sq ft (kg/sq m)
Milled HMA, Aged Non-Milled HMA, Milled Concrete,	0.05 (0.244)
Non-Milled Concrete & Tined Concrete	` '
Fog Coat between HMA Lifts, IL-4.75 & Brick	0.025 (0.122)

The bituminous material for the prime coat shall be placed one lane at a time. If a spray paver is not used, the primed lane shall remain closed until the prime coat is

fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

(2) Aggregate Bases. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft ± 0.01 (1.21 kg/sq m ±0.05).

The prime coat shall be permitted to cure until the penetration has been approved by the Engineer, but at no time shall the curing period be less than 24 hours for MC-30 or four hours for PEP. Pools of prime occurring in the depressions shall be broomed or squeegeed over the surrounding surface the same day the prime coat is applied.

The base shall be primed 1/2 width at a time. The prime coat on the second half/width shall not be applied until the prime coat on the first half/width has cured so that it will not pickup under traffic.

The residual asphalt rate will be verified a minimum of once per type of surface to be primed as specified herein for which at least 2000 tons (1800 metric tons) of HMA will be placed. The test will be according to the "Determination of Residual Asphalt in Prime and Tack Coat Materials" test procedure.

Prime coat shall be fully cured prior to placement of HMA to prevent pickup by haul trucks or paving equipment. If pickup occurs, paving shall cease in order to provide additional cure time, and all areas where the pickup occurred shall be repaired.

If after five days, loss of prime coat is evident prior to covering with HMA, additional prime coat shall be placed as determined by the Engineer at no additional cost to the Department."

Revise the last sentence of the first paragraph of Article 406.13(b) of the Standard Specifications to read:

"Water added to emulsified asphalt, as allowed in Article 406.02, will not be included in the quantities measured for payment."

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

"Aggregate for covering prime coat will not be measured for payment."

Revise the first paragraph of Article 406.14 of the Standard Specifications to read:

"406.14 Basis of Payment. Prime Coat will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT), or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)."

Revise Article 407.02 of the Standard Specifications to read:

"407.02 Materials. Materials shall be according to Article 406.02, except as follows.

Item Article/Section

(a) Packaged Rapid Hardening Mortar or Concrete1018"

Revise Article 407.06(b) of the Standard Specifications to read:

"(b) A bituminous prime coat shall be applied between each lift of HMA according to Article 406.05(b)."

Delete the second paragraph of Article 407.12 of the Standard Specifications.

Revise the first paragraph of Article 408.04 of the Standard Specifications to read:

"408.04 Method of Measurement. Bituminous priming material will be measured for payment according to Article 406.13."

Revise the first paragraph of Article 408.05 of the Standard Specifications to read:

"408.05 Basis of Payment. This work will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT) or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) and at the contract unit price per ton (metric ton) for INCIDENTAL HOT-MIX ASPHALT SURFACING."

Revise Article 1032.02 of the Standard Specifications to read:

"1032.02 Measurement. Asphalt binders, emulsified asphalts, rapid curing liquid asphalt, medium curing liquid asphalts, slow curing liquid asphalts, asphalt fillers, and road oils will be measured by weight.

A weight ticket for each truck load shall be furnished to the inspector. The truck shall be weighed at a location approved by the Engineer. The ticket shall show the weight of the empty truck (the truck being weighed each time before it is loaded), the weight of the loaded truck, and the net weight of the bituminous material.

When an emulsion or cutback is used for prime coat, the percentage of asphalt residue of the actual certified product shall be shown on the producer's bill of lading or attached certificate of analysis. If the producer adds extra water to an emulsion at the request of the purchaser, the amount of water shall also be shown on the bill of lading.

Payment will not be made for bituminous materials in excess of 105 percent of the amount specified by the Engineer."

Add the following to the table in Article 1032.04 of the Standard Specifications.

"SS-1vh	160-180	70-80
RS-1, CRS-1	75-130	25-55"

Add the following to Article 1032.06 of the Standard Specifications.

"(g) Non Tracking Emulsified Asphalt SS-1vh shall be according to the following.

Requirements for SS-1vh				
Test		SPEC	AASHTO Test Method	
Saybolt Viscosity @ 25C,	SFS	20-200	T 72	
Storage Stability, 24hr.,	%	1 max.	T 59	
Residue by Evaporation,	%	50 min.	T 59	
Sieve Test,	%	0.3 max.	T 59	
Tests on Residue from Evaporation				
Penetration @25°C, 100g., 5 s	sec., dmm	20 max.	T 49	
Softening Point,	°C	65 min.	T 53	
Solubility,	%	97.5 min.	T 44	
Orig. DSR @ 82°C,	kPa	1.00 min.	T 315"	

Revise the last table in Article 1032.06(f)(2)d. of the Standard Specifications to read:

"Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, SS-1vh	Prime or fog seal
PEP	Bituminous surface treatment prime
RS-2, HFE-90, HFE-150, HFE-300, CRSP, HFP, CRS-2, HFRS-2	Bituminous surface treatment
CSS-1h Latex Modified	Microsurfacing"

Add the following to Article 1101 of the Standard Specifications.

"1101.19 Vacuum Sweeper. The vacuum sweeper shall have a minimum sweeping path of 52 in. (1.3 m) and a minimum blower rating of 20,000 cu ft per minute (566 cu m per minute)."

Add the following to Article 1102 of the Standard Specifications:

"1102.06 Spray Paver. The spreading and finishing machine shall be capable of spraying a rapid setting emulsion tack coat, paving a layer of HMA, and providing a smooth HMA mat in one pass. The HMA shall be spread over the tack coat in less than five seconds after the

LRFD PIPE CULVERT BURIAL TABLES (BDE)

Effective: November 1, 2013 | Revised: April 1, 2015

Revise Article 542.02 of the Standard Specifications to read as follows:

"Item	Article/Section
(a) Galvanized Corrugated Steel Pipe	1006.01
(b) Galvanized Corrugated Steel Pipe Arch	1006.01
(c) Bituminous Coated Corrugated Steel Pipe	1006.01
(d) Bituminous Coated Corrugated Steel Pipe Arch	1006.01
(e) Reserved	
(f) Aluminized Steel Type 2 Corrugated Pipe	1006.01
(g) Aluminized Steel Type 2 Corrugated Pipe Arch	
(h) Precoated Galvanized Corrugated Steel Pipe	1006.01
(i) Precoated Galvanized Corrugated Steel Pipe Arch	1006.01
(j) Corrugated Aluminum Alloy Pipe	
(k) Corrugated Aluminum Alloy Pipe Arch	1006.03
(I) Extra Strength Clay Pipe	
(m) Concrete Sewer, Storm Drain, and Culvert Pipe	1042
(n) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	
(o) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	
(p) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	
(q) Polyvinyl Chloride (PVC) Pipe	1040.03
(r) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	1040.03
(s) Corrugated Polypropylene (CPP) pipe with smooth Interior	
(t) Corrugated Polyethylene (PE) Pipe with a Smooth Interior	
(u) Polyethylene (PE) Pipe with a Smooth Interior	
(v) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete	•
(w) Mastic Joint Sealer for Pipe	
(x) External Sealing Band	
(y) Fine Aggregate (Note 1)	
(z) Coarse Aggregate (Note 2)	
(aa) Packaged Rapid Hardening Mortar or Concrete	
(bb) Nonshrink Grout	
(cc) Reinforcement Bars and Welded Wire Fabric	
(dd) Handling Hole Plugs	1042.16

Note 1. The fine aggregate shall be moist.

Note 2. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 542.03 of the Standard Specifications as follows:

"Class	Materials
Α	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
С	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Emptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
	Flexible Pipes:
	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch
	Precoated Galvanized Corrugated Steel Pipe
	Precoated Galvanized Corrugated Steel Pipe Arch
ļ	Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Arch
	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
	Polyethylene (PE) Pipe with a Smooth Interior
	Corrugated Polypropylene (CPP) Pipe with Smooth Interior
D	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
ļ	Flexible Pipes:
	Galvanized Corrugated Steel Pipe
	Galvanized Corrugated Steel Pipe Arch
	Bituminous Coated Corrugated Steel Pipe
	Bituminous Coated Corrugated Steel Pipe Arch
ļ	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch
	Precoated Galvanized Corrugated Steel Pipe
	Precoated Galvanized Corrugated Steel Pipe Arch
	Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Arch
ŀ	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
	Corrugated Polyethylene (PE) Pipe with a Smooth Interior Polyethylene (PE) Pipe with a Smooth Interior"
	Corrugated Polypropylene (CPP) Pipe with Smooth Interior
	Tournagated Fotypropylette (CFF) Fibe With Smooth Interior

Revise Articles 542.03(b) and (c) of the Standard Specifications to read:

- "(b) Extra strength clay pipe will only be permitted for pipe culverts Type 1, for 10 in., 12 in., 42 in. and 48 in. (250 mm, 300 mm, 1050 mm and 1200 mm), Types 2, up to and including 48 in. (1200 mm), Type 3, up to and including 18 in. (450 mm), Type 4 up to and including 10 in. (250 mm), for all pipe classes.
- (c) Concrete sewer, storm drain, and culvert pipe Class 3 will only be permitted for pipe culverts Type 1, up to and including 10 in (250 mm), Type 2, up to and including 30 in. (750 mm), Type 3, up to and including 15 in. (375 mm); Type 4, up to and including 10 in. (250 mm), for all pipe classes."

Replace the pipe tables in Article 542.03 of the Standard Specifications with the following:

	Type 7	Fill Height:	Greater than 30'	not exceeding 35'	>	>	^	>	>	^	>	>	>	>	>	^	>	2730	2740	2750	2750	2760	2770
Pipe	Type 6	Fill Height:	Greater than 25'	not exceeding 30'	^	>	Λ	>	>	^	>	>	۸	>	>	^	>	2370	2380	2390	2400	2410	2410
"Table IA: Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe	Type 5	Fill Height:	Greater than 20'	not exceeding 25'	2	≥	N	\ \	≥	N	٨١	≥	>	>	≥	Λ	>	2020	2020	2030	2040	2050	2060
"Table IA: Classes of Reinforced Concrete Pipe ive Diameters of Pipe and Fill Heights over the	Type 4	Fill Height:	Greater than 15'	not exceeding 20'	N	≥	≥	2	2	2	2	2	2	2	2	Δ	Α	2	2	1680	1690	1700	1710
"Table IA: Classe ective Diameters of	Type 3	Fill Height:	Greater than 10'	not exceeding 15'		=			=	=		=	=		=	=	_	=	=		=	=	1360
for the Resp	Type 2	Fill Height:	Greater than 3'	not exceeding 10'		=	=		=					_		_					=	=	
	Type 1	Fill Height:) Tr	3 and less 1' min cover	<u> </u>	≥	2		=	≥		=	=		=	=		: =	: =		=	=	=
		Nominal	Diameter	. £	12	5	18	21	24	30	36	42	48	54	09	99	72	1.7	84	06	96	102	108

Notes: A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

		Ĭ.	OR THE	RESPE	CTIVE D	IAMETE	ROFPII	TABI.	E IB: TP FILL HEI	TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2	S OF CC /ER THE	RRUGA:	TED STE	EL PIPE PE FOR 2	2/3"x1/2"	TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2", 3"x1" AND 5"x1" CORRUGATIONS	D 5"x1" C	ORRUGAT	FIONS		
		Type 1			Type 2			Type 3			Type 4			Type 5			Type 6			Type 7	
ıətəmei		Fill Height:		<u>u</u>	Fill Height:			Fill Height:	נג	Œ	Fill Height:			Fill Height:			Fill Height:			Fill Height:	
O lsnimo *.ni		3' and less 1' min. cover		Gre not e	Greater than 3' not exceeding 10'	n 3' g 10'	Gre	Greater than 10' not exceeding 15'	g 15'	Gree not e	Greater than 15' not exceeding 20'	15' , 20'	Gre	Greater than 20' not exceeding 25'	20° , 25°	Por	Greater than 25' not exceeding 30'	25' 30'	Gre	Greater than 30' not exceeding 35'	35'
PN	2 2/3" × 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" × 1/2"	3"x1"	5"x1"	2 2/3" × 1/2"	3"x1"	5"x1"	2 2/3" × 1/2"	3"x1"	5"x1"
12	0.064			0.064			0.064			0.064			0.064			0,064			0.064		
15	0.064			0.064			0.064			0.064			0.064			0.064			(0.079)		
<u>~</u>	(0.02)			0.064			0.064			0.064			0.064			(0.079)			(0.079)		
21	(0.079)			0.064			0.064			0.064			(0.079)			(0.079)			(0.079)		
24	(0.079)	*******		0.064			0.064			0.064			(0.079)			(0.079)			(0.109)		
30	(0.109E)			0.064			0.064			(0.079)			(0.079)			(0.109)			0.109		
36	(0.109E)			0.064			(0.079)			(0.079)			(0.109)			0.109			(0.138E)		
42	0.079			0.064			(0.079)			(0.079)			(0.109)			(0.109E)			(0.109E)		
48	0.109	(0.109)	0.109	(0.109)	0.079	0.079	(0.109)	0.079	(0.109)	0.109	(0.109)	0.109	(0.138)	(0.109)	0.109	(0.138E)	0.109	0.109	(0.138E)	0.109	(0.138)
54	0.109	(0.109)	0.109	(0.109)	0.079	0.079	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	0.109	(0.138)	(0.138E)	0.138	0.138
9	0.109	0.109	0.109	0.109	0.079	(0.109)	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	(0.138)	(0.138)	_	(0.138E)	(0.138E)
99	(0.138)	0.109	0.109	0.109	0.079	(0.109)	0.109	(0.109)	0.109	0.109	0.109	0.109	(0.138)	0.109	(0.138)	(0.138E)	0.138	0.138	0.138E	(0.138E)	0.138E
72	0.138	0.109	(0.138)	0.138	(0.109)	(0.109)	0.138	(0.109)	0.109	0.138	0.109	0.109	0.138	(0.138)	(0.138)	(0.168E) (0.138E)	(0.138E)	0.138E	(0.168E) (0.138E)	(0.138E)	0.138E
78	0.168	0.109	(0.138)	0.168	(0.109)	0.109	0.168	0.109	0.109	0.168	0.109	(0.138)	0.168	(0.138)	(0.138)	H0.168E (0.138E)	(0.138E)	0.138E	H0.168E	0.138E	(0.168E)
84	0,168	(0.138)	(0.138)	0.168	(0.109)	0.109	0.168	0.109	0.109	0.168	0.109	(0.138)	0.168	(0.138)	0.138	H0.168E (0.138E)	(0.138E)	0.138E	H0.168E (0.168E)	(0.168E)	(0.168E)
90		(0.138) (0.138)	(0.138)		(0.109)	0.109		0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		0.138E	(0.168E)		(0.168E) (0.168E)	(0.168E)
96		(0.138) (0.138)	(0.138)		(0.109)	0.109		0.109	0.109			(0.138)		(0.138)	0.138		(0.168E)	(0.168E)		(0.168E) (0.168E)	(0.168E)
102		0.109Z 0.109Z	0.109Z	•	(0.109)	0.109		0.109	(0.138)		(0.138)	(0.138)		(0.138)	0.138		(0.168E)	(0.168E)		HO,138E	H0.138E H0.168E
108		0.109Z (0.138Z	0.138Z)		0.109	0.109		0.109	(0.138)		(0.138)	0.138		0.138	(0.168)		(0.168E)	(0.168E)		HO.138E	H0.168E
114		0.109Z (0.138Z	9.138Z)		0.109	0.109		0.109	(0.138)		(0.138)	0.138		(0.168)	(0.168)		(0.168E)	0.168E		H0.138E	H0.168E
120		0.1092 (0.1382)	0.138Z)		0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		(0.168)	(0.168)		H0.138E H0.168E	H0.168E		H0.168E	HO.168E
126		0.138Z 0.138Z	9.138Z		0.138	0.138		0.138	0.138		0.138	(0.168)		(0.168)	(0.168)		H0.138E	H0.168E		H0.168E	H0.168E
132		0.138Z 0.138Z	0.138Z		0.138	0.138		0.138	0.138			(0.168)		_	0.168		H0.138E H0.168E	H0.168E		H0,168E	H0.168E
138		0.138Z 0.138Z	9.138Z		0.138	0.138		0.138	0.138			(0.168)	_	(0.168E)	H0.168⊑		H0.168E H0.168E	H0,168E		H0.168E	
144		0.168Z 0.168Z	0.168Z		0.168	0.168		0.168	0.168		0,168	0.168		H0.168E	H0.168E		H0.168E H0.168E	H0.168E		H0.168E	

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 42" according to Article 1006.01, 1 1/2" x 1/4" corrugations shall be used for diameters less than 12". Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is allowed.

A thickness preceded by "t" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e)

Z 1*-6" Minimum fill

TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm , 75 mm x 25 mm AND 125 mm x 25 mm CORRUGATIONS (Metric)	Type 7		2	125 x 25 68 x 13 75 x 25 125 x 25 mm mm	1.63	(2.01)	(2.01)	(2.01)	(2.77)	2.77	(3.51E)	(2.77E)	2.77 (3.51E) 2.77 (3.51)	3.51	_	3.51 3.51E (3.51E) 3.51E	(4.27E) (3.51E)	H 4.27E 3.51E	3.51E H 4.27E (4.27E) (4.27E)	(4.27E)	(4.27E)	(4.27E) H 3.51E H 4.27E	(4.27E) H 3.51E H 4.27E	4.27E H 3.51E H 4.27E	H 4.27E H 4.27E	H 4.27E H 4.27E		H 4.27E
m AND 125 mm x	Type 6 Fill Height:		not exceeding 9 m	68 x 13 75 x 25 125 x 25 mm mm	1.63	1.63	(2.01)	(2.01)	(2.01)	(2.77)	2.77	(2.77E)	(3.51E) 2.77	(3.51E) 2.77	(3.51E) (3.51)	(3.51E) 3.51	(4.27E) (3.51E)	H 4.27E (3.51E)	H 4.27E (3.51E)	3.51E	(4.27E)	(4.27E)	(4.27E)	(4.27E)	H 3.51E	H 3.51E	H 3.51E	H 4.27E
n, 75 mm x 25 m	Type 5 Fill Heinht	1 d d d d d d d d d d d d d d d d d d d	Greater than 6 m not exceeding 7.5 m	75 x 25 125 x 25 mm						100000			(2.77) 2.77	2.77 2.77	2.77 2.77	2.77 (3.51)	(3.51) (3.51)	(3.51) (3.51)	(3.51) 3.51	(3.51) 3.51	(3.51) 3.51	(3.51) 3.51	3.51 (4.27)	(4.27) (4.27)	(4.27) (4.27)	(4.27) (4.27)	4.27 4.27	(4.27E) H 4.27E
STEEL PIPE 8 mm x 13 mr	ĮŪ.	· ·	Grea not exc	25 68 x 13 75 x 25 mm mm	1.63	1.63	1.63	(2.01)	(2.01)	(2.01)	(2.77)	(2.77)	(3.51)	(3.51)	(3.51)	(3.51)	3.51	4.27	4.27									
TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE GHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 m (Metric)	Type 4		Greater than 4.5 m not exceeding 6 m	75 x 25 125 x 25									(2.77) 2.77	77.2 (77.2)	77.2 (2.77)	2.77 2.77	2.77	2.77 (3.51)	2.77 (3.51)	(3.51) (3.51)	(3.51) (3.51)	(3.51) (3.51)	(3.51) 3.51	(3.51) 3.51	(3.51) 3.51	3.51 (4.27)	(4.27) (4.27)	(4.27) (4.27)
NESS OF COR TOP OF THE ((Metric)	<u> </u>	(Grea not e	25 68 x 13 75 x 25	1.63	1.63	1.63	1.63	1.63	(2.01)	(2.01)	(2.01)	2.77	2.77	2.77	2.77	3.51	4.27	4.27			_			_			
IB: THICK	Type 3	: teigin:	Greater than 3 m not exceeding 4.5 m	75 x 25 125 x 25	┢			·					01 (2.77)	77.7	77.2 (77.7)	77.) 2.77	(2.77)	2.77 2.77	77 2.77	77. 2.77	77 2.77	(3.51)	(3.51)	77 (3.51)	(3.51) (3.51)	51 3,51	3.51	3.64
TABLE.	Tyj		Greater not excee	68 × 13 75 ×	╁	1.63	1.63	1.63	1.63	1,63	(2.01)	(2.01)	(2.77) 2.01	2.77 (2.77)		2.77 (2.77)	3.51 (2.7	4.27 2.7	4.27 2.77	2.77	2.77	2.77	2.77	2.77	(3.5	3.51	3.51	2 5.7
E AND FILI			11m g3m	125 x 25									2.01	2.01	(2.77)	(2.77)	(2.77)	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	3.51	3.51	2 7.7
TER OF PIF	Type 2	riii riegar.	Greater than 1 m not exceeding 3 m	13 75 x 25	<u> </u>								7) 2.01	7) 2.01			1 (2.77)				(2.77)	(2.77)	2.77	2.77	2.77	3.51	3.51	2 7
VE DIAMET			~ Ĕ	x 25 68 x 13	╁	1.63	1.63	1.63	1.63	1.63	1.63	1.63		_	·		3.51		_		ii)	Z2	12)	12)	12)	17	1Z	17
RESPECTI	Type 1	FIII Height:	1 m and less 0.3 m min. cover	75 x 25 125 x 25	-								77.7) 2.77	<u> </u>			H		_	-	(3.51) (3.51)		_	\vdash			-	
FOR THE		Ē	1m (68 x 13 75	╁	1.63	(5.01)	(2.01)	(2.01)	(2.77E)	(2.77E)	2.01		\vdash		_	-	-			<u>ප</u>	- 21		2.	-2	<u>ෆ</u>	3,	
	191		a lsn mm	imoM I	300	375	450	525	900	750	1	_	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	3000	3150	3300	2450

Aluminized Type 2 Steel or Precoated Galvanized Steet shall be required for diameters up to 1050 mm according to Article 1006.01, 38 mm x 6.5 mm corrugations shall be used for diameters less than 300 mm.

Thickness are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is allowed.

A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e)

Z 450 mm Minimum Fill

	FOR 1	THE RESPI	FOR THE RESPECTIVE DIAM	TAB IETER OF F	TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE ETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS	(NESS OF	CORRUGAT S OVER THE	ED ALUMII	NUM ALLOY HE PIPE FOI	PIPE 3 2 2/3"x1/2	" AND 3"x1"	CORRUGA	TIONS	
1 0	Type 1	9.1	Type	2.2	Type 3	3	Type 4	4	Type 5	3.5	Typ	Type 6	Type 7	9.7
amet	Fill Height	ight:	Fill Heig	ight:	Fill Height:	ght:	Fill Height:	ight:	Fill Height:	ight:	Fill Height:	eight:	Fill Height:	ight:
iO Isnir .ni	3' and less 1' min. cover	less cover	Greater than 3' not exceeding 10'	than 3' ding 10'	Greater than 10' not exceeding 15'	ıan 10' Jing 15'	Greater than 15' not exceeding 20'	nan 15' ding 20'	Greater than 20' not exceeding 25'	han 20' ding 25'	Greater than 25' not exceeding 30	Greater than 25' not exceeding 30'	Greater than 30' not exceeding 35'	han 30' ding 35'
noN	2 2/3"x1/2"	3"×1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"
12	(0.075)		0.060		090'0		090'0		0.060		090'0		090'0	
15	(0.075)		090'0		0.060		090'0		0.060		090.0		(0.075)	
2	(0.075)		090'0		090'0		0.060		090.0		(0.075)		H 0.060	
21	H 0.060E		090'0		0.060		090'0		(0.075)		H 0.060		H 0.060E	
24	(0.105E)		0.060		0.060		(0.075)		(0.105)		(0.105)		(0.105E)	
99	H 0.075E	H 0.060	0.075	H 0.060	0.075	H 0.060	(0.105)	H 0.060	(0.105)	H 0.060	H 0.075E	H 0.060	H 0.075E	H 0.060
36	(0.135E)	H 0.060E	0.075	H 0.060	(0.105)	H 0.060	(0.105)	H 0.060	(0.135)	H 0.060	H 0.075E	H 0.060	H 0.075E	H 0.060E
42	0.105E	(0.075)	0.105	090.0	0.105	0.060	0.105	090'0	0.105	(0.075)	0.105E	0.105	0.105E	(0.105E)
48	0.105E	(0.075)	0.105	090.0	0.105	0.060	0.105	(0.075)	0.105	(0.105)	0.105E	(0.105E)	0.105E	(0.135E)
54	0.105E	(0.105)	0.105	0.060	0.105	090'0	0.105	(0.075)	0.105	(0.105)	0.105E	(0.105E)	(0.135E)	(0.135E)
09	0.135E	(0.105)	0.135	090.0	0.135	(0.075)	0.135	(0.105)	0.135	(0.105)	0.135E	(0.135E)	(0.164E)	(0.135E)
99	0.164E	(0.105)	0.164	0.060	0.164	(0.075)	0.164	(0.105)	0.164	(0.135)	0.164€	(0.135E)	H 0.164E	(0.135E)
72	0.164E	(0.105)	0.164	090.0	0.164	(0.075)	0.164	(0.105)	0.164	(0.135)	H 0.164E	(0.135E)	H 0.164E	(0.164E)
78		(0.135)		0.075	•	(0.105)		(0.105)		(0.135)		(0.135E)		(0.164E)
84		(0.135)		0.105		0.105		(0.135)		(0.135)		(0.164E)		(0.164E)
06		(0.135)		0.105		0.105		(0.135)		(0.135)		(0.164E)		(0.164E)
96		(0.135)		0.105		0.105		(0.135)		(0.135)		(0.164E)		H 0.135E
102		0.1352		0.135		0.135		0.135		(0.164)		(0.164E)		H 0.135E
108		0.135Z		0.135		0.135		0.135		(0.164)		(0.164E)	- Harman	H 0.164E
114		0.164Z		0.164		0.164		0.164		0.164		H 0.164E		H 0.164E
120		0.164Z		0.164		0.164		0.164		0.164		H 0.164E		

Notes:
Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.
A thickness preceded by an "H" indicates only helical seam fabrication is allowed.
E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1'-6"
Z 1"-6" Minimum fill

TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm AND 75 mm x 25 mm CORRUGATIONS (Metric)	e 4 Type 5 Type 6 Type 7	eight: Fill Height: Fill Height:	an 4.5 m Greater than 6 m Greater than 7.5 m Greater than 9 m ding 6 m not exceeding 9 m not exceeding 10.5 m	68 x 13 75 x 25 mm mm	1.52 1.52	1.52 1.52 (1.91)	1.52 (1.91) H 1.52	(1.91) H 1.52 H 1.52E	(2.67) (2.67E) (2.67E)	H1.52 (2.67) H1.52 H1.91E H1.52 H1.91E H1.52	H1.52 (3.43) H1.52 H1.91E H1.52 H1.91E H1.52E	1.52 2.67 (1.91) 2.67E 2.67 2.67E (2.67E)	(1.91) 2.67 (2.67) 2.67E (2.67E) 2.67E (3.43E)	(1.91) 2.67 (2.67) 2.67E (2.67E) (3.43E) (3.43E)	(2.67) 3.43 (2.67) 3.43E (3.43E) (4.17E) (3.43E)	(2.67) 4.17 (3.43) 4.17E (3.43E) H4.17E (3.43E)	(2.67) 4.17 (3.43) H4.17E (3.43E) H4.17E (4.17E)	(2.67) (3.43) (3.43E) (4.17E)	(3.43) (4.17E) (4.17E) (4.17E)	(3.43) (4.17E) (4.17E)	(3.43) (4.17E) H 3.43E	3.43 (4.17) (4.17E) H 3.43E	3.43 (4.17) (4.17E) H 4.17E	4.17 H 4.17E H 4.17E	
RRUGATED AL AND FILL HEIG 75 mm x 25 mm (Metric)	Type 4	Fill Height:	Greater than 4.5 m not exceeding 6 m	68 x 13 75 x 2 mm mm	1.52	1.52	1.52	1.52	(1.91)	(2.67) H 1.52	(2.67) H 1.52	2.67 1.52	2.67 (1.91)	2.67 (1.91)	3.43 (2.67)	4.17 (2.67)	4.17 (2.67)	(2.67)	(3.43)	(3.43)	(3.43)	3.43	3.43	4.17	177
KNESS OF CO ETER OF PIPE x 13 mm AND 7	Type 3	Fill Height:	Greater than 3 m Greater than 3 m not exceeding 4.5 m n					- Comment		H 1.52	H 1.52	1.52	1.52	1.52	(1.91)	(1.91)	(1.91)	(2.67)	2.67	2.67	2.67	3.43	3.43	4.17	!
E IC: THICI FIVE DIAME DR 68 mm :	1	Ē	Greater not excee	68 x 13 mm	1.52	1.52	1.52	1.52	1.52	1.91	(2.67)	2.67	2.67	2.67	3.43	4.17	4.17								
TABLE RESPECT FC	Type 2	Fill Height:	Greater than 1 m	75 x 25 mm						H 1.52	H 1.52	1.52	1.52	1.52	1.52	1.52	1.52	1.91	2.67	2.67	2.67	3.43	3.43	4.17	
FOR THE	Tyt	T E	Greater not excet	68 x 13 mm	1.52	1.52	1.52	1.52	1.52	1.91	1.91	2.67	2.67	2.67	3.43	4.17	4.17								
)e 1	Fill Height:	1 m and less 0.3 m min, cover	75 x 25 mm						H 1.52	H 1.52E	(1.91)	(1.91)	(2.67)	(2.67)	(2.67)	(2.67)	(3.43)	(3.43)	(3.43)	(3.43)	3.43Z	3.432	4.17Z	1
	Туре	HH	1 m ai 0.3 m m	68 x 13 mm	(1.91)	(1.91)	(1.91)	H 1.52E	(2.67E)	H 1.91E	(3.43E)	2.67E	2.67E	2.67E	3.43E	4.17E	4.17E								
	ر	əjəm	siQ ler mm	ıimoM	300	375	450	525	900	750	006	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700	2850	

Notes:
Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.
A thickness preceded by an "H" indicates only helical seam fabrication is allowed.
E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 450 mm.
Z 450 mm Minimum fill

		1	-	able IIA	THICK OR THE	Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE	R CORRU	GATED {	STEEL P	IPE ARC	CHES AN >F PIPE ≠	D CORRI	ЈGATED НЕІСНТ	S OVER	JUM ALL	OY PIPE P OF PII	: ARCHE PE	S			
potentiar of potentiar of	-	-		1					Type 1					Type 2					Type 3		
Steel & Aluminum			Corrugate Steel Dine Arr	gate el	<u> </u>	Min.		匝	Fill Height:				豆	Fill Height:				ш	Fill Height		
Pipe Arch Pipe Arch 5"x1" 2 2/3" x 1/2" 3" x 1" 5" x 1"				ŧ =		3		ñ	3' and less			Grea	ter than	Greater than 3' not exceeding 10'	seeding 1	o,	Grea	ter than	10' not e	Greater than 10' not exceeding 15'	15'
i i			1	"	1 -	0.757		Steel		Afuminum	inum		Steel		Aluminum	mpr		Steel		Aluminum	mnu
(in.) (in.) (in.) (in.)	(in.)	(in.)		r 🗢	(in.)	Aluminum	2 2/3" × 1/2"	3"x1"	5" × 1"	2 2/3" × 1/2"	3"x1"	2 2/3" × 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" × 1/2"	3"x1"
13						1'-6"	0.064			0.060		0.064			090'0		0.064			090'0	
15						1-6"	0.064			0.060		0.064	_		0.060		0.064			090'0	
18						1'-6"	0.064			(0.075)		0.064			0.060		0.064			090.0	
20						16"	(0.079)			(0.105)		0.064			0.075		0.064			0.075	
24	-	-	-			1.6"	(0.079)			(0.105)		0,064	_		0.075	_	(0.07)			(0.105)	*******
59						16"	(0.079)			0.105		0.064			0.105		0.064			0.105	
33						1'-6"	0.109			0.105		(0.109)			0.105	_	(0.109)			0.105	
38 53 41 53	4		53		41	1'-6"	0.109	(0.109) (0.109)	(0.109)	0.135	090.0	0.109	0.079	0.079	0.135	090'0	0.109	0.079	(0.109)	0.135	0.060
43 60 46 60	46		09		46	1'-6"	0.109	(0.109)	0.109	0.164	(0.075)	0.109	0.079	0.079	0.164	090'0	0.109	(0.109)	0.109	0.164	(0.075)
47 66 51 66	51	<u> </u>	99		51	1'-6"	0.138	(0.109)	0.109	0.164	(0.075)	0.138	0.079	(0.109)	0.164	090.0	0.138	(0.109)	0.109	0.164	(0.075)
52 73 55 73	53		73		53	16"	0.168	(0.109)	0.109		0.075	0.168	0.079	(0.109)		0.075	0.168	(0.109)	0.109		0.075
81 59	26		81		29	1'-6"	0.168	(0.109)	0.109		0.105	0.168	0.079	(0.109)		0.105	0.168	(0.109)	0.109		0.105
87 63 87	63		87	1	63	1'-6"		0.109	0.109		0.105		(0.109)	0.109		0.105		0.109	0.109		0.105
95 67 95	29		92		29	1-6"		0.109	0.109		0.105		(0.109)	0.109		0.105		0.109	0.109		0.105
103 71 103	74		103		7.1	16"		0.109	0.109		0.135		(0.109)	0.109		0.135		0.109	0.109		0.135
112 75 112	75		112		75	1,-6"		0.109	(0.138)		0.164		0,109	0.109		0.164			(0.138)		0.164
117 79 117	79		117		62	1'-6"		0.109	(0.138)		0.164	,	0.109	0.109		0.164		0.109	(0.138)		0.164
128 83 128	83		128		83	1,-6"		0.138	0.138				0.138	0.138				0.138	0.138		
137 87 137	87		137		87	1-6"		0.138	0.138				0.138	0.138				0.138	0.138		
142 91 142	91		142		91	1-6"	•	0.168	0.168				0.168	0.168				0.168	0.168		

Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 42" according to Article 1006.01.

Thicknesses are based on longitudinal riveted seam fabrication, values in "(i)" can be reduced by one gage thickness if helical seam fabrication is utilized.

The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 3 tons per square foot.

The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 2 tons per square foot.

This minimum bearing capacity will be determined by the Engineer in the field.

Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)	Type 2 Type 3	Fill Height:	Greater than 1 m not exceeding 3 m Greater than 3 m not exceeding 4.5 m	sel Aluminum Steel Aluminum	5 125 x 25 68 x 13 75 x 25 68 x 13 7	4 50		.03	1.52 1.63 1.52	1.91 1.63 1.91	1.91 (2.01) (2.67)	2.67 1.63 2.67	2.67	01 2.01 3.43 1.52 2.77 2.01 (2.77) 3.43 1.52	31 2.01 4.17 1.52 2.77 (2.77) 2.77 4.17 (1.91)	(2.77) 4.17 1.52 3.51 (2.77) 2.77 4.17 (01 (2.77) 1.91 4.27 (2.77) 2.77 1.91	2.67 4.27 (2.77) 2.77 2.67	2.77 2.77 2.77	2.77 2.77 2.77	77) 2.77 3.43 2.77 2.77 3.43	2.77 4.17 (3.51)	2.77 4.17 2.77 (51 3.51 3.51 3.51	51 3.51 3.51 3.51	27 4.27 4.27
S		正	er than 3 r	Steel	75 x 25 1	-								2.01	(2.77)	(2.77)	(2.77)	(2.77)	2.77	2.77	2.77	2.77		3.51	3,51	4.27
E ARCHI IPE			Great			1 63	9 6	1.03	1.63	1.63	(2.01)	1.63	(2.77)	2.77	2.77	3.51	4.27	4.27								
LOY PIP			13 m	inum	75 x 25									1.52	1.52	1.52	1.91	2.67	2.67	2.67	3.43	4.17	4.17			
INUM AL R THE T		t:	xceeding	Alum	68 x 13	4 50	, ,	1.52	1.52	1.91	1.91	2.67	2,67	3,43	4.17	4.17										
D ALUM ITS OVE	Туре 2	∹ill Heigh	1 m not 6		125 x 25							-		2.01	2.01	(2.77)	(2.77)	(2.77)	2.77	2.77	2.77	2.77	2.77	3.51	3.51	4.27
RUGATE 1. HEIGP		_	ater than	Steel	75 x 25									2.01	2.01	2.01	2.01	2.01	(2.77)	(2.77)	(2.77)	2.77	2.77	3.51	3.51	4.27
ND COR			Gre				3 9	1.63	1.63	1.63	1.63	1.63	(2.77)	2.77	2.77	3.51	4.27	4.27								
ARCHES A ZE OF PIPE (Metric)				Aluminum	68 x 13 75 x 25									1.52	(1.91)	(1.91)	1.91	2.67	2.67	2.67	3.43	4.17	4.17			
PIPE AR JD SIZE (M		벁	SS	Afum			70"	1.52	(1.91)	(2.67)	(2.67)	2.67	2.67	3.43	4.17	4.17										
STEEL NT ROUN	Type 1	Fill Height:	1 m and less		68 x 13 75 x 25 125 x 25	E								(2.77)	2.77	2.77	2.77	2.77	2.77	2.77	2.77	(3.51)	(3.51)	3.51	3.51	4.27
UGATE			-	Steel	75 x 25	E								(2.77)	(2.77)	(2.77)	(2.77)	(2.77)	2.77	2.77	2.77	2.77	2.77	3.51	3.51	4.27
R CORR					68 x 13	<u>د</u> ا	1.03	1.63	1.63	(2.01)	(2.01)	(2.01)	2.77	2.77	2.77	3.51	4.27	4.27		·						
(NESS FO		Min. Gover		0 1 - 70	Steel & Aluminum		E c,u	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 m	0.5 ш
7: THICF		Corrugated Steel Pine Arch	125 x 25 mm		(mm)									1050	1170	1300	1400	1500	1620	1720	1820	1920	2020	2120	2220	2320
Table II/				_	(mm)	_								1340	1520	1670	1850		2200	2400	2600	2840	2970	3240	3470	
		Corrugated Steel & Aluminum	Pipe Arch 75 x 25 mm		n Kise									1050	1170	0 1300			0 1620	0 1720	1820	0 1920	0 2020	0 2120	1	
				-	se Span m) (mm)	+	<u></u>	<u>۾</u>		510	<u> </u>	740	<u>e</u>	970 1340	1100 1520	-	20 1850		2200	2400	2600	2840	2970	3240	3470	3600
		Corrugated Steel & Aluminum	Pipe Arch 68 x 13 mm		Span Kise (mm)* (mm)	- 1		530 380	610 460	710 51	870 630	1060 74	1240 840	1440 97												
		əzi2 brı O %	(ww)					450	525				1050 1	1200 1	1350 1		1650 1	1800 2	1950	2100	2250	2400	2550	2700	2850	3000

** Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to Article 1006.01.

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 290 kN per square meter. The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 192 kN per square meter. This minimum bearing capacity will be determined by the Engineer in the field.

	e 3	eight: an 10' not ing 15'	Arch	A-IV	A-IV	A-IV	A-IV	A-IV	A-IV	A-IV	A-IV	1450	1460	1470	1480	1480
CH PIPE F PIPE	Type 3	Fill Height: Greater than 10' not exceeding 15'	升	HE-IV	HE-IV	HE-IV	HE-IV	HE-IV	HE-IV	HE-IV	HE-IV	1460	1460	1460	1470	1470
CRETE AR	Type 2	Fill Height: Greater than 3' not exceeding 10'	Arch	H-H	A-III	A-III	A-III	A-III	A-III	A-III	H-A	A-III	A-III	A-III	A-III	A-III
RCED CON	Тур	Fill Hi Greater th	ШН	HE-III	旱里	HE-II	HE-III	H-H-	旱里	HE-III	HE-III	旱里	HE-III	HE-111	皇	出
D REINFOF FILL HEIGH	6.1	ill Height: 3' and less	Arch	A-III	A-III	A-III	A-III	H-III	A-III	A-II	A-II	A-II	A-II	A-II	A-II	A-II
TICALL AN	Type 1	Fill Height: 3' and les	#	HE-III	— 当	里里	里里	里里里	量量	== H	- -	呈	-H	量	<u>-</u>	HE-I
Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE		Minimum Cover	RCCP HE & A	11 -0"	1, -0"	1, -0"	1, -0,,	1,-0,,	1-0"	1, -0"	1' -0"	1-0"	1, -0,"	1,-0,,	10"	1, -0.,
FORCED C		Reinforced Concrete ch pipe (in.)	Rise	11	13 1/2	15 1/2	81	22 1/2	22 1/2	26 5/8	31 5/16	36	40	45	54	54
S OF REIN		Reinforced Concrete Arch pipe (in.)	Span	18	22	26	28 1/2	36 1/4	36 1/4	43 3/4	51 1/8	58 1/2	65	73	88	88
3: CLASSE HE RESPE		Reinforced Concrete Elliptical pipe (in.)	Rise	14	74	9	6	22	24	58	34	38	43	48	53	58
Table IIE FOR T			Span	23	23	3 :	. e	34	38	45	53	: 66 	89	76	83	9
		Equivalent Round Size (in.)		15	<u>~</u>	7 :	24	27	i e	36	42	4 8	7. 45	90	99	72

Notes:
A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

ent Size)	Reinforced Concrete				Type 1	16-1	Type 2	e 2	Type 3	e 3
	Elliptical pipe (mm)	Reinforced Concrete Arch pipe (mm)	Reinforced Concrete ch pipe (mm)	Minimum Cover	Fill Height: 1 m and less	eight: nd less	Fill Height: Greater than 1 m not exceeding 3 m	an 1 m not ng 3 m	Fill Height: Greater than 3 m not exceeding 4.5 m	eight: In 3 m not g 4.5 m
	n Rise	Span	Rise	RCCP HE & A	Ξ	Arch	HE	Arch	Щ	Arch
375 584	356	457	279	0.3 m	HE-III	A-III	III-∃H	H-III	HE-IV	A-IV
		559	343	0.3 m	HE-III	H-III	里里	H-A	HE-IV	A-1V
	483	099	394	0.3 m	무무	₩-III	HE-III	H-A	무무	A-1V
		724	457	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
	_	921	572	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
		921	572	0.3 m	出出	A-III	HE-II	A-III	HE-IV	A-IV
	3 737	1111	676	0.3 m	HE-II	A-II	HE-III	A-III	HE-IV	A-IV
1050 1346		1299	795	0.3 m	H H	A-II	H-III	A-III	HE-I∨	A-I∨
	4 965	1486	914	0.3 m	Η̈́	A-II	<u>∓</u>	A-III	2	70
		1651	1016	0.3 m	HE-I	A-II	HE-III	A-III	70	70
		1854	1143	0.3 m	丑	A-II	무무	H-H	20	70
		2235	1372	0.3 m	핖	H-A	HE-==	A-III	70	70
	1 1473	2235	1372	0.3 m	HE-I	A-II	HE-III	A-III	70	70

Notes: A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

CPVC PE CPE X X X X X X X X X X X X X X X X X X X	Type 1 Type 1 Ith 1' min PE CPE X X X X X	FOR A NA X	GIVEN F	TABLE IIIA: PLASTIC PIPE PERMITTED FABLE IIIA: PLASTIC PIPE PERMITTED FIII Height: Greater than 3',	I ABLE IIIA: PLP DIAMETER AND Type 2 eight: Greater tha not exceeding 10' VC PE CP	AND FILL	CPP CPP	Type 2 Fill Height Over The Permit I ED	TYPE 3 Type 3 Fill Height: Greater than 10' not exceeding 15' CPVC PE CPE X X X X X X X X X X X X X X X X X X X	E TOP OF THE P Type 3 ight: Greater that not exceeding 15' VC PE CI X X X X X X X X X X X X X X X X X X X	than 10°, 15° CPE X NA NA	CPP X	PVC X X	Type 4 Fill Height: Greater than 15' not exceeding 20' PVC CPVC PE CPF X X X NA X NA	sater tha	CPP NA
Ž×:	××	***************************************	×××	×××	≸×5	×׺	×׺	×××	×××	≨×≨	¥	×ן	×××	×××	≰×≱	× § §
∠ا≥		≰ ×	××	×	≸×:	≨ × :	<u>₹</u> × :	< × :	<\	₹	≨	₹ ≯ >	< × >	<××	ξ × >	£ £ £
××			××	××	××	××	××	××	××	××	¥ ×	< ₹	< ×	< ×	< ×	₹ <u>₹</u>
×	×	_	×	NA	×	¥	ΑN	×	Ϋ́	×	¥.	¥:	×	ž:	× :	≨ :
×	×	×	×	NA	×	Ϋ́	AA	×	ΨV	×	ΑĀ	₹	×	¥	×	¥

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (Metric)	Type 1 Type 2 Type 4 Type 4	Fill Height: Im and less, Fill Height: Greater than 1 m, Fill Height: Greater than 3 m, Fill Height: Greater than 4.5 m not exceeding 3 m not exceeding 3 m	PE CPE CPP PVC CPVC PE CPP PVC C	× × × × × × × × × × × × × × × × × × ×	X X X NA X X X X X X X X X X X X X X X X	NA X X X NA X X X X X X		NA N	X X X NA NA NA X X X X X X X X X X X X X		X X X NA NA X X X X X X X X X X X X X X	X X NA X NA X NA X NA X NA X NA X	X X X X X NA NA NA X NA X NA X NA X NA	
FO	Type 1	n and less,	<u> </u>	-		-								
		3ht: 1 m	H.	×	×	ž	×	Ž	×	×	×	×	×	
		Fill Heig	1	×	: ×	×	×	×	×	×	×	¥	¥	
			PVC	×	: ×	×	×	×	×	×	×	×	×	
		Nominal	Diameter (mm)	250	3 6	375	450	525	009	750	006	1000	1200	

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

TABLE IIIB: PLASTIC PIPE PERMITTED	FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE	Type 5 Type 6 Type 7	Fill Height: Greater than 20', not exceeding 25' Fill Height: Greater than 25', not exceeding 30' Fill Height: Greater than 30', not exceeding 35'	PVC CPVC CPVC	×× ××	× ×	×× ××	×	×	×	×	AN X	NA	
			Fill Height	PVC	××	<	××	×	×	×	×	×	×	
			Nominat Diameter	(in.)	10	71	15	21	24	30	36	42	48	

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available

¹⁸⁴

PIPE	Type 7	Fill Height: Greater than 9 m, not exceeding 10.5 m	CPVC	××	×	×××	×	×:	X	AN	AN AN
PERMITTED IT OVER THE TOP OF T	With a second	Fill Height: Greater than 7.5 m, not exceeding 9 m									
TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (metric)	Туре 6	eater than 7.5	CPVC	××	×	××	×	×	×	∀ Z	AN AN
		Fill Height: Gr	PVC	××	×	××	×	×	×	×	×
		Fill Height: Greater than 6 m, not exceeding 7.5 m									
	Type 5	eater than 6 m	CPVC	××	×	××	<\×	<×	×	NA	Y Y
		Fill Height: Gr	PVC	××	×	××	< <i>></i>	×	×	×	×
		Nominal	Ulameter (mm)	250	375	450	070	750	006	1000	1200

Notes:
PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available"

Revise the first sentence of the first paragraph of Article 542.04(c) of the Standard Specifications to read:

"Compacted aggregate, at least 4 in. (100 mm) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except compacted impervious material shall be used for the outer 3 ft (1 m) at each end of the pipe culvert."

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

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Replace the third sentence of the first paragraph of Article 542.04(h) of the Standard Specifications with the following:

"The total cover required for various construction loadings shall be the responsibility of the Contractor."

Delete "Table IV: Wheel Loads and Total Cover" in Article 542.04(h) of the Standard Specifications.

Revise the first and second paragraphs of Article 542.04(i) of the Standard Specifications to read:

"(i) Deflection Testing for Pipe Culverts. All PE, PVC and CPP pipe culverts shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP pipe culverts with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP pipe culverts with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise Articles 542.04(i)(1) and (2) of the Standard Specifications to read:

- "(1) For all PVC pipe: as defined using ASTM D 3034 methodology.
- (2) For all PE and CPP pipe: the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

Revise the second sentence of the second paragraph of Article 542.07 of the Standard Specifications to read:

"When a prefabricated end section is used, it shall be of the same material as the pipe culvert, except for polyethylene (PE), polyvinylchloride (PVC), and polypropylene (PP) pipes which shall have metal end sections."

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

"1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

- "(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.
- (d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

"1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

- (a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.
- (b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be

Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

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

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved."

80328

RETROREFLECTIVE SHEETING FOR HIGHWAY SIGNS (BDE)

Effective: November 1, 2014

Revise the first sentence of the first paragraph of Article 1091.03(a)(3) of the Standard Specifications to read:

"When tested according to ASTM E 810, with averaging, the sheeting shall have a minimum coefficient of retroreflection as show in the following tables."

Replace the Tables for Type AA sheeting, Type AP sheeting, Type AZ sheeting and Type ZZ sheeting in Article 1091.03(a)(3) with the following.

Type AA Sheeting Minimum Coefficient of Retroreflection Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AA (Average of 0 and 90 degree rotation)

					,		
Observation	Entrance	·					
Angle	Angle	White	Yellow	Red	Green	Blue	FO
(deg.)	(deg.)						
0.2	-4	800	600	120	80	40	200
0.2	+30	400	300	60	35	20	100
0.5	-4	200	150	30	20	10	75
0.5	+30	100	75	15	10	5	35

Type AA (45 degree rotation)

Type Art (45 degree Totation)								
Observation	Entrance		•					
Angle	Angle	Yellow	FO					
(deg.)	(deg.)							
0.2	-4	500	165					
0.2	+30	115	40					
0.5	-4	140	65					
0.5	+30	60	30					

Type AP Sheeting Minimum Coefficient of Retroreflection Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AP (Average of 0 and 90 degree rotation)

		1300711 (woluge of	o and oo	acgree rou	20011		
Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	Brown	FO
0.2	-4	500	380	75	55	35	25	150
0.2	+30	180	135	30	20	15	10	55
0.5	-4	300	225	50	30	20	15	90
0.5	+30	90	70	15	10	7.5	5	30

Type AZ Sheeting Minimum Coefficient of Retroreflection Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AZ (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	375	280	75	45	25	300	230
0.2	+30	235	170	40	25	15	190	150
0.5	-4	245	180	50	30	20	200	155
0.5	+30	135	100	25	15	10	100	75
1.0	-4	50	37.5	8.5	5	2	45	25
1.0	+30	22.5	20	5	3	1	25	12.5

Type ZZ Sheeting Minimum Coefficient of Retroreflection Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type 77 (Average of 0 and 90 degree rotation)

		1 9 0 0 22 1	(Avelage (or or array	o acgree	rotationy			
Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY	FO
0.2	-4	570	425	90	60	30	460	340	170
0.2	+30	190	140	35	20	10	150	110	65
0.5	-4	400	300	60	40	20	320	240	120
0.5	+30	130	95	20	15	7	100	80	45
1.0	-4	115	90	17	12	5	95	70	35
1.0	+30	45	35	7	5	2	35	25	15

REINFORCEMENT BARS (BDE)

Effective: November 1, 2013

Revise the first and second paragraphs of Article 508.05 of the Standard Specifications to read:

"508.05 Placing and Securing. All reinforcement bars shall be placed and tied securely at the locations and in the configuration shown on the plans prior to the placement of concrete. Manual welding of reinforcement may only be permitted or precast concrete products as indicated in the current Bureau of Materials and Physical Research Policy Memorandum "Quality Control / Quality Assurance Program for Precast Concrete Products", and for precast prestressed concrete products as indicated in the Department's current "Manual for Fabrication of Precast Prestressed Concrete Products". Reinforcement bars shall not be placed by sticking or floating into place or immediately after placement of the concrete.

Bars shall be tied at all intersections, except where the center to center dimension is less than 1 ft (300 mm) in each direction, in which case alternate intersections shall be tied. Molded plastic clips may be used in lieu of wire to secure bar intersections, but shall not be permitted in horizontal bar mats subject to construction foot traffic or to secure longitudinal bar laps. Plastic clips shall adequately secure the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. Plastic clips may be recycled plastic, and shall meet the approval of the Engineer. The number of ties as specified shall be doubled for lap splices at the stage construction line of concrete bridge decks when traffic is allowed on the first completed stage during the pouring of the second stage."

Revise the fifth paragraph of Article 508.05 of the Standard Specifications to read:

"Supports for reinforcement in bridge decks shall be metal. For all other concrete construction the supports shall be metal or plastic. Metal bar supports shall be made of cold-drawn wire, or other approved material and shall be either epoxy coated, galvanized or plastic tipped. When the reinforcement bars are epoxy coated, the metal supports shall be epoxy coated. Plastic supports may be recycled plastic. Supports shall be provided in sufficient number and spaced to provide the required clearances. Supports shall adequately support the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. The legs of supports shall be spaced to allow an opening that is a minimum 1.33 times the nominal maximum aggregate size used in the concrete. Nominal maximum aggregate size is defined as the largest sieve which retains any of the aggregate sample particles. All supports shall meet the approval of the Engineer."

Revise the first sentence of the eighth paragraph of Article 508.05 of the Standard Specifications to read:

"Epoxy coated reinforcement bars shall be tied with plastic coated wire, epoxy coated wire, or molded plastic clips where allowed."

Add the following sentence to the end of the first paragraph of Article 508.06(c) of the Standard Specifications:

"In addition, the total slip of the bars within the splice sleeve of the connector after loading in tension to 30 ksi (207 MPa) and relaxing to 3 ksi (20.7 MPa) shall not exceed 0.01 in. (254 microns)."

Revise Article 1042.03(d) of the Standard Specifications to read:

"(d) Reinforcement and Accessories: The concrete cover over all reinforcement shall be within ±1/4 in. (±6 mm) of the specified cover.

Welded wire fabric shall be accurately bent and tied in place.

Miscellaneous accessories to be cast into the concrete or for forming holes and recesses shall be carefully located and rigidly held in place by bolts, clamps, or other effective means. If paper tubes are used for vertical dowel holes, or other vertical holes which require grouting, they shall be removed before transportation to the construction site."

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

Effective: April 2, 2004 Revised: July 1, 2015

<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 have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

<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 for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. 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

Attachment	
ltem	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 as pa following items of work?	art of the co	ntract 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:	

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012 Revised: November 1, 2014

<u>Description</u>. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

- "(13) Equipment for Warm Mix Technologies.
 - a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ±2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

- "(e) Warm Mix Technologies.
 - (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
 - (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012 Revised: April 2, 2015

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports 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.

PERMANENT STEEL SHEET PILING (LRFD)

Effective: January 31, 2012 Revised: August 17, 2012

<u>Description.</u> This work shall consist of furnishing and installing the permanent sheet piling to the limits and tolerances shown on the plans according to Section 512 of the Standard Specifications.

<u>Material.</u> The sheet piling shall be made of steel and shall be new material. Unless otherwise specified the sheeting shall have a minimum yield strength of 50 ksi (345 MPa) according to ASTM A 572. The sheeting shall be identifiable and free of bends and other structural defects. The Contractor shall furnish a copy of the published sheet pile section properties to the Engineer for verification purposes. The Engineer's approval will be required prior to driving any sheeting. All driven sheeting not approved by the Engineer shall be removed at the Contractor's expense.

The Contractor shall furnish a sheet pile section, to be used for each wall section, with a published section modulus equal to or larger than that specified on the plans.

The selection of the sheet pile section shall not relieve the Contractor of the responsibility to satisfy all details including minimum clearances, cover, reinforcement, shear stud locations, interlocking, and field cutting. Any modifications of the plans to accommodate the Contractor's selection shall be paid for by the Contractor and subject to the approval of the Engineer.

Construction. The Contractor shall verify locations of all underground utilities before driving any sheet piling. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The Contractor shall be responsible for determining the appropriate equipment necessary to drive the sheeting to the tip elevation(s) specified on the plans or according to the Contractor's approved design. The sheet piling shall be driven, as a minimum, to the tip elevation(s) specified, prior to commencing any related construction. If unable to reach the minimum tip elevation, the adequacy of the sheet piling design will require re-evaluation by the Department prior to allowing construction adjacent to the sheet piling in question.

Obstructions. Obstructions shall be defined as any object (such as but not limited to, boulders, logs, old foundations, etc.) that cannot be driven through with normal driving procedures, but requires special equipment to remove the obstruction. When obstructions are encountered, the Contractor shall notify the Engineer and upon concurrence of the Engineer, the Contractor shall begin working to break up, push aside, or remove the obstruction.

<u>Method of Measurement</u>. This work will be measured in place in square feet (square meters). Sheet piling associated with other work in this contract or for permanent sheet piling that is cut off or driven beyond those dimensions shown on the plans will not be measured for payment.

Obstruction mitigation shall be paid for according to Article 109.04.

Basis of Payment.	This work will be	paid for at the	contract unit price	per square	foot (square
meter) for PERMAN	IENT STEEL SHE	ET PILING at the	ne location shown	on the plans.	

WEEP HOLE DRAINS FOR ABUTMENTS, WINGWALLS, RETAINING WALLS AND CULVERTS

Effective: April 19, 2012 Revised: October 22, 2013

Delete the last paragraphs of Articles 205.05 and 502.10 and replace with the following.

"If a geocomposite wall drain according to Section 591 is not specified, a prefabricated geocomposite strip drain according to Section 1040.07 shall be placed at the back of each drain hole. The strip drain shall be 24 inches (600 mm) wide and 48 inches (1.220 m) tall. The strip drain shall be centered over the drain hole with the bottom located 12 inches (300 mm) below the bottom of the drain hole. All form boards or other obstructions shall be removed from the drain holes before placing any geocomposite strip drain."

Revise the last sentence of the first paragraph of Article 503.11 to read as follows.

"Drain holes shall be covered to prevent the leakage of backfill material according to Article 502.10."

Revise the title of Article 1040.07 to Geocomposite Wall Drains and Strip Drains.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

- 2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
 - "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or onthe-job training."
- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If

the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- **7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor 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 DOT-assisted contracts. 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 contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
 - a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color,

religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or singleuser restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

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

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such

action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose Wage and Hour Division Web http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

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

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

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

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
 - d. Apprentices and Trainees (programs of the U.S. DOT).

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

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
 - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

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

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

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

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

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

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

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

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

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XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

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

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

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

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