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. the Proposal Bid Bond. If you are using an electronic bond, include your bid the Proof of Insurance printed from the Surety's Web Site.	The Power of Attorney page should be stapled to
☐ Disadvantaged Business Utilization Plan and/or Good Faith Effort – T Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SB 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 bids does not begin until approximately 10:30 AM.	T 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 en Web page for the current letting.	nd 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 April 24, 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. 63869
MCHENRY County
Section 08-00357-00-BR
Route TR 32 (Noe Road)
Project BROS-0111(057)
District 1 Construction Funds

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

Prepared by

Checked by

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(Printed by authority of the State of Illinois)

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PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

District 1 Construction Funds

1.	Proposal of
	Taxpayer Identification Number (Mandatory)
	For the improvement identified and advertised for bids in the Invitation for Bids as:
	Contract No. 63869 MCHENRY County Section 08-00357-00-BR Project BROS-0111(057) Route TR 32 (Noe Road)

Remove the bridge carrying Noe Road over Rush Creek and the re-alignment of Noe Road to the west of Brush Creek to eliminate the crossing of Rush Creek. Project beings at Carmack Road and extends North towards Kishwaukee Valley Road.

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)	

STATE JOB #- C-91-100-09

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 63869

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				-	TOTAL \$		

JOTE:

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

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

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

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

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:
□lac	knc	welledge 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'the Otate 7's		
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 amount 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 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 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 salary exceeds 60 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 salary exceeds 60	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 local government authorized by the Constitution of the State of Illinoi 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:	
Track of displace of the second of the secon	
ADDU LOADUE OTATEMENT	
APPLICABLE STATEMENT This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Und	lor
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	
Under penalty of perjury, I have determined that no individuals associated with this organization the criteria that would require the completion of this Form A.	meet
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	р			-	
Telephone Nu	ımber		Email Address	Fax Number (if avail	able)
			s Form is required by Section 50 solicly 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	oing procurement rela	
	such as bid or proje		relationship by showing State o attach additional pages as nece		
		THE FOL	LOWING STATEMENT MUST	BE CHECKED	
			Signature of Authorized Representative		Date
			OWNERSHIP CERTIFICA	<u>ATION</u>	
	e certify that the foll of ownership.	owing stater	nent is true if the individuals for	all submitted Form A	A disclosures do not total
			erest is held by individuals recoutive income or holding less th		
	☐ 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.



PART I. IDENTIFICATION

Contract No. 63869
MCHENRY County
Section 08-00357-00-BR
Project BROS-0111(057)
Route TR 32 (Noe Road)
District 1 Construction Funds

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 ha	as analyz perform	ed mir ed, an	d for th d fema	ne locati	ons froi	n whic	h the b	idder re	cruits	employe	es, and he	reby subm	its the foll	owir con	ng workfo		
		TOTA	AL Wo	rkforce	Project	tion for	Contra	ct						CURRENT	EM	IPLOYEE	S	
				MINORITY EMPLOYEES						TRAINEES				TO BE ASSIGNED TO CONTRACT				
JOB								*OTHER		APPREN- ON THE JOB TICES TRAINEES				OTAL		MINC		
CATEGORIES	EMPL(OYEES F				HISPANIC M F		OR. F	M	ES F	TRA M	INEES F	EMPL M	OYEES F		EMPLO M)YEES F	
OFFICIALS (MANAGERS)	101		101		101		M		141	'	101		101			101		
SUPERVISORS																		
FOREMEN																		
CLERICAL																		
EQUIPMENT OPERATORS																		
MECHANICS																		
TRUCK DRIVERS																		
IRONWORKERS																		
CARPENTERS																		
CEMENT MASONS																		
ELECTRICIANS																		
PIPEFITTERS, PLUMBERS																		
PAINTERS																		
LABORERS, SEMI-SKILLED																		
LABORERS, UNSKILLED																		
TOTAL																		
_		BLE C		, ,					7			FOR I	DEPARTM	MENT USE	- 01	ILY		
EMPLOYEES	OTAL Tra	aining Pro TAL	ojectio	n tor C	ontract		*∩T	HER	-					50-		•		
IN	_	OYEES	BLA	ACK	HISP	ANIC		NOR.										
TRAINING	М	F	М	F	М	F	М	F										
APPRENTICES																		
ON THE JOB																		

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

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

Contract No. 63869
MCHENRY County
Section 08-00357-00-BR
Project BROS-0111(057)
Route TR 32 (Noe Road)
District 1 Construction Funds

PART II. WORKFORCE PROJECTION - continued

B.	Included in "Total Employees" under Table A is the total number of new hires that would be employed in the event the undersigned bidder is awarded this contract.			
		ndersigned bidder projects that: (number) ted from the area in which the contract project is lo new hires would		ea in which the bidder's principal
	office	or base of operation is located.		
C.		led in "Total Employees" under Table A is a project signed bidder as well as a projection of numbers of		
	The u be dire emplo	ndersigned bidder estimates that (number)ectly employed by the prime contractor and that (nupyed by subcontractors.	umber)	persons will persons will be
PART	II. AFF	FIRMATIVE ACTION PLAN		
A.	utilizatin any commo (geare utilizati	indersigned bidder understands and agrees that in tion projection included under PART II is determined to job category, and in the event that the undersign encement of work, develop and submit a writte end to the completion stages of the contract) what tion are corrected. Such Affirmative Action Plan values inois Department of Human Rights .	ed to be an underutilīza ned bidder is awarded n Affirmative Action Pl ereby deficiencies in r	tion of minority persons or women this contract, he/she will, prior to an including a specific timetable minority and/or female employee
B.	submi	ndersigned bidder understands and agrees that the itted herein, and the goals and timetable included upart of the contract specifications.		
Comp	any		Telephone Numb	er
Addre	ss			
		NOTICE REGARDING	G SIGNATURE	
		signature on the Proposal Signature Sheet will constituted only if revisions are required.	e the signing of this form.	The following signature block needs
Signat	ure: 🗌		Title:	Date:
Instruct	ions:	All tables must include subcontractor personnel in addition to	prime contractor personnel.	
Table A	lnclude both the number of employees that would be hired to perform the contract work and the total number currently employees. (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" collaboration should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.			trainees. The "Total Employees" column
Table B	-	Include all employees currently employed that will be allocate currently employed.	d to the contract work includir	ng any apprentices and on-the-job trainees
Table C	; -	Indicate the racial breakdown of the total apprentices and on-	the-job trainees shown in Tab	le A.
				PC 1256 (Pay 12/11/07)

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. 63869 MCHENRY County Section 08-00357-00-BR Project BROS-0111(057) Route TR 32 (Noe 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 Date			
(NOW ALL PERSONS BY THE	SE PRESENTS, That We			
as PRINCIPAL, and				
the amount specified in the bid	proposal under "Proposal Guaranty" i	in effect on the date of the Invitation for	of 5 percent of the total bid price, or for r Bids, whichever is the lesser sum, well s, executors, administrators, successors	
			omitted a bid proposal to the STATE OF retation Bulletin Item Number and Letting	
specified in the bidding and cor with the terms of the bidding and with good and sufficient surety prosecution thereof; or if, in the pays to the Department the diffe	ntract documents; and if, after award documents including evide for the faithful performance of such event of the failure of the PRINCIP perence not to exceed the penalty here tract with another party to perform the	by the Department, the PRINCIPAL sence of the required insurance coverage contract and for the prompt payment AL to enter into such contract and to go for between the amount specified in the	RINCIPAL shall, within the time and as shall enter into a contract in accordance es and providing such bond as specified t of labor and material furnished in the give the specified bond, the PRINCIPAL bid proposal and such larger amount for the this obligation shall be null and void,	
hen Surety shall pay the penal within such period of time, the [sum to the Department within fiftee	n (15) days of written demand therefo ollect the amount owed. Surety is liable	as set forth in the preceding paragraph, r. If Surety does not make full payment e to the Department for all its expenses,	
n TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer day of A.D.,		In TESTIMONY WHEREOF, instrument to be signed by its day of	the said SURETY has caused this officer A.D.,	
(Company Name)		(Company Name)		
Зу		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 r	ne on (date)	Signed and attested before m	ne on (date)	
(Name of Notary Public)		(Name o	f Notary Public)	
(Seal)		(Seal)		
,,	(Signature of Notary Public)		(Signature of Notary Public)	
	(Date Commission Expires)	_	(Date Commission Expires)	
proposal the Principal is en		oid bond has been executed and	Electronic Bid Bond. By signing the the Principal and Surety are firmly	
Electronic Bid Bond ID #	Company/Bidder Nan	ne	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) Project and Bid Identification			
Complete the following information concerning the project and bid:			
Route	Total Bid		_
Section	Contract DBE Goal		
Project		(Percent)	(Dollar Amount)
County			
Letting Date			
Contract No.			
Letting Item No.			
(4) Assurance			
Attached are the signed participation statements, forms suse of each business participating in this plan and assuring work of the contract. Failed to meet contract award goals and has included good provided participation as follows: Disadvantaged Business Participation per of the contract goals should be accordingly modified or was support of this request including good faith effort. Als required by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the Special Provision evidencing availability and the second participation is supported by the second pa	d documented participation as followers SBE 2025, required by the Special of that each business will perform that each business will perform that each documentation to motion the second second are the signed participant use of each business participant.	al Provision evid n a commercially neet the goals ar ion required by rticipation stater	encing availability and vuseful function in the and that my company has the Special Provision in ments, forms SBE 2025,
business will perform a commercially useful function in the Company By	The "as read" Low Bidder is red	for each project. Th	•
Title	submitted in accordance with the		ocal 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	r Registration Number		Le	etting	
Participation	Statement		Ite	em No.	
(1) Instruction	าร		Co	ontract No.	
	st be completed for each disadvantaged busines: vith the special provision and will be attached to t n for the firm.				
(2) Work:					
Please indica	te: J/V Manufacturer	Supplier (60%)	Subcon	tractor	Trucking
Pay Item No.	Description		Quantity	Unit Price	Total
				l Total	
	yment Items (For any of the above items which a ust be sufficient to determine a Commercially Usefu				et dollar amount:
Boothpaon	active comments to determine a commencial, cools	ii r unotion, opoon	iodily docorroo the t	von and odpooning	or donar arribarri
	ent is to be a second-tier subcontractor, or if the first t must be clearly indicated on the DBE Participat				
	DBE subcontractor second-tiers a portion of its			•	•
	orime must submit a DBE Participation Statemen				
perform a con contractor or	ned certify that the information included herein is nmercially useful function in the work of the contr 1 st Tier subcontractor. The undersigned further u	ract item(s) listed understand that r	d above and to exe no changes to this	cute a contract wit statement may be	h the prime made without
	from the Department's Bureau of Small Busines erformed on this project and the payment therefo				ation regarding
aotaa wom p	one med on the project and the payment thereof	no maor do provi	idod to the Doparti		
Sigr	nature for Contractor 1 st Tier 2 nd Tier		Signature for D	BE Firm 1 st Tier	2 nd Tier
Title		Title			
Date		Date			
Contact Pers	on	Cont	act Person		
Phone		Phor	ıΔ		
Firm Name		Firm	Nama		
Address		Addr	ess		
City/State/Zip		City/S			
		ŕ		E	
The Department of Tr	ansportation is requesting disclosure of information that is necessary to acco	mnlish the statutory purpo	ose as outlined under the stat	e and WC	
federal law. Disclosur	an spondator in sequesting obscission of information that is necessary to according to the original of the sequestion of	esult in the contract not be	ing awarded. This form has t	peen	

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. 63869
MCHENRY County
Section 08-00357-00-BR
Project BROS-0111(057)
Route TR 32 (Noe 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
(-)	- 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 disclosura(s) established 100% of	wnershin)

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.mApril 24, 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. 63869 MCHENRY County Section 08-00357-00-BR Project BROS-0111(057) Route TR 32 (Noe Road) District 1 Construction Funds

Remove the bridge carrying Noe Road over Rush Creek and the re-alignment of Noe Road to the west of Brush Creek to eliminate the crossing of Rush Creek. Project beings at Carmack Road and extends North towards Kishwaukee Valley Road.

- 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, Acting Secretary

CONTRACT 63869

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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<u>Pg</u> #	V	File Name	<u>Title</u>	Effective	Revised
	<u> </u>	GBSP 4	Polymer Modified Portland Cement Mortar	June 7, 1994	July 26, 2013
			Drainage System	June 10, 1994	Jan 1, 2007
	†	GBSP 13 High-Load Multi-Rotational Bearings		Oct 13, 1988	Oct 30, 2012
		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
		GBSP 28	Deck Slab Repair	May 15, 1995	Oct 15, 2011
		GBSP 29	Bridge Deck Microsilica Concrete Overlay	May 15, 1995	Dec 29, 2014
		GBSP 30	Bridge Deck Latex Concrete Overlay	May 15, 1995	Dec 29, 2014
		GBSP 31	Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay	Jan 21, 2000	Dec 29, 2014
		GBSP 32	Temporary Sheet Piling	Sept 2, 1994	Jan 31, 2012
		GBSP 33	Pedestrian Truss Superstructure	Jan 13, 1998	Dec 29, 2014
		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
		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	
		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	June 1, 2007	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	Dec 29, 2014
107	Х	GBSP 73	Cofferdams	Oct 15, 2011	
		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
		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 SPECIAL 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	6
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

INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

LR # LR SD12 LR SD13 LR 107-2 LR 107-4 LR 108 LR 109 LR 212 LR 355-1	Pg# 109	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 LR 403-1		Plant Mix Bituminous Stabilized Base Course, 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 Surface Profile Milling of Existing, Recycled or Reclaimed	Oct. 1, 1973 Feb. 20, 1963 Jan. 1, 2007 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 403-2 LR 406 LR 420 LR 442 LR 451 LR 503-1 LR 503-2 LR 542 LR 663 LR 702 LR 1000-1		Flexible Pavement 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	Apr. 1, 2012 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	Jun. 1, 2012 Jan. 1, 2007 Jan. 2, 2007 Jun. 1, 2007 Jan. 1, 2007 Jan. 1, 2002 Jan. 1, 2007 Jan. 1, 2007 Jan. 1, 2007 Jun. 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>	<u>Pg.</u>		Special Provision Title	Effective	Revised
Name			About October 1914 De 1916		
80240			Above Grade Inlet Protection	July 1, 2009	Jan. 1, 2012
80099			Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274			Aggregate Subgrade Improvement	April 1, 2012	Jan. 1, 2013
80192	440		Automated Flagger Assistance Device	Jan. 1, 2008	
80173	110	X		Nov. 2, 2006	Aug. 1, 2013
80241			Bridge Demolition Debris	July 1, 2009	
50261			Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481		-	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491		-	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
80310			Coated Galvanized Steel Conduit	Jan. 1, 2013	Jan. 1, 2015
80341			Coilable Nonmetallic Conduit	Aug. 1, 2014	Jan. 1, 2015
80198			Completion Date (via calendar days)	April 1, 2008	
80199			Completion Date (via calendar days) Plus Working Days	April 1, 2008	
* 80293			Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5	April 1, 2012	April 1, 2015
80294			Feet Concrete Box Culverts with Skews ≤ 30 Degrees Regardless of	April 1 2012	A: 1.1 2011
0020		***************************************	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	113	X	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80335	116	X	Contract Claims	April 1, 2014	1407. 1, 2014
* 80029	117	Х	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2015
* 80358	128	X	Equal Employment Oppurtunity	April 1, 2015	Jan. 2, 2010
80265	132	X	Friction Aggregate	Jan. 1, 2011	Nov. 1, 2014
80229			Fuel Cost Adjustment	April 1, 2009	July 1, 2009
80329			Glare Screen	Jan. 1, 2014	July 1, 2009
80304			Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
80246	136	Х	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2012
80322			Hot-Mix Asphalt – Mixture Design Composition and Volumetric	Nov. 1, 2013	Nov. 1, 2014
			Requirements	1404. 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 –	Nov. 1, 2013	April 1, 2015
			Jobsite Sampling	1404. 1, 2014	April 1, 2013
80348	138	Χ	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	1407. 1, 2013
80336			Longitudinal Joint and Crack Patching	April 1, 2014	
* 80324	143	Χ	LRFD Pipe Culvert Burial Tables	Nov. 1, 2013	April 1, 2015
* 80325	163	X	LRFD Storm Sewer Burial Tables	Nov. 1, 2013	April 1, 2015
80045			Material Transfer Device	June 15, 1999	
80342			Mechanical Side Tie Bar Inserter		Aug. 1, 2014
80165			Moisture Cured Urethane Paint System	Aug. 1, 2014	Jan. 1, 2015
80337			Paved Shoulder Removal	Nov. 1, 2006	Jan. 1, 2010
80349	100		Pavement Marking Blackout Tape	April 1, 2014	
80298			Pavement Marking Tape Type IV	Nov. 1, 2014	
80254			Pavement Patching	April 1, 2012	
80352			Pavement Striping - Symbols	Jan. 1, 2010	
* 80359			Portland Cement Concrete Bridge Deck Curing	Jan. 1, 2015	
00000	Į		Totalid Centent Concrete bridge Deck Culling	April 1, 2015	

<u>File</u> Name	<u>Pg.</u>		Special Provision Title	Effective	Revised
* 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	1
80343			Precast Concrete Handhole	Aug. 1, 2014	
80300			Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
80328	173	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	Nov. 1, 2012	Jan. 2, 2015
			Shingles (RAS)	,	,
80350	174	X	Retroreflective Sheeting for Highway Signs	Nov. 1, 2014	
80327	176	Х	Reinforcement Bars	Nov. 1, 2013	
80344	SSEP 1000 Standardermannen om		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	•
80127			Steel Cost Adjustment	April 2, 2004	April 1, 2009
80317			Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	•
80355			Temporary Concrete Barrier	Jan. 1, 2015	
80301			Tracking the Use of Pesticides	Aug. 1, 2012	
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	
* 80346			Waterway Obstruction Warning Luminaire	Aug. 1, 2014	April 1, 2015
80288	178	X	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2014
* 80302	180	Χ	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289	,	***************************************	Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	# 150 (150 (150 (150 (150 (150 (150 (150
80071			Working Days	Jan. 1, 2002	

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

<u>File</u>	Special Provision Title	New Location	Effective	Revised
<u>Name</u> 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

Noe Road

Section No.:08-00357-00-BR Project No.: BROS-0111(057)

Contract No. 63869 McHenry County

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", the "Manual of Test Procedures of 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 the Noe Road Realignment Project. In case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

Section No. 08-00357-00-BR Project No. BROS-0111(057) Job No. C-91-100-09 Contract No. 63869

LOCATION OF PROJECT

The project is located on Noe Road, starting approximately 2,000 feet north of Carmack Road in the Township of Marengo within rural McHenry County. The total net and gross length of the project is 2,140 feet (0.405 mile) for realigning Noe Road in a southwesterly direction to the west around Rush Creek.

DESCRIPTION OF PROJECT

The work consists of removing the existing superstructure that crosses over Rush Creek, removal of sections of existing Noe Road, new hot-mix asphalt pavement, aggregate shoulders, new Noe Road and Carmack Road intersection, pavement markings, landscaping, and other miscellaneous items of work in accordance with the drawings, Standard Specifications, and these Special Provisions for furnishing all labor, materials, equipment, and other incidentals necessary for the completion of the Project.

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
ComEd Dave Schachet 2 lincoln Center	Guy Wire	Station 101+71, 32 feet left	No conflict
Oakbrook, IL 60181-4260 630-437-4855	Power pole	Station 101+91, 31 feet left	No conflict

Noe Road Section No.:08-00357-00-BR Project No.: BROS-0111(057)

> Contract No. 63869 McHenry County

AT&T Sandra L Spendal 1000 Commerce Drive	Underground cable	Station 99+50 to Station 101+91 on left side	No conflict
Oak Brook, IL 60523 630-573-5422	Splice Box	Station 101+91, 31 feet left	No conflict

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.

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 a.m. the Wednesday prior to 11:59 p.m. 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."

Section No.:08-00357-00-BR Project No.: BROS-0111(057)

> Contract No. 63869 McHenry County

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	OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
701006-05	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5m) 24" (600 mm) FROM PAVEMENT EDGE
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS > 45 MPH
701901-04	TRAFFIC CONTROL DEVICES
BLR 22-7	TYPICAL APPLICATIONS OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION
	ON RURAL LOCAL HIGHWAYS (TWO-LANE TWO WAY RURAL TRAFFIC) (ROAD
	CLOSED TO THRU TRAFFIC)

DETAILS:

RAISED REFLECTIVE PAVEMENT MARKERS (SNOW PLOW RESISTANT) (TC-11) DISTRICT ONE TYPICAL PAVEMENT MARKINGS (TC-13)

SPECIAL PROVISIONS:

TRAFFIC CONTROL AND PROTECTION (ARTERIALS)
MAINTENANCE OF ROADWAYS
TRAFFIC CONTROL PLAN
PUBLIC CONVENIENCE AND SAFETY

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.

Noe Road

Section No.:08-00357-00-BR

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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.

COMPLETION DATE PLUS WORKING DAYS

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

Revise Article 108.05 (b) of the Standard Specifications as follows:

"When a completion date plus working days is specified, the Contractor shall complete all contract items and safely open all roadways to traffic by 11:59 P.M. on October 31, 2015, except as specified herein.

The Contractor will be allowed to complete all clean-up work and punch list items within 5 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 clean-up 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.

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

Noe Road Section No.:08-00357-00-BR Project No.: BROS-0111(057) Contract No. 63869 McHenry County

paid for in accordance with Article 109.04 of the Standard Specifications

EMBANKMENT II

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>. Reclaimed asphalt shall not be used within the ground water table or as a fill if ground water is present. 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 and tested 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 compaction can be performed. Embankment material placement cannot begin until tests are completed.

<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).

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.

Stability. 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.

Contract No. 63869 McHenry County

EXPLORATION TRENCH (SPECIAL)

<u>Description</u>. This work shall consist of constructing a trench for the purpose of location of field tiles and private underground utilities within the construction limits of the proposed improvements where shown in the plans.

General. The exploration trench shall be constructed according to Section 213.

<u>Method of Measurement</u>. Exploration Trench (Special) will be measured for payment in cubic yards of actual depth of trench construction..

<u>Basis of Payment</u>. This work will be paid for at the contract unit price per cubic yard of EXPLORATION TRENCH (SPECIAL).

TEMPORARY DITCH CHECK URETHANE FOAM/GEOTEXTILE

This work shall consist of constructing, maintaining, and removing of urethane foam/geotextile temporary ditch checks in accordance with the applicable portions of Section 280 of the Standard Specifications, the details in the plans, and as modified herein. The furnished materials shall remain the property of the Contractor upon removal.

<u>Materials</u>. Urethane foam/geotextile ditch checks shall be triangular shaped, having a minimum height of 10 inches in the center with equal sides and a 20-inch base. The triangular-shaped inner material shall be a low density urethane foam. The outer cover shall be woven geotextile fabric placed around the inner material and allowed to extend beyond both sides of the triangle 3 feet. Standard lengths of each ditch check shall be 7 feet and they shall be a minimum of 14 feet long. Wire staples fabricated from 11 gauge wire and at least 8 inches long shall be used to attach the ditch check to the ground. A minimum of 8 staples per square yard shall be installed to secure the apron to the ground. The staple pattern shall be as specified by the manufacturer.

<u>Method of Measurement</u>. Measurement for TEMPORARY DITCH CHECKS (SPECIAL) will be made per each 7-foot length.

Basis of Payment. Payment for TEMPORARY DITCH CHECKS (SPECIAL) will be made at the contract unit price contract unit price, which price shall include furnishing all labor, materials, and equipment necessary to furnish, construct, maintain, and remove the urethane foam/geotextile temporary ditch check.

STONE OUTCROPPING

<u>Description</u>. Contractor shall provide stone outcropping streambank treatment as shown on the drawings.

<u>Materials</u>. The stones shall be field stone and shall be durable stone hauled in from off-site source(s). It shall be sound, hard, dense, resistant to the action of air and water, and free from seams, cracks, or other structural defects. The stone shall consist of varying sizes and weights. Field stone shall not be uniform in color, type, or geometry. Available on-site field stone meeting

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the specifications herein may be reused for this project. Stone depth shall be as shown on the drawings. Any stone that has been cracked either by shipping, handling, or placing and does not meet the specified size range shall be removed from the project and replaced. The stones shall have the following dimensions.

D50 (feet)	Min D (feet)	Max D (feet)
1.5	1.0	2.0

D50: The median stone particle size.

Diameter (D) measurement shall be the average of the diameters arrived at by measuring in TWO DIRECTIONS perpendicular to each other.

Stone Bed: Stone bed shall conform to Section 281 of the Standard Specifications for Stone Riprap, Class A2, to thickness shown on the drawings.

Filter Fabric: Filter fabric shall conform to Section 282 of the Standard Specifications.

<u>Construction Methods</u>. Stone bed filter fabric shall be installed according to the Standard Specifications. The stones shall be placed randomly in a single layer. Filter fabric shall be installed under the bed. A suitable foundation, as approved by Engineer, shall be provided to preclude settlement. Some chinking may be required to secure stability of the stones.

<u>Method of Measurement</u>. STONE OUTCROPPING shall be measured in place and the area computed in square feet. The area for measurement will include the upper sloped surface of the stone outcropping and the upper horizontal surface of the toe anchor.

Basis of Payment. This work will be paid for at the contract unit price per square foot for STONE OUTCROPPING shall be paid according to the unit price bid. Price bid shall include all materials, labor, and equipment necessary for a complete installation as shown and specified, including filter fabric, riprap bed, and stones.

AGGREGATE SUBGRADE IMPROVEMENT (D-1)

Effective: February 22, 2012 Revised: November 1, 2014

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	
(b) Reclaimed Asphalt Pavement (RAP	(Notes 1, 2 and 3)1031

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- Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01 or CS 02 but shall not exceed 40 percent 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 gradations CS 01 or CS 02 are used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.
- 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.
- **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 gradations CS 01 or CS 02 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

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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.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01 or CS 02.

	COARSE AGGREGATE SUBGRADE GRADATIONS				
Grad No.	Sieve Size and Percent Passing				
	8"	6"	4"	2"	#4
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 02		100	80 ± 10	25 ± 15	

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Grad No.	Sieve Size and Percent Passing				
Grad No.	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20
CS 02		100	80 ± 10	25 ± 15	

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

STABILIZED DRIVEWAYS

This work shall consist of furnishing, placing, and compacting hot-mix asphalt driveway pavement at locations shown on the plans and as directed by the Engineer.

This work shall conform to the applicable Sections of Articles 311, 355, and 406.

Residential driveways and field entrances shall be constructed to a nominal thickness of 6 inches. Commercial driveways shall be constructed to a nominal thickness of 8 inches. Each shall have a minimum 2-inch-thick surface course (HMA Surface Course, Mix "D", N50) with the balance constructed using hot-mix asphalt base course (HMA Base Course, 4-inch or 6-inch). Aggregate and bituminous material prime coats shall be applied according to Article 406 and as directed by the Engineer. The driveway shall be constructed on a 4-inch compacted aggregate subbase conforming to the applicable Sections of Article 311 for Subbase Granular Materials Type B.

<u>Method of Measurement</u>: Stabilized driveways will be measured in place and the area computed in square yards. Aggregate subbase and aggregate and bituminous material prime coats will not be measured for payment but shall be considered included in payment for Stabilized Driveways of the thickness specified.

Basis of Payment: The work will be paid at the contract unit price per square yard for STABILIZED DRIVEWAYS, 6 INCH.

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."

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

"MINIMUM COMPACTED LIFT THICKNESS		
Mixture Composition	Thickness, in. (mm)	
IL-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."

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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.

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

"11	0:	
"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 ¹⁷
	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.

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Item	Article/Section
(a) Coarse Aggregate	1004 03
(b) Fine Aggregate	1003 03
(c) RAP Material	1031
(a) 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.

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.

		,,, LO, 12,	14117(10)	VIII OOM	COILL	N (% PA	SSING)			
Sieve Size	Sieve IL-19.0 Size		1	IA ^{4/} 5 mm		1A ⁴⁷ 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)	8290	100		100						
1/2 in. (12.5 mm)	5075	8589	80	100	***************************************	100		100		100

High ESAL, MIXTURE COMPOSITION (% PASSING) 17											
Sieve Size	IL-19.0 mm		SMA ^{4/} IL-12.5 mm			SMA ^{4/} IL-9.5 mm		IL-9.5 mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max	
3/8 in. (9.5 mm)				65	90	100	90	100		100	
#4 (4.75 mm)	2440	50 60	20	30	36	50	3234	69	90	100	
#8 (2.36 mm)	20	3642	16	24 ^{5/}	16	32 ^{5/}	34 ^{6/}	52 ^{2/}	70	90	
#16 (1.18 mm)	1015	2530					10	32	50	65	
#30 (600 μm)			12	16	12	18					
#50 (300 μm)	46	1215					4	15	15	30	
#100 (150 μm)	34	9					3	10	10	18	
#200 (75 μm)	3	6	7.0	9.0 ^{3/}	7.5	9.5 ^{3/}	4	6	7	9 ^{3/}	
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0	

- 1/ Based on percent of total aggregate weight.
- 3The mixture composition shall not exceed 44 percent passing the #8(2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ 4Additional 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 μ m) sieve shall be \leq 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.

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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 in the Mineral Aggregate (VMA), with Asphal minimum Binder								
Ndesign	IL-25.0 IL-19.0	IL-12.5 IL-9.5	IL-4.75 ^{1/}	(VFA), %				
50	12.0	44.0	18.5	65 – 78 ^{2/}				
70	12.0 13.5	14.0 15.0						
105	10.0	15.0		65 - 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 Design Design VMA (Voids VFA (Voids								
Composition	Compactive	Air Voids	in the	Filled with				
Effort Target % Mineral Asphalt								
			Aggregate),	Binder),				
			% min.	%				
IL-9.5L	$N_{DES} = 30$	4.0	15.0	65-78				
IL-19.0L	N _{DES} =30	4.0	13.5	N/A"				

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

"(3) SMA Mixtures.

	Volumetric Requirements SMA ^{1/}					
Ndesign Design Air Voids Voids in the Voids Fille Target % Mineral Aggregate with Aspha (VMA), % min. (VFA), %						
80 4/	3.5	17.0 ^{2/} 16.0 ^{3/}	75 - 83			

^{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:

		
"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Test Method 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 Note 1.	1 per half day of production	Illinois-Modified AASHTO T 308
VMA Note 2.	Day's production ≥ 1200 tons: 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)	Illinois-Modified AASHTO R 35
Air Voids Bulk Specific Gravity of Gyratory Sample Note 4.	Day's production ≥ 1200 tons: 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)	Illinois-Modified AASHTO T 312

	1	T
1	Frequency of Tests	Test Method
	1	See Manual of
"Parameter	High ESAL Mixture	
- arameter		Test Procedures
	Low ESAL Mixture	for Materials
	Day's production	
Maximum Specific	≥ 1200 tons	Illinois-Modified
Gravity of Mixture	- 1200 10113.	
Gravity of Mixture		AASHTO T 209
	1 per half day of	
	production	
	F	
1	Day's production	
	< 1200 tons:	
	1 non-half day of	
	1 per half day of	l
	production for first	I
	2 days and 1 per	I
i i	day thereafter (first	I
	sample of the day)	j
L	sample of the day)	j

- 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 \pm 5 °F (132 \pm 3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270 \pm 5 °F (132 \pm 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.

		"CONTR	OL LIMITS			
Davanata	High ESAL		SN	MA		
Parameter	Individual Test	Moving Avg. of 4	Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: 1/						3. 0
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 Content	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
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."

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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
Gradation ^{1/3/}	% Passing Sieves: 1/2 in. (12.5 mm) ^{2/} 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

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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

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 $9.0 \, \mathrm{mm}$ at $15,000 \, \mathrm{repetitions}$.

(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.

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."

AGGREGATE SURFACE COURSE FOR TEMPORARY ACCESS

Effective: April 1, 2001 Revised: January 2, 2007

Revise Article 402.10 of the Standard Specifications to read:

"402.10 For Temporary Access. The contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances and roads 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) Private Field Entrance. The minimum width shall be 12 ft (3.6 m). The minimum compacted thickness shall be 6 in. (150 mm). The maximum grade shall be eight percent, except as required to match the existing grade.

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(b) Commercial Entrance. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The maximum grade shall be six percent, except as required to match the existing grade.

(c) Road. The minimum width shall be 24 ft (7.2 m). The minimum compacted thickness shall be 9 in. (230 mm). The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of 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."

Add the following to Article 402.12 of the Standard Specifications:

"Aggregate surface course for temporary access will be measured for payment as each for every private entrance, commercial entrance or road constructed for the purpose of temporary access. If a residential drive, commercial entrance, or road is to be constructed under multiple stages, the aggregate needed to construct the second or subsequent stages will not be measured for payment but shall be included in the cost per each of the type specified."

Revise the second paragraph of Article 402.13 of the Standard Specifications to read:

"Aggregate surface course for temporary access will be paid for at the contract unit price per each for TEMPORARY ACCESS (FIELD ENTRANCE), TEMPORARY ACCESS (COMMERCIAL ENTRANCE) or TEMPORARY ACCESS (ROAD).

Partial payment of the each amount bid for temporary access, of the type specified, will be paid according to the following schedule:

- (a) Upon construction of the temporary access, 60 percent of the contract unit price per each, of the type constructed, will be paid.
- (b) Subject to the approval of the Engineer for the adequate maintenance and removal of the temporary access, the remaining 40 percent of the pay item will be paid upon the permanent removal of the temporary access."

HOT MIX ASPHALT-QUANTITY CORRECTION (BMPR)

Effective: October 1, 2014 Revised: October 2, 2014

Revise the fifth paragraph of Article 406.13(b) of the Standard Specifications to read as follows:

"HMA and Stone Matrix Asphalt (SMA) mixture in excess of 103 percent of the quantity

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shown on the plans or the plan quantity as specified by the Engineer will not be measured for payment. The "adjusted quantity to be placed" and the "adjusted pay quantity" for HMA and SMA mixtures will be calculated as follows.

Adjusted Quantity To Be Placed = $C \times C$ quantity shown on the plans or the plan quantity as specified by the Engineer

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

and where: G_{mb} = average bulk specific gravity from approved mix design

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

46.8 = English constant 24.99 = metric constant

Adjusted Pay Quantity (not to exceed 103 percent of the quantity shown on the plans or the plan quantity as specified by the Engineer) = $B \times HMA$ tons actually placed

where: $B = \frac{1}{C}$

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

GRATING FOR CONCRETE HEADWALL

<u>Description</u>. This work shall consist of furnishing and installing steel grating on the precast reinforced concrete flared end sections in accordance with the applicable portions of Section 542 of the Standard Specifications, the details in the plans, and as modified herein.

Materials. Materials shall be according to Articles 542.07(b)(2).

<u>General</u>. The grating shall be of the size in order to fit on a precast reinforced concrete flared end section of equivalent round-size 36" with the dimensions shown on Highway Standard Detail 542306-02.

Method of Measurement. GRATING FOR CONCRETE HEADWALL shall be measured at the contract unit price per each grating installed at each flared end section.

<u>Basis of Payment</u>. The work will be paid for at the contract unit price per each for GRATING FOR CONCRETE HEADWALL of the number specified. Price bid shall include payment for providing turbidity barrier and appurtenances and removal of turbidity barrier and appurtenances after stabilization including furnishing all labor, tools, equipment, and incidentals necessary to complete the work

RECLAIMED ASPHALT PAVEMENT FOR NON-POROUS EMBANKMENT AND

BACKFILL

Effective: April 1, 2001 Revised: January 1, 2007

Add the following sentence to Article 1004.05 (a) of the Standard Specifications:

"Reclaimed Asphalt Pavement (RAP) may be used as aggregate in Non-porous Granular Embankment and Backfill. The Rap material shall be reclaimed asphalt pavement material resulting from the cold milling or crushing of an existing hot-mix bituminous concrete pavement structure, including shoulders. RAP containing contaminants such as earth, brick, concrete, sheet asphalt, sand, or other materials identified by the Department will be unacceptable until the contaminants are thoroughly removed.

Add the following sentence to Article 1004.05 (c)(2) of the Standard Specifications:

"One hundred percent of the RAP when used shall pass the 3 inch (75 mm) sieve. The RAP shall be well graded from coarse to fine. RAP that is gap-graded or single-sized will not be accepted."

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.

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

Effective: November 1, 2013

Article 1020.15 shall not apply.

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

Effective: November 1, 2012 Revise: January 2, 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...).

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- (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. (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.

- (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

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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 %
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.

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Test Parameter	Acceptable Limits of Precision	
% Passing: ¹⁷	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.
 - (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 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.

Noe Road Section No.:08-00357-00-BR Project No.: BROS-0111(057)

Contract No. 63869 McHenry County

Max Asphalt Binder Replacement for FRAP with RAS Combination

HMA Mixtures 1/2/	Maximum % ABR		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified 3/
30L	50	40	10
50	40	35	10
70	40	30	10
90	40	30	104/
4.75 mm N-50			30
SMA N-80			20

- 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/ For polymerized surface mix used for overlays, with up to 10 percent ABR, an SBS PG70-22 will be required. However if used in full depth HMA, an SBS PG70-28 will be required.

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.

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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.
 - h. 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.)

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McHenry County

- 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).
 - e. RAS and FRAP weight to the nearest pound (kilogram).
 - f. Virgin asphalt binder weight to the nearest pound (kilogram).
 - g. 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. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded, FRAP, or single sized will not be accepted for use as Aggregate Surface Course and Aggregate Shoulders."

Noe Road

Section No.:08-00357-00-BR Project No.: BROS-0111(057) Contract No. 63869

McHenry County

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 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.

TURBIDITY BARRIER

<u>Description</u>. Contractor shall provide sediment control for streambank restoration activities consisting of a turbidity barrier to fully enclose the area where sediment may enter the water.

<u>Materials</u>. Turbidity barrier shall be constructed according to the detail in the drawings. Contractor shall submit additional details on the type of fabric that will be used. Fabric type must be approved by ENGINEER.

Construction Method. The turbidity barrier shall be installed in-stream from the upstream to downstream ends of the streambank being worked on. The barrier shall remain in place and be maintained until construction activity is completed and the disturbed area is stabilized. Contractor shall complete restoration and final stabilization of the section(s) being constructed consisting of stone outcropping, seed, and erosion control blanket. Remove turbidity barrier as soon as practical following construction after completion of temporary or permanent stabilization in each area.

<u>Method of Measurement</u>. TURBIDITY BARRIER shall be measured at the contract unit price per foot for the amount of turbidity barrier necessary for Contractor to complete the work.

<u>Basis of Payment</u>. The work will be paid for at the contract unit price per foot for TURBIDITY BARRIER. Price bid shall include payment for providing turbidity barrier and appurtenances and removal of turbidity barrier and appurtenances after stabilization including furnishing all labor, tools, equipment, and incidentals necessary to complete the work.

FENCE REMOVAL

This work shall consist of the removal of the existing fence as shown on the drawings and as directed by the Engineer.

 $\underline{\mathsf{Method}}$ of $\underline{\mathsf{Measurement}}$. This work will be measured for payment in feet for FENCE REMOVAL.

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

DEPARTMENT OF THE ARMY



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

December 27, 2013

Technical Services Division Regulatory Branch LRC-2009-00447

SUBJECT: Authorization for the Removal of the Existing Bridge and Road Realignment at Noe Road over Rush Creek near Marengo, McHenry County, Illinois

Wally Dittrich McHenry County Division of Transportation 16111 Nelson Road Woodstock, Illinois 60098

Dear Mr. Dittrich:

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 and the overall RPP under Category II of the Regional Permit Program.

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 entitled "Plans for Proposed Federal Aid Highway – Noe Road – Carmack Road to 0.6 Miles South of Kishwaukee Valley Road – Roadway Realignment – Section 08-00357-00-BR – Project No: BROS-0111 (057) – McHenry County – Job No: C-91-100-09" dated November 12, 2013, prepared by Strand Associates, Inc. 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.

The following special conditions are a requirement of your authorization:

 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 McHenry-Lake County 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 the 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 construction 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.
- 2. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
- 3. A copy of this authorization must be present at the project site during all phases of construction.
- 4. 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.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. 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

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water. Once the cofferdam is in place and the isolated area is dewatered, equipment may enter the coffered area to perform the required work.

- 10. 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.
- 11. 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.
- 12. 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.

The authorization is without force and effect until all other permits or authorizations from local, state, or other Federal agencies are secured. Please note that IEPA has issued Section 401 Water Quality Certification for this RP. These conditions are included in the enclosed fact sheet. If you have any questions regarding Section 401 certification, please contact Mr. Dan Heacock at IEPA's Division of Water Pollution Control, Permit Section #15, by telephone at (217) 782-3362.

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Mr. Soren Hall of my staff by telephone at 312-846-5532, or email at Soren.G.Hall@usace.army.mil.

Sincerely,

Keith L. Wozniak Chief, West Section

Herry lynne

Regulatory Branch

Enclosures

Copy Furnished (with authorization): McHenry-Lake County SWCD (Ed Weskerna) Strand Associates (James McCarthy)



PERMIT COMPLIANCE CERTIFICATION

Permit Number:

LRC-2009-00447

Permittee:

Wally Dittrich

McHenry County Division of Transportation

Date:

December 27, 2013

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.



US Army Corps of Engineers® Chicago District

GENERAL CONDITIONS APPLICABLE TO THE 2012 REGIONAL PERMIT PROGRAM

ALCOHOLOGICA CONTRACTOR AND ACCOUNT.

The permittee shall comply with the terms and conditions of the Regional Permits and the following general conditions for all activities authorized under the RPP:

1. State 401 Water Quality Certification - Water quality certification under Section 401 of the Clean Water Act may be required from the Illinois Environmental Protection Agency (IEPA). The District may consider water quality, among other factors, in determining whether to exercise discretionary authority and require an Individual Permit. Please note that Section 401 Water Quality Certification is a requirement for projects carried out in accordance with Section 404 of the Clean Water Act. Projects carried out in accordance with Section 10 of the Rivers and Harbors Act of 1899 do not require Section 401 Water Quality Certification

On March 2, 2012, the IEPA granted Section 401 certification, with conditions, for all Regional Permits, except for activities in certain waterways noted under RPs 4 and 8. The following conditions of the certification are hereby made conditions of the RPP:

- 1. The applicant shall not cause:
 - a) a violation of applicable water quality standards of the Illinois Pollution Control Board Title 35, Subtitle C: Water
 - b) water pollution defined and prohibited by the Illinois Environmental Protection Act;
 - c) interference with water use practices near public recreation areas or water supply intakes;
 - d) a violation of applicable provisions of the Illinois Environmental Protection Act.
- The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- Except as allowed under condition 9, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all State statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material placed in a manner to prevent violation of applicable water quality standards.
- All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent soil erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining a NPDES Stormwater Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of (1) one or more acres, total land area. A NPDES Stormwater Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois EPA's Division of Water Pollution Control, Permit Section.
- The applicant shall implement erosion control measures consistent with the Illinois Urban Manual (IEPA/USDA, NRCS; 2011,
- The applicant is advised that the following permits(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- Backfill used in the stream-crossing trench shall be predominantly sand or larger size material, with less than 20% passing a
- Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of
- Backfill used within trenches passing through surface waters of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
 - particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using
 - b) excavation and backfilling are done under dry conditions.
- 10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered "acid-producing material" as defined in 35 II. Adm. Code,

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- Subtitle D. If considered "acid-producing material," the applicant shall obtain a permit to construct pursuant to 35 Il. Adm.
- 12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
- 13. Applicants that use site dewatering techniques in order to perform work in waterways for construction activities approved under Regional Permits 1 (Residential, Commercial and Institutional Developments), 2 (Recreation Projects), 3 (Transportation Projects), 7 (Temporary Construction Activities), 9 (Maintenance) or 12 (Bridge Scour Protection) shall maintain flow in the stream during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
- 14. In addition to any action required of the Regional Permit 13 (Cleanup of Toxic and Hazardous Materials Projects) applicant with respect to the "Notification" General Condition 22, the applicant shall notify the Illinois EPA Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL) for all cleanup activities under BOL jurisdiction, or for which authorization or approval is sought from BOL for no further remediation. This Regional Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.
- 2. Threatened and Endangered Species If the District determines that the activity may affect Federally listed species or critical habitat, the District will initiate section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with the Endangered Species Act of 1973, as amended (Act). Applicants shall provide additional information that would enable the District to conclude that the proposed action will have no effect on federally listed species.

The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Act, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Review all documentation pertaining to the species list, provide the rationale for your effects determination for each species, and send the information to this office for review.

If no species, their suitable habitats, or critical habitat are listed, then a "no effect" determination can be made, and section 7 consultation is not warranted. If species or critical habitat appear on the list or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit process.

Projects in Will, DuPage, or Cook Counties that are located in the recharge zones for Hine's emerald dragonfly critical habitat units may be reviewed under the RPP, with careful consideration due to the potential impacts to the species. All projects reviewed that are located within 3.25 miles of a critical habitat unit will be reviewed under Category II of the RPP. Please visit the following website for the locations of the Hine's emerald dragonfly critical habitat units in Illinois. http://www.fws.gov/midwest/endangered/insects/hed/FRHinesFinalRevisedCH.html

3. <u>Historic Properties</u> - In cases where the District determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity may require an Individual Permit. A determination of whether the activity may be authorized under the RPP instead of an Individual Permit will not be made until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the District with the appropriate documentation to demonstrate compliance with those requirements.

Non-Federal permittees must include notification to the District if the authorized activity may have the potential to cause effects to any historic properties listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the permit application must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing permit submittals, the District will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. Based on the information submitted and these efforts, the District shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties which the activity may have the potential to cause effects and so notified the District, the non-Federal applicant shall not begin the activity until notified by the District either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

The District will take into account the effects on such properties in accordance with 33 CFR Part 325, Appendix C, and 36 CFR 800. If all issues pertaining to historic properties have been resolved through the consultation process to the satisfaction of the District, Illinois Historic Preservation Agency (IHPA) and Advisory Council on Historic Preservation, the District may, at its discretion, authorize the activity under the RPP instead of an Individual Permit.

Applicants are encouraged to obtain information on historic properties from the IHPA and the National Register of Historic Places at the earliest stages of project planning. For information, contact:

Illinois Historic Preservation Agency 1 Old State Capitol Plaza Springfield, IL 62701-1507 (217) 782-4836 www.illinoishistory.gov

If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity, you must immediately notify this office of what you have found, and to the maximum extent practicable, stop activities that would adversely affect those remains and artifacts until the required coordination has been completed. We will initiate the Federal, Tribal and State coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. Soil Erosion and Sediment Control - Measures shall be taken to control soil erosion and sedimentation at the project site to ensure that sediment is not transported to waters of the U.S. during construction. Soil erosion and sediment control measures shall be implemented before initiating any clearing, grading, excavating or filling activities. All temporary and permanent soil erosion and sediment control measures shall be maintained throughout the construction period and until the site is stabilized. All exposed soil and other fills, and any work below the ordinary high water mark shall be permanently stabilized at the earliest practicable date.

Applicants are required to prepare a soil erosion and sediment control (SESC) plan including temporary BMPs. The plan shall be designed in accordance with the Illinois Urban Manual, 2011 (http://aiswcd.org/IUM/index.html). Practice standards and specifications for measures outlined in the soil erosion and sediment control plans will follow the latest edition of the "Illinois Urban Manual: A Technical Manual Designed for Urban Ecosystem Protection and Enhancement." Additional Soil Erosion and Sediment Control (SESC) measures not identified in the Illinois Urban Manual may also be utilized upon District approval.

At the District's discretion, an applicant may be required to submit the SESC plan to the local Soil and Water Conservation District (SWCD), or the Lake County Stormwater Management Commission (SMC) for review. When the District requires submission of an SESC plan, the following applies: An activity may not commence until the SESC plan for the project site has been approved; The SWCD/SMC will review the plan and provide a written evaluation of its adequacy; A SESC plan is considered acceptable when the SWCD/SMC has found that it meets technical standards. Once a determination has been made, the authorized work may commence unless the SWCD/SMC has requested that they be notified prior to commencement of the approved plans. The SWCD/SMC may attend pre-construction meetings with the permittee and conduct inspections during construction to determine compliance with the plans. Applicants are encouraged to begin coordinating with the appropriate SWCD/SMC office at the earliest stages of project planning. For information, contact:

Kane-DuPage SWCD 2315 Dean Street, Suite 100 St. Charles, IL 60174 (630) 584-7961 ext.3 www.kanedupageswcd.org

North Cook SWCD 899 Jay Street Elgin, IL 60120 (847) 468-0071 www.northcookswcd.org

McHenry-Lake County SWCD 1648 South Eastwood Dr. Woodstock, IL 60098 (815) 338-0099 ext.3 www.mchenryswcd.org

Lake County SMC 500 W. Winchester Rd, Suite 201 Libertyville, IL 60048 (847) 377-7700 www.lakecountyil.gov/stormwater

- 5. Total Maximum Daily Load For projects that include a discharge of pollutant(s) to waters for which there is an approved Total Maximum Daily Load (TMDL) allocation for any parameter, the applicant shall develop plans and BMPs that are consistent with the assumptions and requirements in the approved TMDL. The applicant must incorporate into their plans and BMPs any conditions applicable to their discharges necessary for consistency with the assumptions and requirements of the TMDL within any timeframes established in the TMDL. The applicant must carefully document the justifications for all BMPs and plans, and install, implement and maintain practices and BMPs that are consistent with all relevant TMDL allocations and with all relevant conditions in an implementation plan. Information regarding the TMDL program, including approved TMDL allocations, can be found at the following website: www.epa.state.il.us/water/tmdl/
- 6. Floodplain Discharges of dredged or fill material into waters of the United States within the 100-year floodplain (as defined by the Federal Emergency Management Agency) resulting in permanent above-grade fills shall be avoided and minimized to the maximum extent practicable. When such an above-grade fill would occur, the applicant may need to obtain approval from the Illinois



Department of Natural Resources, Office of Water Resources, (IDNR-OWR) which regulates activities affecting the floodway and the local governing agency (e.g., Village or County) with jurisdiction over activities in the floodplain. Compensatory storage may be required for fill within the floodplain. Applicants are encouraged to obtain information from the IDNR-OWR and the local governing agency with jurisdiction at the earliest stages of project planning. For information on floodway construction, contact:

IDNR/OWR 2050 Stearns Road Bartlett, IL 60103 (847) 608-3100 http://dnr.state.il.us/owr/

For information on floodplain construction, please contact the local government and/or the Federal Emergency Management Agency. Pursuant to 33 CFR 320.4(j), the District will consider the likelihood of the applicant obtaining approval for above-ground permanent fills in floodplains in determining whether to issue authorization under the RPP.

- 7. Navigation No activity may cause more than a minimal adverse effect on navigation. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 8. Proper Maintenance Any authorized structure or fill shall be properly maintained, including that necessary to ensure public safety.
- 9. Aquatic Life Movements No activity may substantially disrupt the movement of those species of aquatic life indigenous to the waterbody, including species that normally migrate through the area, unless the activity's primary purpose is to impound water.
- 10. Equipment Soil disturbance and compaction shall be minimized through the use of matting for heavy equipment, low ground pressure equipment, or other measures as approved by the District.
- 11. Wild and Scenic Rivers No activity may occur in a component of the National Wild and Scenic River System or in a river officially designated by Congress as a "study river" for possible inclusion in the system, while the river is in an official study status. Information on Wild and Scenic Rivers may be obtained from the appropriate land management agency in the area, such as the National Park Service and the U.S. Forest Service.
- 12. Tribal Rights No activity or its operation may impair reserved tribal rights, such as reserved water rights, treaty fishing and hunting rights.
- 13. Water Supply Intakes No discharge of dredged or fill material may occur in the proximity of a public water supply intake except where the discharge is for repair of the public water supply intake structures or adjacent bank stabilization.
- 14. Shellfish Production No discharge of dredged or fill material may occur in areas of concentrated shellfish production.
- 15. Suitable Material No discharge of dredged or fill material may consist of unsuitable material and material discharged shall be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act). Unsuitable material includes trash, debris, car
- 16. Spawning Areas Discharges in spawning areas during spawning seasons shall be avoided to the maximum extent practicable.
- 17. Obstruction of High Flows Discharges shall not permanently restrict or impede the passage of normal or expected high flows. All crossings shall be culverted, bridged or otherwise designed to prevent the restriction of expected high water flows, and shall be designed so as not to impede low water flows or the movement of aquatic organisms.
- 18. Impacts From Impoundments If the discharge creates an impoundment of water, adverse impacts on aquatic resources caused by the accelerated passage of water and/or the restriction of its flow shall be avoided to the maximum extent practicable.
- 19. Waterfowl Breeding Areas Discharges into breeding areas for migratory waterfowl shall be avoided to the maximum extent practicable.
- 20. Removal of Temporary Fills Any temporary fill material shall be removed in its entirety and the affected area returned to its pre-
- 21. Mitigation All appropriate and practicable steps must first be taken to avoid and minimize impacts to aquatic resources. For unavoidable impacts, compensatory mitigation is required to replace the loss of wetland, stream, and/or other aquatic resource functions (33 CFR 332). The proposed compensatory mitigation shall utilize a watershed approach and fully consider the ecological needs of the watershed. Where an appropriate watershed plan is available, mitigation site selection should consider recommendations in the plan. The applicant shall describe in detail how the mitigation site was chosen and will be developed, based on the specific

resource need of the impacted watershed. Permit applicants are responsible for proposing an appropriate compensatory mitigation option to offset unavoidable impacts. However, the District is responsible for determining the appropriate form and amount of compensatory mitigation required when evaluating compensatory mitigation options, and determining the type of mitigation that would be environmentally preferable. In making this determination, the District will assess the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed. Methods of providing compensatory mitigation include aquatic resource restoration, establishment, enhancement, and in certain circumstances, preservation. Compensatory mitigation will be accomplished by establishing a minimum ratio of 1.5 acres of mitigation for every 1.0 acre of impact to waters of the U.S. Furthermore, the District has the discretion to require additional mitigation to ensure that the impacts are no more than minimal. Further information is available at www.lrc.usace.army.mil/Missions/Regulatory/Illinois/Mitigation.aspx

22. Notification - The applicant shall provide written notification (i.e., a complete application) for a proposed activity to be authorized under the RPP prior to commencing a proposed activity. The District's receipt of the complete application is the date when the District receives all required notification information from the applicant (see below). If the District informs the applicant within 60 calendar days that the notification is incomplete (i.e., not a complete application), the applicant shall submit to the District, in writing, the requested information to be considered for review under the Regional Permit Program. A new 60 day review period will commence when the District receives the requested information. Applications that involve unauthorized activities that are completed or partially completed by the applicant are not subject to the 60-day review period.

For all activities, notification shall include:

- A cover letter providing a detailed narrative of the proposed activity describing all work to be performed, a clear project purpose and need statement, the Regional Permit(s) to be used for the activity, the area (in acres) of waters of the U.S. to be impacted (be sure to specify if the impact is permanent or temporary, and identify which area it affects), and a statement that the terms and conditions of the RPP will be followed.
- A completed joint application form for Illinois signed by the applicant or agent. The application form is available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/forms/appform.pdf. If the applicant does not sign the joint application form, notification shall include a signed, written statement from the applicant designating the agent as their representative.
- A delineation of waters of the U.S., including wetlands, for the project area, and for areas adjacent to the project site (off-site wetlands shall be identified through the use of reference materials including review of local wetland inventories, soil surveys and the most recent available aerial photography), shall be prepared in accordance with the current U.S. Army Corps of Engineers methodology (www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/reg_supp.aspx) and generally conducted during the growing season.* Our wetland delineation standards are available at www.lrc.usace.army.mil/Portals/36/docs/regulatory/pdf/Delineations.pdf. For sites supporting wetlands, the delineation shall include a Floristic Quality Assessment (Swink and Wilhelm. 1994, latest edition, Plants of the Chicago Region). The delineation shall also include information on the occurrence of any high-quality aquatic resources (see Appendix A), and a listing of waterfowl, reptile and amphibian species observed while at the project area. The District reserves the right to exercise judgment when reviewing submitted wetland delineations. Flexibility of the requirements may be determined by the District on
- A street map showing the location of the project area.
- Latitude and longitude for the project in decimal degrees format (i.e. 41.88377N, -87.63960W).
- Preliminary engineering drawings sized 11" by 17" (full-sized may be requested by the project manager and you may also submit plans in PDF format on a disc) showing all aspects of the proposed activity and the location of waters of the U.S. to be impacted and not impacted. The plans shall include grading contours, proposed and existing structures such as buildings footprints, roadways, road crossings, stormwater management facilities, utilities, construction access areas and details of water conveyance structures. The plans shall also depict buffer areas, outlots or open space designations, best management practices, deed restricted areas and restoration areas, if required under the specific RP.
- Submittal of soil erosion and sediment control (SESC) plans that identify all SESC measures to be utilized during construction
- The application packet shall indicate whether resources (species, their suitable habitats, or critical habitat) listed or designated under the Endangered Species Act of 1973, as amended, may be present within areas affected (directly or indirectly) by the proposed project. Applicants shall provide a section 7 species list for the action area using the on-line process at the USFWS website. You can access "U.S. Fish and Wildlife Service Endangered Species Program of the Upper Midwest" website at www.fws.gov/midwest/Endangered. Click on the section 7 Technical Assistance green shaded box in the lower right portion of the screen and follow the instructions to completion. Print all documentation pertaining to the species list, include the rationale for your effects determination for each species, and forward the information to this office for review.

If a wetland delineation is conducted outside of the growing season, the District will determine on a case-by-case basis whether sufficient evidence is available to make an accurate determination. If the District finds that the delineation lacks sufficient evidence, the application will not be considered complete until the information is provided. This may involve re-delineating the project site during the growing season.

In the event there are no species, their suitable habitats, or critical habitat, then a "no effect" determination can be made and section 7 consultation is not warranted. If species or critical habitat appear on the list, or suitable habitat is present within the action area, then a biological assessment or biological evaluation will need to be completed to determine if the proposed action will have "no effect" or "may effect" on the species or suitable habitat. The District will request initiation of section 7 consultation with the USFWS upon agreement with the applicant on the effect determinations in the biological assessment or biological evaluation. If the issues are not resolved, the analysis of the situation is complicated, or impacts to listed species or critical habitat are found to be greater than minimal, the District will consider reviewing the project under the Individual Permit

- A determination of the presence or absence of any State threatened or endangered species. Please contact the Illinois Department of Natural Resources (IDNR) to determine if any State threatened and endangered species could be in the project area. You can access the IDNR's Ecological Compliance Assessment Tool (EcoCAT) at the following website: http://dnrecocat.state.il.us/ecopublic/. Once you complete the EcoCAT and consultation process, forward all resulting information to this office for consideration. The report shall also include recommended methods as required by the IDNR for minimizing potential adverse effects of the project.
- A statement about the knowledge of the presence or absence of Historic Properties, which includes properties listed, or properties eligible to be listed in the National Register of Historic Places. A letter from the Illinois Historic Preservation Agency (IHPA) can be obtained indicating whether your project is in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended. The permittee shall provide all pertinent correspondence with the IHPA documenting compliance. The IHPA has a checklist of documentation required for their review located here: www.illinoishistory.gov/PS/rcdocument.htm .
- Where an appropriate watershed plan is available, the applicant shall address in writing how the proposed activity is aligned with the relevant water quality, hydrologic, and aquatic resource protection recommendations in the watershed plan.
- A discussion of measures taken to avoid and/or minimize impacts to aquatic resources on the project site.
- m. A compensatory mitigation plan for all impacts to waters of the U.S. (if compensatory mitigation is required under the specific RP).
- A written narrative addressing all items listed under the specific RP.

For Category II activities, the District will provide an Agency Request for Comments (ARC) which describes the proposed activity. The ARC will be sent to the following agencies: United States Fish & Wildlife Service (USFWS), United States Environmental Protection Agency (USEPA), Illinois Department of Natural Resources (IDNR), Illinois Department of Natural Resources/Office of Water Resources (IDNR/OWR), Illinois Environmental Protection Agency (IEPA), Illinois Historic Preservation Agency (IHPA), Illinois Nature Preserves Commission (INPC) and U.S. Coast Guard (Section 10 activities only). Additional entities may also be notified as needed. These agencies have ten (10) calendar days from the date of the ARC to contact the District and either provide comments or request an extension not to exceed fifteen (15) calendar days. The District will fully consider agency comments received within the specified time frame. If the District determines the activity complies with the terms and conditions of the RPP and impacts on aquatic resources are minimal, the District will notify the applicant in writing and include special conditions if deemed necessary. If the District determines that the impacts of the proposed activity are more than minimal, the District will notify the applicant that the project does not qualify for authorization under the RPP and instruct the applicant on the procedures to seek authorization under an

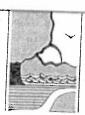
- 23. Compliance Certification Any permittee who has received authorization under the RPP from the District shall submit a signed certification regarding the completed work and any required mitigation. The certification will be forwarded by the District with the authorization letter and will include: a) a statement that the authorized work was done in accordance with the District's authorization, including any general or specific conditions; b) a statement that any required mitigation was completed in accordance with the permit conditions and; c) the signature of the permittee certifying the completion of the work and mitigation.
- 24. Multiple use of Regional Permits In any case where a Regional Permit is combined with any other Regional Permit to cover a single and complete project (except where prohibited under specific Regional Permits), the applicant shall notify the District in accordance with General Condition 22. If multiple Regional Permits are used, the total impact may not exceed the maximum allowed by the Regional Permit with the greatest impact threshold.
- 25. Other Restrictions Authorization under the RPP does not obviate the need to obtain other Federal, State or local permits, approvals, or authorizations required by law nor does it grant any property rights or exclusive privileges, authorize any injury to the property or rights of others or authorize interference with any existing or proposed Federal project.

Approved	by:
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//ORIGINAL SIGNED// Frederic A. Drummond, Jr. Colonel, U.S. Army District Commander

February 24, 2012 Date





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 25, 2014

SUBJECT: Permit No. NE2014020

Noe Road Realignment, Rush Creek McHenry County, Application No. 2013187

Walter Dittrich, P.E. McHenry County Division of Transportation 16111 Nelson Road Woodstock, Illinois 60098

Dear Mr. Dittrich:

Enclosed is Illinois Department of Natural Resources, Office of Water Resources Permit No. NE2014020 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.

The removal of bridge structures provided no materials would be placed in a way which would obstruct flows and bank restoration to pre-existing conditions does not require an IDNR/OWR permit.

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 contact Jeannette Schiller of my staff at 847/608-3100, ext. 32025 if you have any questions.

Sincerely,

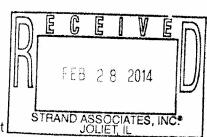
Gary W. Jereb, P.E., Chief

Northeastern Illinois Regulatory Programs Section

GJ/JS:crw Enclosure

CC:

Chicago District, U.S. Army Corps of Engineers
McHenry County Planning and Development Department
Marc Grigas, Strand Associates, Inc.—





PERMIT NO. NE2014020 DATE: February 25, 2014

State of Illinois Department of Natural Resources, Office of Water Resources

Permission is hereby granted to:

McHenry County Division of Transportation 16111 Nelson Road Woodstock, Illinois 60098

to fill and excavate in the floodway of Rush Creek as part of the Noe Road realignment project in the Southeast Quarter of Section 8, Township 44 North, Range 5 East of the Third Principal Meridian in McHenry County,

in accordance with an application dated August 26, 2013, and the plans and specifications entitled:

COMPENSATORY STORAGE EXHIBIT, TWO SHEETS, DATED JUNE 14, 2013, RECEIVED OCTOBER 8, 2013, GRADING PLAN, SHEET 41 OF 66, DATED NOVEMBER 12, 2013, RECEIVED DECEMBER 2, 2013, NOE ROAD CROSS SECTIONS, THREE SHEETS, DATED NOVEMBER 12, 2013, RECEIVED JANUARY 31, 2014.

Examined and Recommended:

Approval Recommended:

Gary W. Jereb, Chief

Northeastern IL Regulatory

Programs Section

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.



PERMIT NO. NE2014020

THIS PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

- This permit is granted in accordance with the Rivers, Lakes and Streams Act "615 ILCS 5."
- 2) 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 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.
- 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
- 5) The permittee shall, at the permittee's own expense, remove all temporary piling, cofferdams, false work, and material incidental to the construction of the project. If the permittee fails to remove such structures or materials, the Department may have removal made at the expense of the permittee.
- 6) 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.
- 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.
- 11) 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.

Page 1 of 3



Illinois Environmental Protection Agency

Bureau of Water

• 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. TLR4000264 For Office Use Only OWNER INFORMATION Permit No. ILR10 Company/Owner Name: McHenry County Division of Transportation Mailing Address: 16111 Nelson Road Phone: 815-334-4980 City: Woodstock State: IL Zip: 60098 Fax: 815-334-4989 Contact Person: Wally Dittrich, P.E. E-mail: wrdittrich@co.mchenry.il.us Owner Type (select one) County CONTRACTOR INFORMATION MS4 Community: Yes □ No Contractor Name: Mailing Address: Phone: _____ State: ___ Zip: ____ City: Fax: CONSTRUCTION SITE INFORMATION ⊠ New Change of information for: ILR10 Project Name: Noe Road Realignment County: McHenry Street Address: Noe Road near Carmack Road City: Marengo IL Zip: 60152 Latitude: 42 18 4 Longitude: 88 5E (Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range Approximate Construction Start Date May 1, 2015 Approximate Construction End Date Oct. 31, 2015 Total size of construction site in acres: 6.5 Fee Schedule for Construction Sites: If less than 1 acre, is the site part of a larger common plan of development? Less than 5 acres - \$250 ☐ Yes ☐ No 5 or more acres - \$750 STORM WATER POLLUTION PREVENTION PLAN (SWPPP) Has the SWPPP been submitted to the Agency? ✓ Yes (Submit SWPPP electronically to: epa,constilr10swppp@illinois.gov) Location of SWPPP for viewing: Address: Division of Transportation - 16111 Nelson Rd City: Woodstock SWPPP contact information: Inspector qualifications: Contact Name: Marc Grigas Phone: 815-744-4200 Fax: 815-744-4215 E-mail: Project inspector, if different from above Inspector qualifications: Inspector's Name: Phone: E-mail:

Rev 5/10

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 IL 532 2104 WPC 623 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) 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 Transportation	Pag
SIC Code:	AND THE PROPERTY OF THE PROPER
Type a detailed description of the project:	
, ,	urnishing all labor, materials, equipment, and other incidentals
necessary for the completion of concrete super	structure removal, removal of existing abutments and pier, pavement
removal, hot-mix asphalt pavement, aggregate	shoulders, pipe culverts, ditch grading, pavement markings,
landscaping, and other miscellaneous items of	work in accordance with the Plans, Standard Specifications, and
Special Provisions.	work to describe with the Flans, Standard Specifications, and
	GERED SPECIES COMPLIANCE state agencies to satisfy applicable requirements for compliance with
Historic Preservation Agency Yes	No
Endangered Species Yes	☐ No
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 y	ou discharge: Rush Creek
Mall completed form to: Illinois Environmental Pro- Division of Water Pollution Attn: Permit Section Post Office Box 19276 Springfield, Illinois 62794 or call (217) 782-0610 FAX: (217) 782-9891	on Control 1 LCN 4000 2 6 4
Or submit electronically to: epa.constilr10swppp@	Dillinois.gov
submitted. Based on my inquiry of the person or p for gathering the information, the information submitted. I am aware that there are significant per	and all attachments were prepared under my direction and supervision nat qualified personnel properly gather and evaluate the information ersons who manage this system, or those persons directly responsible nitted is, to the best of my knowledge and belief, true, accurate, and natties for submitting false information, including the possibility of fine visions of the permit, including the development and implementation onitoring program plan, will be complied with.
Any person who knowled makes a false fictitious	or fraudulent material statement, orally or in writing, to the Illinois EPA offense after conviction is a Class 3 felony. (415 ILCS 5/44(hj)
Without	1-29-15
OWner Signature:	Date:
Wally Dittrich, P.E.	Design Manager
Printed Name:	

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."

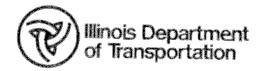
Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

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.





Storm Water Pollution Prevention Plan

None	F. N. J. Z.	Marked Rte.	Noe Road
Section	08-00357-00-BR	Project No.	BROS-0111(057)
County	McHenry	Contract No.	63869
	has been prepared to comply with the provisions of the ILR10 (Permit ILR10), issued by the Illinois Environment truction site activities.	e National Pollut nental Protection	ant Discharge Elimination System (NPDES) Agency (IEPA) for storm water discharges
submitted gathering am aware	nder penalty of law that this document and all attach be with a system designed to assure that qualified p . Based on my inquiry of the person or persons who me the information, the information submitted is, to the best that there are significant penalties for submitting false in g violations.	ersonner proper lanage the syste	ly gathered and evaluated the information m, or those persons directly responsible for
-	Walter Dittrich	α	MA A
	Print Name Design Manager Title CHenry County Division of Transportation		Signature /-2 (-16) Date
	Agency		

I. Site Description:

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

The project is located on Noe Road over Rush Creek between Kishwaukee Valley Road and Carmak Road northwest of the City of Marengo, Marengo Township, in McHenry County, Illinois. The project is located in Sections 8 and 9, T 44N, R 5E. The total gross and net length for this project is 2,140 feet (0.405 miles). (Lat:42°18' 4" and Long:88°40'1")

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

The work included in this contract consists of furnishing all labor, materials, equipment, and other incidentals neccessary for the completion of concrete superstructure removal; removal of existing abutments and pier; pavement removal; hot-mix asphalt pavement; aggregate shoulders; pipe culverts; ditch grading; pavement markings; landscaping; and other miscellaneous items of work in accordance with the Plans, Standard Specifications, and these Special Provisions.

C. Provide the estimated duration of this project:

5 months

D. The total area of the construction site is estimated to be <u>6.5</u> acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 6.5 acres.

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

C = 0.56 (Proposed); C = 0.55 (Existing)

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

Lisbon Silt Loam (59A), 0 to 2% slopes Dakota Loam (379B), 2 to 4% slopes Dunham Silty Clay Loam (523A), 0 to 2% slopes Grundelein Silt Loam (526A), 0 to 2% slopes Millstream Silt Loam (557A), 0 to 2% slopes



Martinsville Silt Loam (570B), 2 to 4% slopes Comfrey Loam (8776A), 0 to 2% slopes, Occasionally flooded

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

Rush Creek area of impact: +/- 0.076 acres

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

Roadside ditches are proposed on the west and east sides of relocated Noe Road, along with removal of existing S.N. 056-3048 that carried Noe Road over Rush Creek.

- I. 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):
 - 1. Stripping and stockpiling topsoil outside the flood plain.
 - 2. Earthwork and ditch grading along Noe Road.
 - 3. Structure removal over Rush Creek along with bank stabilization.
 - 4. Realignment of Noe Road will require embankment and/or cuts. These areas shall remain disturbed until covered with subgrade.
- 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 where stabilization of major structural and non-structural controls identified in the plan, the location of areas water is discharged to surface water including wetlands.
- K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Waters of the State (Rush Creek)

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

McHenry County

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:

Receiving Water: Rush Creek

Ultimate Receiving Water: Kishwaukee River

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 that are protected with perimeter erosion control barrier shall remain undisturbed throughout the duration of the project. Also, Rush Creek shall be protected from pollutants throughout the duration of the project.

O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

\boxtimes	Floodplain
\boxtimes	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	302/d) Listed

1. 303(d) Listed receiving waters (fill out this section if checked above):

N/A

a. The name(s) of the listed water body, and identification of all pollutants causing impairment:



	b	Provide a description of how sediment resulting from a stori hour rainfall event:	v erosion m event ed	and sediment control practices will prevent a discharge of qual to or greater than a twenty-five (25) year, twenty-four (24)
	C	Provide a description of the lobody:	ocation(s)	of direct discharge from the project site to the 303(d) water
	d.	Provide a description of the loc	ation(s) of	any dewatering discharges to the MS4 and/or water body:
2.	ТМ	DL (fill out this section if checked a	above)	
	a.	The name(s) of the listed water	body:	
	b.	Provide a description of the eros design that is consistent with the	sion and s e assumpti	ediment control strategy that will be incorporated into the site ions and requirements of the TMDL:
	C.	If a specific numeric waste loadischarges, provide a description	ad allocation of the ne	on has been established that would apply to the project's cessary steps to meet that allocation:
P. The	followi	ng pollutants of concern will be as	sociated w	vith this construction project
	Soil Con Con Solid Pain Solve	Sediment crete crete Truck Waste crete Curing Compounds d Waste Debris ts		Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Antifreeze / Coolants Waste water from cleaning construction equipment Other (specify) Other (specify) Other (specify) Other (specify)
Controls:				Other (specify)
This section described in	of the	e plan addresses the controls the	at will be	implemented for each of the major construction activities

II.

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 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:

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

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

Temporary Erosion Control Seeding:

All areas of base ground will be temporarily seeded every seven days until permanent erosion control is in place. Topsoil and earth stockpiles shall be temporarily seeded within seven days if they are to remain unused for more than fourteen days.

Permanent Seeding:

Excavated areas and embankments shall be permanently seeded when final graded. If not, they shall be temporarily seeded in accordance with the Standard Specifications for Road and Bridge Construction.

Temporary Erosion Control Blanket/Mulching:

Heavy duty erosion control blanket shall be used on all areas of permanent seeding. Temporary mulching will be utilized onsite, especially where stabilization is required but seed will not germinate (e.g., mid summer and winter)

Geotextiles:

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Geotextile materials will be utilized in multiple applications to minimize soil disturbance and help prevent sediment from washing off project area.

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

The temporary erosion control system will be removed and permanent erosion control items will be installed as shown on the drawings. Maintenance and repair of these items shall be the responsibility of McHenry County Division of Transportation.

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 temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the

The following structural practices will be used for this project:

	Perimeter Erosion Barrier Temporary Ditch Check Storm Drain Inlet Protection Sediment Trap Temporary Pipe Slope Drain Temporary Sediment Basin Temporary Stream Crossing Stabilized Construction Exits Turf Reinforcement Mats Permanent Check Dams Permanent Sediment Basin Aggregate Ditch Paved Ditch		Rock Outlet Protection Riprap Gabions Slope Mattress Retaining Walls Slope Walls Concrete Revetment Mats Level Spreaders Other (specify) In-stream Work Plan Other (specify) Turbidity Barrier Other (specify) Cofferdams Other (specify) Temporary Sediment Trap Other (specify)
--	--	--	---

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

Perimeter Erosion Barrier:

Perimeter erosion barrier will be installed at the beginning of construction and remain for the duration of the project. Perimeter erosion barrier will reduce the potential for untreated runoff to flow offsite.

Temporary Ditch Checks:

Temporary ditch checks will be placed in the roadside swales to dissipate flows and reduce the potential for erosion. These ditch checks will be comprised of urethance foam/geotextile ditch checks.

Inlet and Pipe Protection:

Inlet and pipe protection will be installed on upstream ends of existing and proposed culverts shown to treat the runoff from the jobsite and reduce the potential for offsite contamination. For inlet and pipe protection, a combination of temporary seed, erosion control blanket, and temporary ditch checks will be used.

Temporary Sediment Trap:

Temporary sediment basins will be used for surface runoff and discharge from in stream work. Water shall have sediment removed prior to being reintroduced to the downstream waterway. Discharge water is considered clean if it does not result in a visually identifiable degradation of water quality.

Riprap:

Riprap will be utilized at all downstream end sections of culverts and storm sewers, as well as around structure piers and abutments. Riprap is a scour and erosion countermeasure.

In-stream Work Plan:

The in-stream work shall follow the McHenry County Soil and Water Conservation District technical standards.

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

Once permanent erosion control systems as proposed in the drawings are functional and established, temporary

items shall be removed, the area cleared, and disturbed areas reseeded.

D. Treatment Chemicals

Will polymer flocculants or treatment chemicals be utilized on this project:		Yes	\boxtimes	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.
 - 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.

2. 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

Description of permanent storm water management controls:

Temporary stormwater management controls shall be performed during construction as shown in the drawings. This shall include perimeter erosion barrier, temporary erosion control seeding, mulching, inlet and pipe protection, temporary ditch checks, and temporary in-stream work. All disturbed areas shall be seeded or mulched and shall incorporate erosion control blanket as shown in the drawings.

Permanent stormwater management features include proposed seeding for all disturbed areas.

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 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 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:

All management practices, controls, and other provisions provided in this plan are in accordance with the IDOT Standard Specifications for Road and Bridge Construction," "McHenry County Stormwater Management Ordinance," 'McHenry and Lake County Soil and Water Conservation District (MCSWCD)", and 'illinois Urban Manual"

- 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.
 - 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.

Perimeter Erosion Barrier:

Barrier should be installed prior to any earth-disturbing activities. It shall not have tears or gaps and must not be leaning. Any stakes that are missing or broken must be replaced immediately. If the sediment reaches 1/3 the height of the barrier, maintenance or replacement is required. Repair the barrier if undermining occurs anywhere along its entire length. Remove the barrier once final stabilization is established.

Temporary Ditch Checks:

Sediment shall be removed from the upstream side of the ditch check when the sediment has reached 50% of the height of the structure. Ditch checks are to be replaced or repaired whenever tears, splits, unraveling, or compressed excelsior is apparent. Replace torn fabric mat that allows water to undermine the ditch check. Remove debris when observed on the check. If water or sediment is going around the ditch check, maintenance may be required or installation may be flawed. If the ditch checks are floating, stakes may be installed incorrectly.

Temporary Seeding:

A visual inspection of this item is necessary to determine whether or not it has germinated. If the seed has failed to germinate, another application of seed may be necessary. If seed has been washed away or found to be concentrated in ditch bottoms, temporary mulch may have to be used to hold seed in place. Restore rills greater than 4 inches deep as quickly as possible on slopes steeper than 1V:4H to prevent sheet-flow from becoming concentrated flow patterns. If excessive weed development occurs, mowing may be necessary.

Temporary Mulching:

If straw is blown or washed away, erosion control blanket curls or slides down a slope, or hydraulic mulch washes away, maintenance of this item will be required. Place tackifier or an erosion control blanket if mulch does not control erosion.

Permanent Seeding:

A visual inspection of this item is necessary to determine whether or not it has germinated. If the seed has failed to germinate, another application of seed may be necessary.

Temporary Erosion Control Blanket:

Repair damage due to water running beneath the blanket and restore blanket when displacement occurs. Reseeding may be necessary. Replace all displaced blankets and restaple.

Temporary Sediment Basin:

Sediment basins shall be inspected weekly and immediately after rain events. Sediment shall be removed to maintain the proper amount of sediment storage volume. If the outlet becomes clogged, it shall be cleaned to restore flow capacity. Provisions for proper disposal of the removed sediment shall be made. Replace any damaged or failed parts of the basin.

IV. Inspections:

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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.

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



BDE 2342 (Rev. 3/20/14)

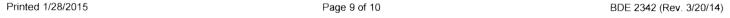
Illinois Environmental Protection Agency Division of Water Pollution Control Attn: Compliance Assurance Section 1021 North Grand East Post Office Box 19276 Springfield, Illinois 62794-9276

Additional Inspections Required:

N/A

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	T.R. 32	Marked Rte.	Noe Road
Section	08-00357-00-BR	Project No.	BROS-0111(057)
County	McHenry	Contract No.	63869
This certi Permit No	ification statement is a part of SWPPP for the problem. ILR10 issued by the Illinois Environmental Protect	oject described a tion Agency.	above, in accordance with the General NPDES
	nder penalty of law that I understand the terms of the distribution with industrial activity from the construction site in		
project; I	n, I have read and understand all of the information have received copies of all appropriate maintenan compliance with the Permit ILR10 and SWPPP and the supplemental supplemental supplements.	ce procedures; a	and, I have provided all documentation required
☐ Cont	ractor		
☐ Sub-	Contractor		
	Print Name	AMAZINE SOCIOLO SOCIONO SI SI SOCIONO SI	Signature
W. Human	Title	***************************************	Date
74	Name of Firm	***************************************	Telephone
	Street Address		City/State/ZIP
Items whi	ch this Contractor/subcontractor will be responsible	for as required in	n Section II.G. of SWPPP:

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BDE 2342a (Rev. 3/20/14)



McHENRY - LAKE COUNTY SOIL & WATER **CONSERVATION DISTRICT**



1648 South Eastwood Dr., Woodstock, Illinois 60098 (815) 338-0099 ext. 3 Fax (815) 338-7731

September 27, 2013

Strand Associates Marc Grigas 1170 South Houbolt Rd. Joliet, IL 60431

RE: E & S plan review for Noe Rd Realignment Project

Dear Marc:

My apologies for the delay in responding to your erosion control plan review for the Noe Rd realignment project. I have reviewed the plans you submitted and have determined that these plans meet our technical standards to control erosion on the site. The only additional item that should be on your plans is the type of erosion control blanket and turf reinforcement matting you intend to use. There are many choices of blanket and it would be helpful to the contractor to know what exact kind to use.

I will retain this set of plans for field inspection purposes, however if any changes are made between now and when construction begins you will need to send us those changes. As with any erosion control plan, changes may be needed as field and weather conditions change. If you have any questions please do not hesitate to call.

Sincerely,

Edward Weskerna

District Manager



Resources for the Future

McHENRY - LAKE COUNTY SOIL & WATER CONSERVATION DISTRICT



1648 South Eastwood Dr., Woodstock, Illinois 60098 (815) 338-0099 ext. 3 Fax (815) 338-7731

Requirements for In-stream Construction Activities

The contractor shall contact the Corps with a proposed cofferdam plan that meets the standards listed below. The Corps will approve a cofferdam plan which meets these erosion and sediment control standards. Means and methods for completing work within a waterway must be approved by the Corps prior to the commencement of work. However, it is incumbent upon the contractor to ensure that all cofferdams are constructed to allow the passage of high flows, maintain downstream flows, and withstand anticipated erosive forces.

The following definitions apply to these notes:

<u>Cofferdam</u>: a temporary structure within a waterway or body of water designed to provide a dry work area for temporary construction activities and contain disturbed soil and/or suspended sediments.

<u>In-stream work area</u>: work occurring at or below the ordinary high water mark (OHWM) of a waterway or the normal water level (NWL) of abutting wetlands, including adjacent uplands.

<u>Dewatering</u>: the removal of water with the purpose of creating a dry work area for temporary construction activities.

Work within a waterway must meet the following standards:

- 1. 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.
- 2. 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 fabric, etc.). Earthen cofferdams are not permissible.
- 3. Work may not be performed in the water, except for the placement of the materials necessary for the construction of the cofferdam. The cofferdam must be constructed from the upland area and no equipment may enter the 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.
- 4. 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.
- 5. During dewatering of the coffered area, all water must be filtered to remove sediment. Possible options for sediment removal include baffle systems, anionic polymers, 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. Discharge water is considered clean if it does not result in a visually identifiable degradation of water clarity.
- 6. 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 preconstruction conditions and fully stabilized prior to accepting flows.

Resources for the Future





Corporate Office

360 S. Main Place, Carol Stream, IL 60188-2404 630.462.2600 • Fax 630.653.2988

Local Offices:

1701 W. Market Street, Suite B, Bloomington, IL 61701-2641 309.821.0430 • Fax 309.821.1242

457 E. Gundersen Drive, Carol Stream, IL 60188-2492 630.653.3920 • Fax 630.653.2726

209 Cleveland Street, Suite C, Cary, IL 60013-2978 847.516.0505 • Fax 847.516.0527

650 Peace Road, Suite D, DeKalb, IL 60115 815.748.2100 • Fax 815.748.2110

401 Riverside Drive, Suite 24, Gurnee, il. 60031-5906 847.249.6040 • Fax 847.249.6042

2235 23^{RO} Avenue, Rockford, IL 61104-7334 815.394.2562 • Fax 815.394.2566

203 Earl Road, Suite A, Shorewood, IL 60404-9446 815.744.1510 • Fax 815.744.1728

8201 W. 183RD Street, Suite C, Tinley Park, IL 60487-9208 708.429.2080 • Fax 708.429.2144

Geotechnical & Environmental Engineering

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Construction Materials Engineering & Testing

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Laboratory Testing of Soils, Concrete & Asphalt

THE NEW YOR PER

Geo-Environmental Drilling & Sampling

Geotechnical Soils Investigation

Noe Road over Rush Creek

Bridge Replacement

Section 08-000357-00-BR

McHenry County, Illinois

Strand Associates, Inc.





GEOTECHNICAL SOILS INVESTIGATION NOE ROAD OVER RUSH CREEK BRIDGE REPLACEMENT SECTION 08-000357-00-BR McHENRY COUNTY, ILLINOIS

PREPARED FOR: STRAND ASSOCIATES, INC. 1170 SOUTH HOUBOLT ROAD JOLIET, ILLINOIS 60431

PREPARED BY:
TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188
(630) 653-3920

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GEOTECHNICAL SOILS INVESTIGATION NOE ROAD OVER RUSH CREEK BRIDGE REPLACEMENT SECTION 08-000357-00-BR McHENRY COUNTY, ILLINOIS

1.0 INTRODUCTION

This report presents results of the subsurface investigation performed for the reconstruction of the Noe Road bridge over Rush Creek in McHenry County, Illinois. These geotechnical services have been provided in accordance with TSC Proposal No. 41,781 (Revised) as executed on October 9, 2008.

The existing Noe Road bridge over Rush Creek (Structure No. 056-3048) is located about 3 miles west of IL Route 23 and 1 mile south of Kishwaukee Valley Road, in western McHenry County. The project site bisects the Southeast 1/4 of Section 8 and Southwest 1/4 of Section 9 of Marengo Township (T 44 N, R5 E). A project location map is appended to this report.

The existing structure consists of a two-span bridge which has a length of about 82 feet. The structure supports a two-lane pavement and has a width of approximately 24 feet. It is understood the original plans for the bridge show closed concrete type abutments supported on timber piles and a pile bent pier cap type center pier supported on 14" diameter metal shell (MS) piles.

The replacement bridge (Structure No.056-3193) will consist of a two-span structure with integral (open) type abutments, having an overall length slightly larger than the existing bridge. One bridge pier is to be constructed (solid wall pier type), approximately midway between the abutments. The bridge deck will be widened to 32'-0" and include two 12' lanes and 4' shoulders. The pier and abutments are to be supported on either metal shell or steel H-piles.

2.0 SITE DESCRIPTION AND GEOLOGY

The project site is located in western McHenry County. Noe Road crosses Rush Creek approximately 1 mile south of its intersection with Kishwaukee Valley Road. The project site bisects the Southeast 1/4 of Section 8 and Southwest 1/4 of Section 9 of Marengo Township (T 44 N, R5 E). The existing roadway and bridge accommodate two lanes of traffic trending north to south. Approaches from both the north and south are located on relatively gently sloping embankments. Appended to this report is a project location map of the surrounding area.

Geologically the project lies within the outwash plains along the front of the Marengo moraine. The surficial soil deposits are mapped as the Henry formation consisting of proglacial stratified sands interbedded with till. Underlying the Henry formation is the Glasford till of Illinoian age.

Uppermost soils across many portions of this area consist of wind-blown loess which has been weathered, decomposed and otherwise modified such that it presently consists of a silty clay of relatively high plasticity. Peat, organic clay and/or soft slopewash deposits may also be found in relatively low-lying areas associated with the moraine topography. Dolomitic shale bedrock of Ordovician age is expected to be overlain by about 70 feet of feet of overburden in the site vicinity.

Included in the Appendix is the Pedological Soil Map for the site as prepared by the Natural Resources Conservation Service. A review of this map indicates the areas along the immediate vicinity of the bridge is classified as the following soils.

8776A Comfrey Loam, 0 to 2 percent slopes, occasionally flooded

The Natural Resources Conservation Service rates these soils to be Poor roadfill material with a "very limited" rating for local roads and streets due to wetness, low strength, frost action, shrink/swell tendencies. There were no areas of organic "muck" type deposits within close proximity to the project.

3.0 PRECIPITATION SUMMARY

The soil borings for this project were drilled in September 2009. Observations made of precipitation during the six months preceding our field work are summarized in the following table. These observations were obtained at the Marengo weather station located approximately 5.5 miles southeast of the project site.

Precipitation Data (in inches)			
Month	Total (inches)	Departure From 30yr Avg.	
March, 2009	1.05	-1.35	
April, 2009	4.57	+1.0	
M ay, 2009	5.42	+1.55	
June, 2009	6.50	+2.20	
July, 2009	2.17	-1.75	
August, 2009	4.66	+0.13	

Based on the above data, it is anticipated that groundwater levels and soil moisture were probably at or below normal seasonal conditions due to lower than normal precipitation during the two proceeding months prior to drilling.

4.0 SUMMARY OF WORK PERFORMED

Work performed for this study included three (3) structure borings, one (1) bridge deck core and one (1) pavement core. The structure borings were drilled at the proposed abutment locations and near the proposed center pier location. The pavement core was taken at the west approach of the bridge, the



bridge deck core near the middle of the south portion of the deck. Reference is made to the appended Location Plan showing the specific boring and core locations.

Drilling, sampling and testing procedures were performed in accordance with IDOT structure boring criteria. Soil sampling was performed in conjunction with the Standard Penetration Test (SPT), for which driving resistance to a 2" split-spoon sampler (in blows per 6" interval) provides an indication of the relative density of granular materials and consistency of cohesive soils. It should be noted that an automatic hammer which has a relatively high energy rating was used to obtain the SPT samples in Boring 2. A rope and cathead/safety hammer system was used to obtain the samples in Borings 1 and 3.

A four-inch diameter pavement core (Core 1) was obtained using an electric drill and core barrel containing diamond cutting bits. Aggregate subbase materials were also sampled and measured for thickness. The pavement core sample was examined by a materials technician in the laboratory. Detailed results are provided in the Appendix under "Pavement Core Results". A representative area of the bridge deck was cored with a 2-inch core barrel (Core 2). The core extended 4½ inches into the concrete deck.

Reference is made to the boring logs in the Appendix of this report which indicate subsurface stratigraphy and soil descriptions, results of field and laboratory tests, as well as water level observations. A Soil Test Data sheet is attached giving results of laboratory testing, along with grain size distribution curves (Soil Data sheets). Definitions of descriptive terminology are also enclosed. While strata changes are shown as a definite line on the boring logs, the actual transition between soil layers may be more gradual.



5.0 DISCUSSION OF RESULTS

5.1 Pavement Composition

Core 1 was taken just south of the south abutment of the existing bridge. Appended to this report is a detailed summary of Pavement Core Results. The core encountered about 3.4 inches of asphalt over 5.5 inches of Crushed Sand and Gravel subbase materials. The asphalt core sample was in relatively good condition and was comprised of about 0.7 to 1.7 inches of surface course, chip & seal and bituminous aggregate mixture (BAM) materials.

5.2 Bridge Deck Core

The bridge deck core (C-2) and testing was performed in accordance with criteria outlined in BDE Procedure Memorandum 26-02A. A representative area of the bridge deck was cored with a 2-inch core barrel. The core extended about 4.5 inches into the concrete deck. The approximate upper 0.4" of the core consisted of bituminous surface materials, the remainder of P.C. concrete. At the completion of coring the core hole was backfilled and compacted with cold patch asphalt.

The core sample was broken down by using the Gravimetric Reduction Method to release any potential asbestos fibers. The material was then analyzed by using Polarized Light Microscopy (PLM) to determine if asbestos fibers were present. TEM Incorporated in Glen Ellyn (101732-0) performed the asbestos testing. Appended to this report is a copy of their letter and data sheet of test results. The test results did not detect any asbestos containing material in the core sample.

5.3 Structure Borings

Boring 3 was drilled on the asphalt pavement at the approximate north abutment location, revealing about 4 inches bituminous concrete. Sandy Loam fill materials were encountered at the surface of Boring 1 and below the pavement in Boring 3, extending to approximately 6 feet below existing grade, apparently representing roadway embankment. The fill materials exhibited SPT N-values ranging from 11 to 29 blows per foot (bpf). Organic Clay and Silty Clay (Topsoil) layers were found directly



underlying the fill materials in Borings 1 and 3, respectively, extending to about 8 feet in depth.

Samples of these organic soils from Borings 1 and 3 exhibited moisture contents of 76 and 68 percent, respectively. The Organic Clay deposit in Boring 1 was underlain by a loose silty Sand and Gravel layer that extended to a depth of about 8 feet.

Approximately 1 foot of apparent sand and gravel fill materials were found at the surface of Boring 2 drilled in the creek bed area, being underlain by a loose gravel deposit (N = 6 bpf) that extended to a depth of approximately 3 feet below existing grade.

Native soils below the above-described surface materials otherwise consisted predominately of medium dense to very dense Sand/Sand and Gravel, occasional layers of medium dense to very dense Sandy Clay Loam, Silty Loam and Sandy Loam also being encountered. The SPT blowcounts for these intermediate and granular soil types were in the range of 18 to as high as 100 blows per 5 inches of run, typically exceeding 30 bpf and increasing with depth. In Boring 1, approximate 5-foot thick deposits of stiff to very stiff Clay Loam and hard Clay Loam were found at depths of about 13 and 48 feet below existing grade, respectively. These low plasticity cohesive soils had unconfined compressive strengths of about 2.0 to 6.0 tsf at moisture contents of 8 to 10 percent.

Free water was first encountered while drilling and sampling in Borings 1 and 3 at depths of 8 and 10½ feet below existing grade, respectively, with free water being first found at a depth of about 1 foot in Boring 2 (drilled in the creek bed area). Upon completion of drilling operations, the water level had risen to the surface of Boring 2, remaining basically at the same depth at B-3. Based on the results of the borings and moisture conditions of the soil samples, the water table at the project site is estimated at approximate Elevation 809 at the time of drilling.



6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Seismic Considerations

The project site is located within western McHenry County, lying within the limits of the Village of Marengo. The Spectral Acceleration values are expressed as percentage of gravity based on 7 percent probability of exceedance in 75 years. In accordance with Appendix 3.15.A of the IDOT Bridge Manual and the LRFD Code, following is a summary of seismic information:

Seismic Performance Zone (SPZ): 1

Design Spectural Acceleration at 1.0 sec (S_{D1}): 5.6

Design Spectural Acceleration at 0.2 sec (S_{DS}): 9.8

Soil Site Class:

6.2 Scour Potential

The center pier for the Noe Road bridge reconstruction is to be located close to the original one near the middle of Rush Creek. Boring 2 was drilled in the creek bed area near the proposed pier location, the ground surface there being at Elevation 809.0. The proposed bottom of pier has been set at Elevation 803.5, i.e. at a depth of about 5.5 feet below existing grade.

Loose to medium dense Sand and Gravel and medium dense Sandy Loam deposits were encountered in Boring 2, extending to approximately 8 feet or Elevation 801.0. Dense to very dense Sand/Sand and Gravel was then encountered underlying these deposits, extending to the bottom of the borehole at 60 feet below existing grade or approximate Elevation 749. The potential for scour may be significant for this bridge. Grain-size analyses were performed on three representative samples from Boring 2 in order to provide data for scour analysis. The results of the grain size analysis are appended to this report, with D50 particle sizes summarized in the following table.



Boring No.	Sample Location		D50	0-11-01	
	Depth (Ft)	Elevation	Particle Size	Soil Classification	
	1.0 - 2.5	807.5	14.0 mm	Small Gravel, some sand A-1-a	
2	6.0 - 7.5	802.5	0.32 mm	Sandy Loam A-2-4	
	8.5 - 10.0	800.0	0.27 mm	Fine to medium Sand A-3	

6.3 Pile Foundations

The bridge pier and abutments are to be supported by steel H-piles or metal shell (MS) piles. Three (3) typical pile sections have been evaluated in connection with them (HP 12x53, HP 14x73 and 14" diameter MS). Nominal Required Bearing, Factor Resistence Available and Estimated Pile Lengths are summarized in the following tables. They have been prepared in connection with Design Guide 3.10.1, LRFD Geotechnical Pile Design Procedure.

Pile Designation	Nominal Required Bearing (kips) *	Factored Resistance Available (kips) **	Estimated Pile Lengths (Feet)
Steel HP 12x53	360	180	#
Steel HP 14x73	360	180	#
14" Dia. Metal Shell	360	180	#

- * Nominal Required Bearing was based on an Allowable Resistance Available of 60 tons (120 kips) and a minimum factor of safety (FS) of 3.0.
- ** Factored Resistance Available computed using a geotechnical resistance factor of 0.5; no reduction taken for downdrag, scour or liquefaction.
- # Estimated pile lengths for the three (3) bridge supports summarized in the following table.



Bridge	Bottom of Abutment Cap or Pier Wall Elevation	Boring No.	Pile Designation	Nominal Required Bearing = 360 kips (minimum)		Estimated Pile Length
Support				Depth (Feet)	Tip Elevation	(Feet) *
South Abutment	812.1	1	HP 12x53	33	784	30
			HP 14x73	30	787	27
			14" Metal Shell	23	794	20
Center Pier	803.5	2	HP 12x53	29	780	25
			HP 14x73	24	785	20
			14" Metal Shell	19	790	15
North Abutment	812.5	3	HP 12x53	25	793	22
			HP 14x73	23	795	20
			14" Metal Shell	18	800	15

Estimated Pile Lengths include 1.0 and 2.0 foot embedment into pier wall and abutment cap, respectively.

The above estimated pile lengths are being provided for contract estimates. The actual pile lengths should be determined during installation based on resistance to driving criteria. It is recommended that at least one test pile be driven at each abutment and pier prior to ordering piles for production driving. However, it would probably be advantageous to drive two test piles per substructure unit, located at each end of the abutment or pier. It is recommended that the piles be provided with metal pile shoes (pile points) due to the possible presence of cobbles, boulders or existing piles which may be encountered during pile driving.

It is recommended that the 14" MS piles have a minimum wall thickness of 0.25" (ideally 0.312") so that they can be adequately driven to the minimum required capacity. In this regard, the driving equipment should be selected so that the piles can be driven to the required capacity (Nominal Required Bearing) at an adequate final penetration resistance and without inducing pile stresses that



exceed allowable values. Once the driving equipment has been selected, a wave equation analysis may be performed toward this end. This will ultimately be confirmed during the driving of test piles.

6.4 Groundwater Management

The center pier will be located near the middle of the creek where the excavation for the footing will extend to a depth of about 5 to 6 feet below the existing grade (Elevation 803.5) at Boring 2. Saturated Sand and Gravel materials were found at a depth of approximately 3 feet below existing grade (underlying a loose Sandy Loam layer) at the boring location. In this regard, the water table was found at the surface of the boring. Therefore, extensive dewatering and/or the use of a cofferdam will likely be required for the construction of the center pier.

It should be noted that existing MS piles which support the existing pier may pose as obstructions for installation of new sheeting. The design and construction procedures of cofferdams (temporary sheet piling) and new foundation piles must take into account the presence of the existing piles.

If the temporary sheet pile walls are designed as cantilever type structures, conventional earth pressure methods (Rankine or Coulomb) may be utilized to calculate the lateral earth pressures. The following table summarizes soil parameters that may be utilized for the development of earth pressure diagrams. They were developed using the soil stratigraphy found in Boring 2 (center pier).

Coll Tyron	Elevation Range	Unit Weight (pcf) *	Shear Strength Parameters		
Soil Type			c (psf)	φ (degrees)	
Loose to Med, Dense Sand and Gravel	809.0 -803.5	60	0	30	
Medium Dense Sandy Loam	803.5-801.0	63	0	32	
Med. Dense to Dense Sand	801.0-796.0	63	0	35	
Dense to Very Dense Sand/Sand and Gravel	796.0 -770.0	68	0	38	

- c Cohesion Intercept in pounds per square foot (psf).
- Angle of Internal Friction in degrees.
- * Buoyant unit weight for soils below the water table in pcf.

7.0 CLOSURE

The analysis and recommendations submitted in this report are based upon the data obtained from the three (3) soil borings and two (2) pavement/deck cores performed at the locations indicated on the Boring Location Plan. This report does not reflect any variations which may occur between these borings, the nature and extent of which may not become evident until during the course of construction. If variations are then identified, recommendations contained in this report should be re-evaluated after performing on-site observations.

We are available to review this report with you at your convenience.

OF ILLINO English

Alfredo J. Bermudez 062-Registered Professional Engli

Illinois No. 062-046608



TESTING SERVICE CORPORATION

LETING SERVICE CONFUNATION

- 1. PARTIES AND SCOPE OF WORK: If Client is ordering the services on behalf of another, Client represents and warrants that Client is the duly authorized agent of said party for the purpose of ordering and directing said services, and in such case the term "Client" shall also include the principal for whom the services are being performed. Prices quoted and charged by TSC for its services are predicated on the conditions and the allocations of risks and obligations expressed in these General Conditions. Unless otherwise stated in writing, Client assumes sole responsibility for determining whether the quantity and the nature of the services ordered by Client are adequate and sufficient for Client's intended purpose. Unless otherwise expressly assumed in writing, TSC's services are provided exclusively for client. TSC shall have no duty or obligation other than those duties and obligations expressly set forth in this Agreement. TSC shall have no duty to any third party. Client shall communicate these General Conditions to each and every party to whom the Client transmits any report prepared by TSC. Ordering services from TSC shall constitute acceptance of TSC's proposal and these General Conditions.
- 2. SCHEDULING OF SERVICES: The services set forth in this Agreement will be accomplished in a timely and workmanlike manner. If TSC is required to delay any part of its services to accommodate the requests or requirements of Client, regulatory agencies, or third parties, or due to any cause beyond its reasonable control, Client agrees to pay such additional charges, if any, as may be applicable.
- 3. ACCESS TO SITE: TSC shall take reasonable measures and precautions to minimize damage to the site and any improvements located thereon as a result of its services or the use of its equipment; however, TSC has not included in its fee the cost of restoration of damage which may occur. If Client desires or requires TSC to restore the site to its former condition, TSC will, upon written request, perform such additional work as is necessary to do so and Client agrees to pay to TSC the cost thereof plus TSC's normal markup for overhead and profit.
- 4. CLIENT'S DUTY TO NOTIFY ENGINEER: Client represents and warrants that Client has advised TSC of any known or suspected hazardous materials, utility lines and underground structures at any site at which TSC is to perform services under this agreement.
- 5. DISCOVERY OF POLLUTANTS: TSC's services shall not include investigation for hazardous materials as defined by the Resource Conservation Recovery Act, 42 U.S.C.§ 6901, et, seq., as amended ("RCRA") or by any state or Federal statute or regulation. In the event that hazardous materials are discovered and identified by TSC, TSC's sole duty shall be to notify Client.
- 6. MONITORING: If this Agreement includes testing construction materials or observing any aspect of construction of improvements, Client's construction personnel will verify that the pad is properly located and sized to meet Client's projected building loads. Client shall cause all tests and inspections of the site, materials and work to be timely and properly performed in accordance with the plans, specifications, contract documents, and TSC's recommendations. No claims for loss, damage or injury shall be brought against TSC unless all tests and inspections have been so performed and unless TSC's recommendations have been followed.

TSC's services shall not include determining or implementing the means, methods, techniques or procedures of work done by the contractor(s) being monitored or whose work is being tested. TSC's services shall not include the authority to accept or reject work or to in any manner supervise the work of any contractor. TSC's services or failure to perform same shall not in any way operate or excuse any contractor from the performance of its work in accordance

with its contract. "Contractor" as used herein shall include subcontractors, suppliers, architects, engineers and construction managers.

Information obtained from borings, observations and analyses of sample materials shall be reported in formats considered appropriate by TSC unless directed otherwise by Client. Such information is considered evidence, but any inference or conclusion based thereon is, necessarily, an opinion also based on engineering judgment and shall not be construed as a representation of fact. Subsurface conditions may not be uniform throughout an entire site and ground water levels may fluctuate due to climatic and other variations. Construction materials may vary from the samples taken. Unless otherwise agreed in writing, the procedures employed by TSC are not designed to detect intentional concealment or misrepresentation of facts by others.

- 7. DOCUMENTS AND SAMPLES: Client is granted an exclusive license to use findings and reports prepared and issued by TSC and any sub-consultants pursuant to this Agreement for the purpose set forth in TSC's proposal provided that TSC has received payment in full for its services. TSC and, if applicable, its sub-consultant, retain all copyright and ownership interests in the reports, boring logs, maps, field data, field notes, laboratory test data and similar documents, and the ownership and freedom to use all data generated by it for any purpose. Unless otherwise agreed in writing, test specimens or samples will be disposed immediately upon completion of the test. All drilling samples or specimens will be disposed sixty (60) days after submission of TSC's report.
- 8. TERMINATION: TSC's obligation to provide services may be terminated by either party upon (7) seven days prior written notice. In the event of termination of TSC's services, TSC shall be compensated by Client for all services performed up to and including the termination date, including reimbursable expenses. The terms and conditions of these General Conditions shall survive the termination of TSC's obligation to provide services.
- 9. PAYMENT: Client shall be invoiced periodically for services performed. Client agrees to pay each invoice within thirty (30) days of its receipt. Client further agrees to pay interest on all amounts invoiced and not paid or objected to in writing for valid cause within sixty (60) days at the rate of twelve (12%) per annum (or the maximum interest rate permitted by applicable law, whichever is the lesser) until paid and TSC's costs of collection of such accounts, including court costs and reasonable attorney's fees.
- 10. WARRANTY: TSC's professional services will be performed, its findings obtained and its reports prepared in accordance with these General Conditions and with generally accepted principles and practices. In performing its professional services, TSC will use that degree of care and skill ordinarily exercised under similar circumstances by members of its profession. In performing physical work in pursuit of its professional services, TSC will use that degree of care and skill ordinarily used under similar circumstances. This warranty is in lieu of all other warranties or representations, either express or implied. Statements made in TSC reports are opinions based upon engineering judgment and are not to be construed as representations of fact.

Should TSC or any of its employees be found to have been negligent in performing professional services or to have made and breached any express or implied warranty, representation or contract, Client, all parties claiming through Client and all parties claiming to have in any way relied upon TSC's services or work agree that the maximum aggregate amount of damages for which TSC, its officers, employees and agents shall be liable is limited to \$50,000 or the total amount of the fee paid to TSC for its services performed with respect to the project, whichever amount is greater.

GENERAL CONDITIONS
Geotechnical and Construction Services

In the event Client is unwilling or unable to limit the damages for which TSC may be liable in accordance with the provisions set forth in the preceding paragraph, upon written request of Client received within five days of Client's acceptance of TSC's proposal together with payment of an additional fee in the amount of 5% of TSC's estimated cost for its services (to be adjusted to 5% of the amount actually billed by TSC for its services on the project at time of completion), the limit on damages shall be increased to \$500,000 or the amount of TSC's fee, whichever is the greater. This charge is not to be construed as being a charge for insurance of any type, but is increased consideration for the exposure to an award of greater damages.

- 11. INDEMNITY: Subject to the provisions set forth herein, TSC and Client hereby agree to indemnify and hold harmless each other and their respective shareholders, directors, officers, partners, employees, agents, subsidiaries and division (and each of their heirs, successors, and assigns) from any and all claims, demands, liabilities, suits, causes of action, judgments, costs and expenses, including reasonable attorneys' fees, arising, or allegedly arising, from personal injury, including death, property damage, including loss of use thereof, due in any manner to the negligence of either of them or their agents or employees or independent contractors. In the event both TSC and Client are found to be negligent or at fault, then any liability shall be apportioned between them pursuant to their pro rata share of negligence or fault. TSC and Client further agree that their liability to any third party shall, to the extent permitted by law, be several and not joint. The liability of TSC under this provision shall not exceed the policy limits of insurance carried by TSC. Neither TSC nor Client shall be bound under this indemnity agreement to liability determined in a proceeding in which it did not participate represented by its own independent counsel. The indemnities provided hereunder shall not terminate upon the termination or expiration of this Agreement, but may be modified to the extent of any waiver of subrogation agreed to by TSC and paid for by Client.
- 12. SUBPOENAS: TSC's employees shall not be retained as expert witnesses except by separate, written agreement. Client agrees to pay TSC pursuant to TSC's then current fee schedule for any TSC employee(s) subpoenaed by any party as an occurrence witness as a result of TSC's services.
- 13. OTHER AGREEMENTS: TSC shall not be bound by any provision or agreement (i) requiring or providing for arbitration of disputes or controversies arising out of this Agreement or its performance, (ii) wherein TSC waives any rights to a mechanics lien or surety bond claim; (iii) that conditions TSC's right to receive payment for its services upon payment to Client by any third party or (iv) that requires TSC to indemnify any party beyond its own negligence These General Conditions are notice, where required, that TSC shall file a lien whenever necessary to collect past due amounts. This Agreement contains the entire understanding between the parties. Unless expressly accepted by TSC in writing prior to delivery of TSC's services, Client shall not add any conditions or impose conditions which are in conflict with those contained herein, and no such additional or conflicting terms shall be binding upon TSC. The unenforceability or invalidity of any provision or provisions shall not render any other provision or provisions unenforceable or invalid. This Agreement shall be construed and enforced in accordance with the laws of the State of Illinois. In the event of a dispute arising out of or relating to the performance of this Agreement, the breach thereof or TSC's services, the parties agree to try in good faith to settle the dispute by mediation under the Construction Industry Mediation Rules of the American Arbitration Association as a condition precedent to filing any demand for arbitration, or any petition or complaint with any court. Paragraph headings are for convenience only and shall not be construed as limiting the meaning of the provisions contained in these General Conditions.





APPENDIX

PROJECT LOCATION MAP

PEDOLOGICAL SOIL MAP

SOIL TEST DATA

SOIL TEST DATA SHEETS

PAVEMENT CORE RESULTS

BULK ASBESTOS SAMPLE EVALUATION

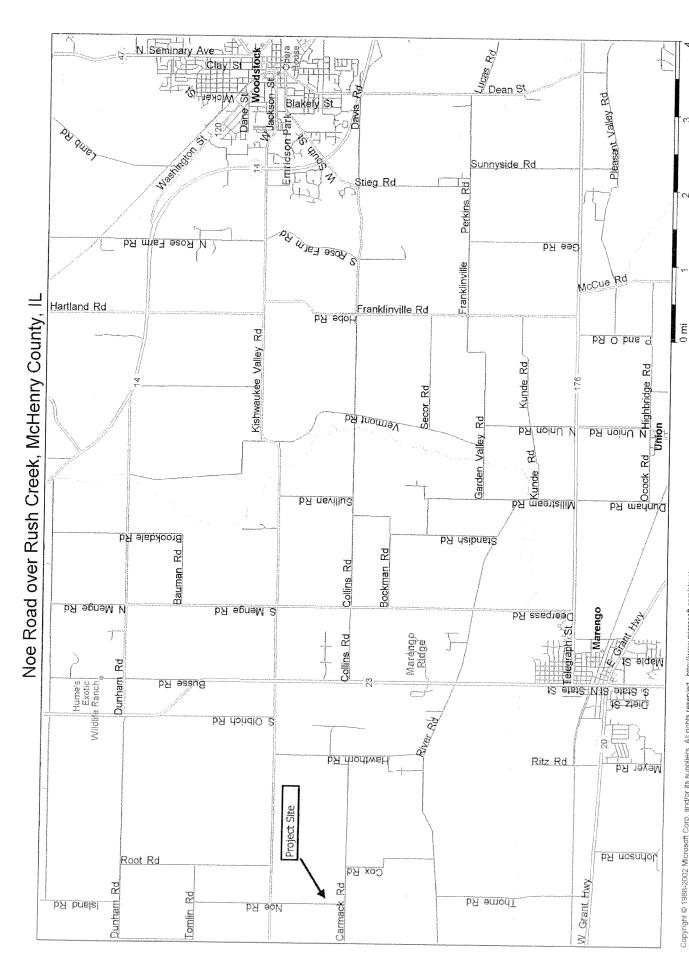
LEGEND FOR BORING LOGS

SOIL TEXTURAL CLASSIFICATION SYSTEM

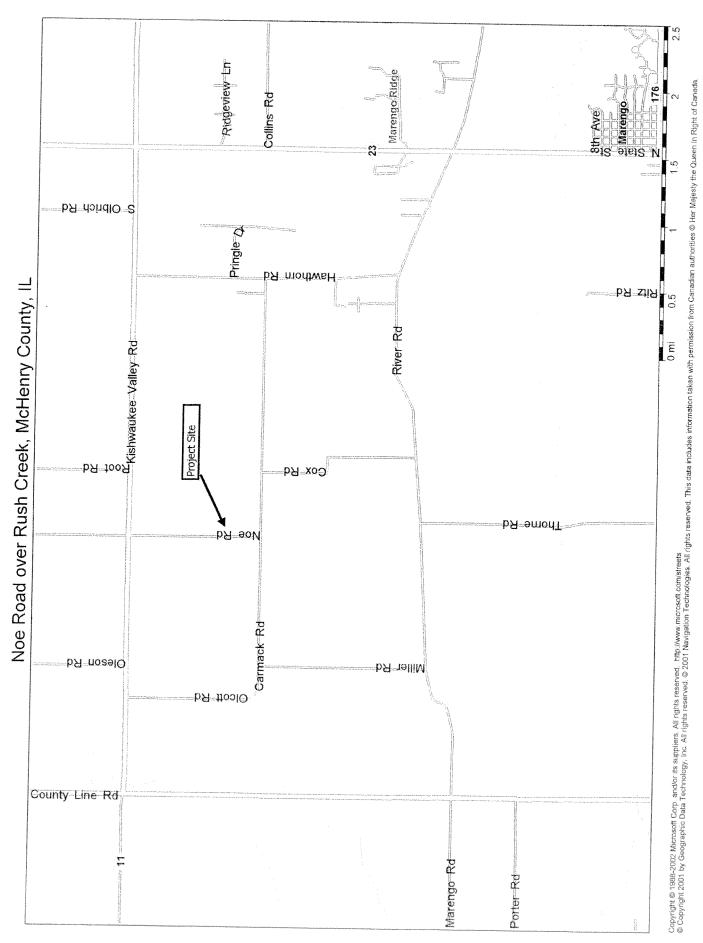
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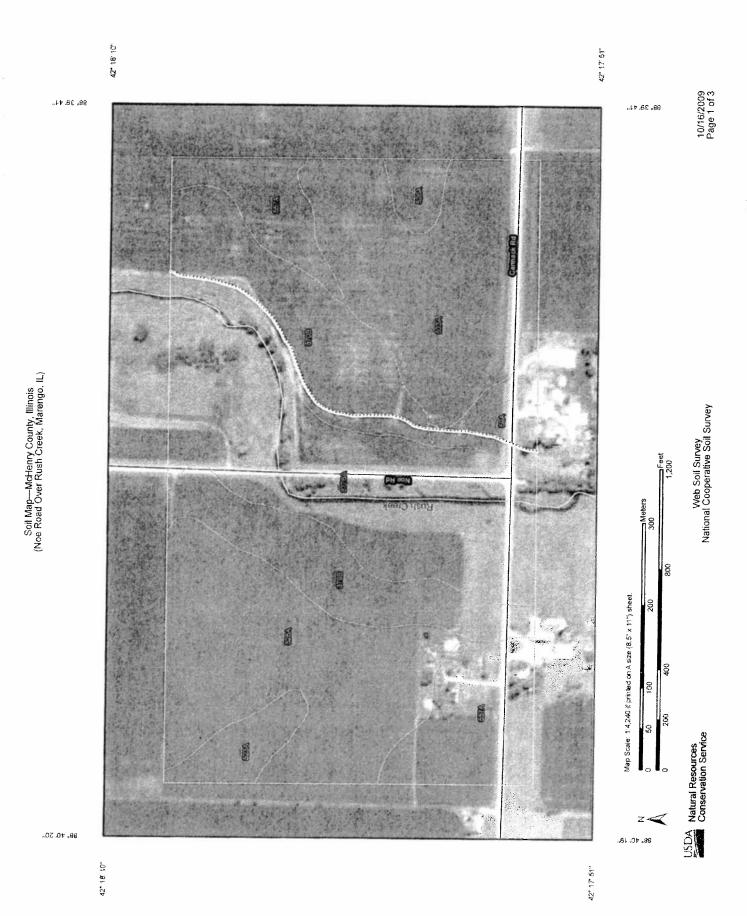
BORING LOGS

BORING LOCATION PLAN



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© Copyright 2001 by Geographic Data Technology, Inc. All rights reserved. © 2001 Navigation Technologies. All rights reserved. This data includes information taken with permission from Canadian authorities © Her Majesty the Queen in Right of Canada.





Soil Map-McHenry County, Illinois (Noe Road Over Rush Creek, Marengo, IL)

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below. The soil surveys that comprise your AOI were mapped at 1:12,000. imagery displayed on these maps. As a result, some minor shifting Please rely on the bar scale on each map sheet for accurate map The orthophoto or other base map on which the soil lines were Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov Coordinate System: UTM Zone 16N NAD83 Natural Resources Conservation Service compiled and digitized probably differs from the background Map Scale: 1:4,240 if printed on A size (8.5" × 11") sheet. Date(s) aerial images were photographed: 7/21/2007 MAP INFORMATION Soil Survey Area: McHenry County, Illinois Survey Area Data: Version 6, Dec 29, 2006 of map unit boundaries may be evident. Source of Map: measurements Streams and Canals Interstate Highways Short Steep Slope Very Stony Spot Special Line Features Major Roads Local Roads **US Routes** Wet Spot Oceans Other Gully Other Cities Political Features Rails Water Features Transportation MAP LEGEND O ‡ ? Area of Interest (AOI) Severely Eroded Spot Wiscellaneous Water Closed Depression Marsh or swamp Perennial Water Wine or Quarry Soil Map Units Gravelly Spot Rock Outcrop Special Point Features Saline Spot Sandy Spot Slide or Slip Gravel Pit Lava Flow Sodic Spot Stony Spot Borrow Pit Spoil Area Area of Interest (AOI) Clay Spot Sinkhole Blowout Landfill Ö 0 (4)

Map Unit Legend

	McHenry County, Illinois (IL1	111)	
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
59A	Lisbon silt loam, 0 to 2 percent slopes	2.4	2.8%
379B	Dakota loam, 2 to 4 percent slopes	7.1	8.5%
523A	Dunham silty clay loam, 0 to 2 percent slopes	17.9	21.3%
526A	Grundelein silt loam, 0 to 2 percent slopes	17.9	21.3%
557A	Millstream silt loam, 0 to 2 percent slopes	9.6	11.4%
570B	Martinsville silt loam, 2 to 4 percent slopes	9.3	11.1%
8776A	Comfrey loam, 0 to 2 percent slopes, occasionally flooded	19.9	23.6%
Totals for Area of Inter	est	84.1	100.0%

TESTING SERVICE CORPORATION 457 East Gundersen Drive Carol Stream, Illinois

CLIENT:

Strand Associates, Inc.

1170 South Houbolt Road

Joliet, Illinois 60431

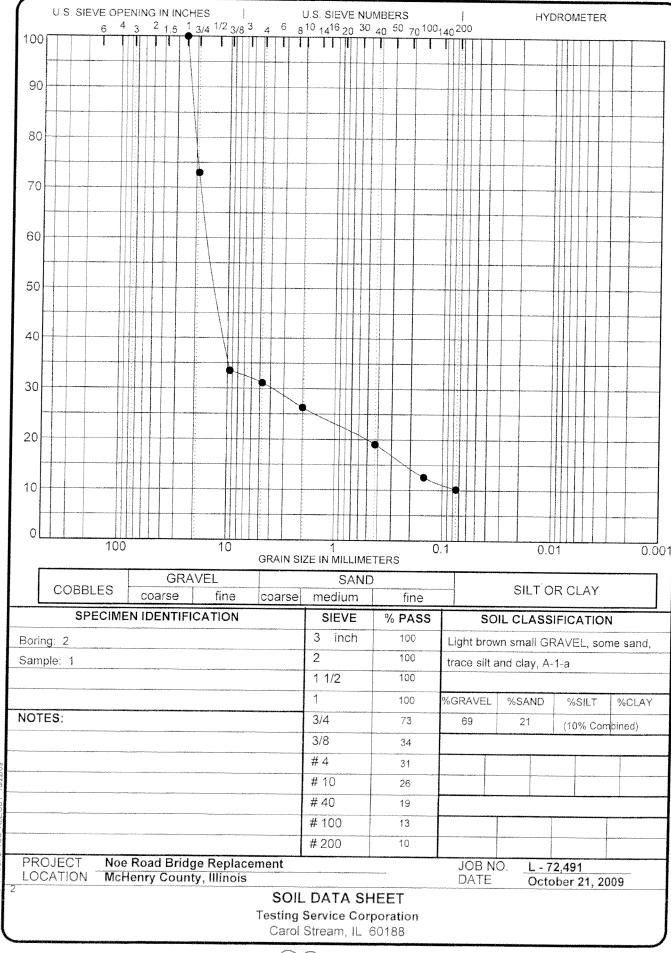
TSC Job No. L - 72,491 October 22, 2009

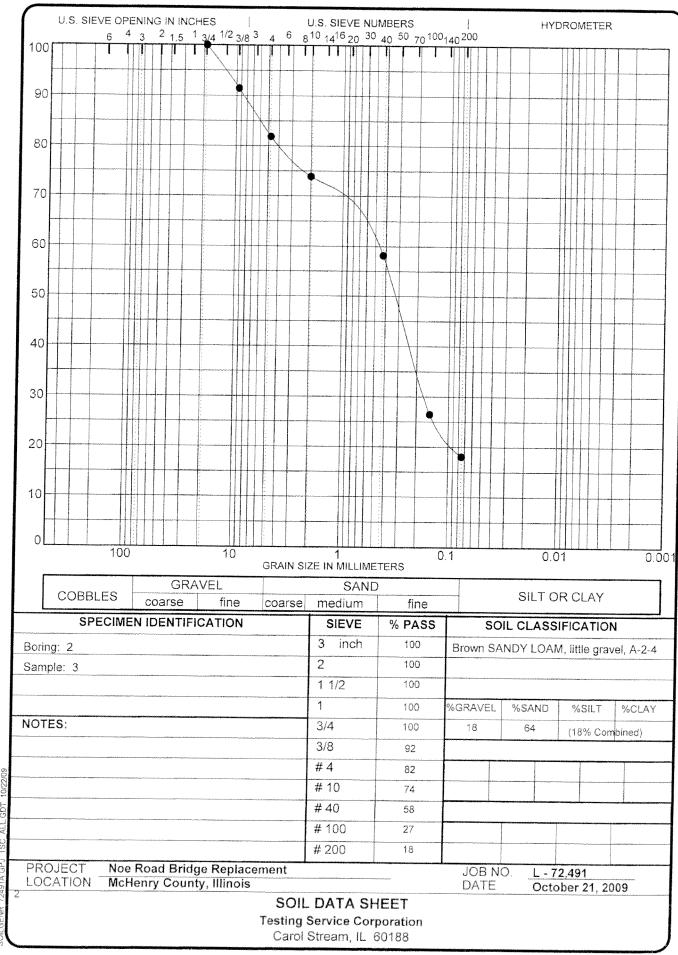
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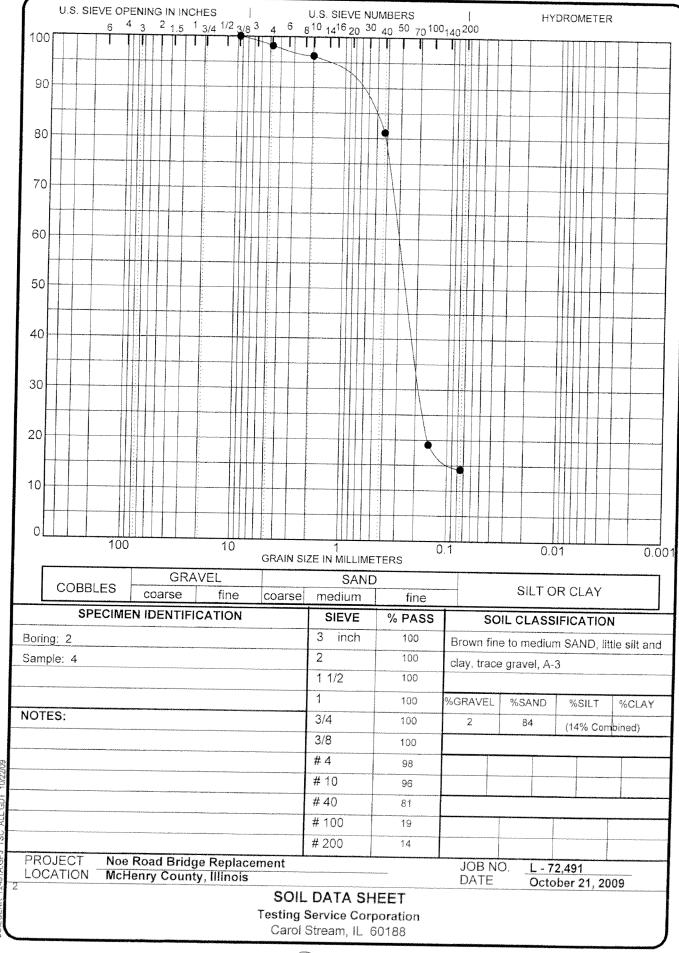
Noe Road over Rush Creek Bridge Replacement McHenry County, Illinois

SOIL TEST DATA

LOCATION	Sta. 109+17, 16'LT	Sta. 109+17, 16'LT	Sta. 109+17, 16'LT	7 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	
BORING NUMBER	2	2	2		
SAMPLE NUMBER	1	3	4		
DEPTH IN FEET	1 - 2½	6 - 7½	8½ - 10		
AASHTO SOIL CLASSIFICATION	A-1-a	A-2-4	A-3		
UNIFIED SOIL CLASSIFICATION	GW-GM	SM	SW-SM		
GRAIN SIZE CLASSIFICATION	GRAVEL	SANDY LOAM	SAND		
GRADATION - PASSING 1" SIEVE %	100	100	100		
GRADATION - PASSING 3/4" SIEVE %	73	100	100		
GRADATION - PASSING 3/8" SIEVE %	34	92	100		
GRADATION - PASSING #4 SIEVE %	31	82	98		
GRADATION - PASSING # 10 SIEVE %	26	74	96		
GRADATION - PASSING #40 SIEVE %	19	58	81		
GRADATION - PASSING # 100 SIEVE %	13	27	19		
GRADATION - PASSING # 200 SIEVE %	10	18	14		
GRAVEL %	69	18	2		
SAND %	21	64	84		
SILT %	10% Fines	18% Fines	14% Fines		
CLAY % (<0.002 MM)					
LIQUID LIMIT %					
PLASTIC LIMIT %					
PLASTICITY INDEX %					
NATURAL MOISTURE CONTENT %		13			
LIQUIDITY INDEX					







PAVEMENT CORE RESULTS

(Each component of pavement section listed from top down.)

CORE 1 Noe Road - Sta. 108+70, 0.0' RT

1.7" Surface Course

0.7" Chip & Seal

1.0" Bituminous Aggregate Mixture (BAM)

3.4" Total Asphalt Thickness

5.5" Crushed Gravel and Sand Subbase (1" to fines)

~9" depth - Subgrade



BULK ASBESTOS SAMPLE EVALUATION - ASPHALT SAMPLES POLARIZED LIGHT MICROSCOPY (PLM) TECHNIQUE

GRAVIMETRIC REDUCTION

NVLAP LAB ID 101130-0

Company Name: Contact	Testing Service Corporation	e Corporation			Client Project Ref: L - 72491	L - 72491	
Address:	AST E Gundange Direct	idez Sep Deim			Project Location:		
	Carol Stream	Soli Dilve	2010 00107		TEM Project:	42887	
Sales Circuits		MEMOIS	00188-2492		Analyzed by:	Lori Boersma	
					Date Analyzed:	10/15/2009	
	Sample Information	nation		Fibron	Fibrous Materials	J noN	Non-Fibrous Materials
Client Co. 1 TV	AND THE PROPERTY OF THE PROPER						AN ous Materials
Cucin sample ID	IEM	COLOR	ACM	Asbestos Fibers	Non-Asbestos Fibers	T. C.	
Description	ID.			Type Percent	Tvne Dercent		Comments

72491 - C-2 203808 Gray N/I	D Chrysotile	Organic Mtl.	10.35 1.63
Concrete core	Amosite	Acid Soluble	88.02
The second control of			

Samples were analyzed following the procedures contained in the EPA Method 600/R-93/116, July 1993, including the use of gravimetric reduction to enhance the ability to aobserve asbesos fibers in the

SLM: The optical resolution of polarized light microscopy limits the size of fibers that are visible. In samples where very small fibers may be present, the asbestos fibers may be smaller than the resolution limit of a polarized light microscope. In those cases, the result of the PLM analysis is not conclusive where the sample is reported as non-asbestos. Samples that are expected to contain small fibers (such as floor tile samples) and that are reported as non-asbestos by PLM should be further anlayzed by transmission electron microscopy.

Key: ACM = Asbestos Containing Material as defined in USEPA NESHAP Regulation; TR = Trace; N/D = None Detected Page 1 of 1

L. Breaden

Signature of Analyst

TESTING SERVICE CORPORATION

LEGEND FOR BORING LOGS (FPS Units)

SAMPLE TYPE:

All soil samples were taken in accordance with the Standard Penetration Test, for which driving resistance to a 2-inch split-spoon sampler provides an indication of the relative density of granular materials and consistency of cohesive soils.

FIELD AND LABORATORY TEST DATA:

N = Standard Penetration Resistance in Blows per 6 inch interval.

WC = In-Situ Water Content in percent

Qu = Unconfined Compressive Strength in tons per square foot (tsf).

* = Hand Penetrometer Measurement; Max. Reading = 4.5+ tsf

B = Bulge failure using modified Rimac spring tester

S = Shear failure using modified Rimac spring tester

SOIL DESCRIPTION:

MATERIAL	PARTICLE SIZE RANGE
BOULDER	Over 12 inch
COBBLE	12 - 3 inch
Coarse GRAVEL	3 - ¾ inch
Small GRAVEL	3/4 inch to No. 10 Sieve
Coarse SAND	No. 10 Sieve to No. 40 Sieve
Fine SAND	No. 40 Sieve to No. 200 Sieve
SILT and CLAY	Passing No. 200 Sieve

COHESIVE SOILS

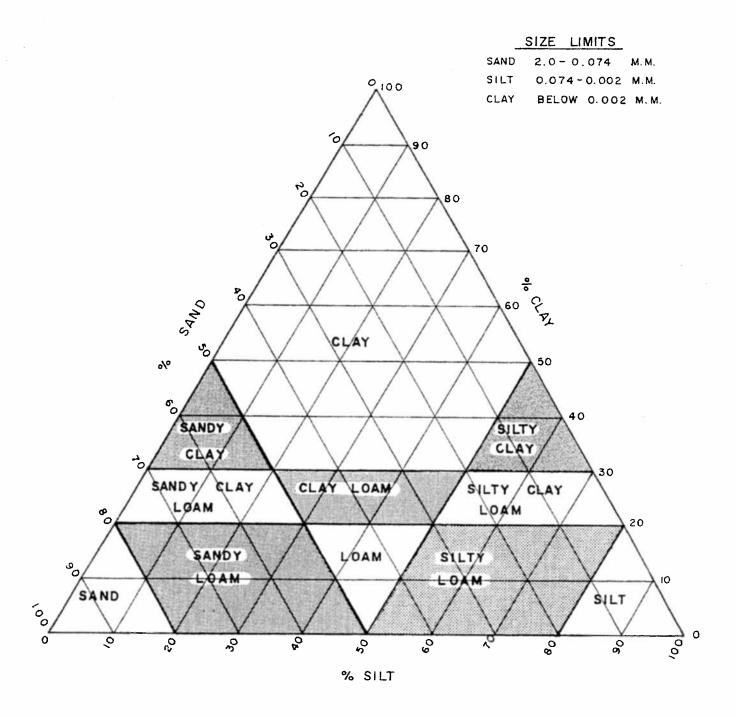
COHESIONLESS SOILS

AA101000000			O OOILO
CONSISTENCY	Qu (tsf)	RELATIVE DENSITY	N
Very Soft	Less than 0.3	Very Loose	0 - 4
Soft	0.3 to 0.6	Loose	4 - 10
Medium Stiff	0.6 to 1.0	Medium Dense	10 - 30
Stiff	1.0 to 2.0	Dense	30 - 50
Very Stiff Hard	2.0 to 4.0	Very Dense	50 and over
Haru	4.0 and over		

MODIFYING TERM	PERCENT BY WEIGHT
Trace	1 - 10
Little	10 - 20
Some	20 - 35

TESTING SERVICE CORPORATION

I DH TEXTURAL CLASSIFICATION CHART

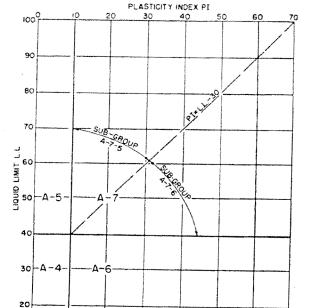


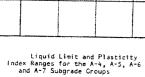
TESTING SERVICE CORPORATION AASHTO CLASSIFICATION CHART

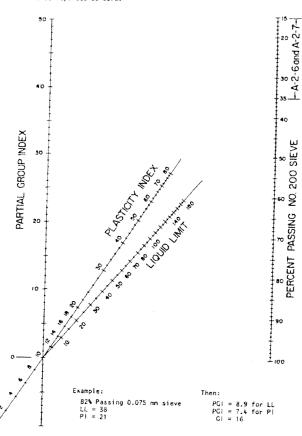
Group Index [GI) = {F-35}[0.2+0.005 {LL-40}]+0.01(F-15)(Pi-10) where F=\$ Passing 0.075 mm sieve, LL = Liquid Limit, and PI = Plasticity Index

When working with A-2-6 and A-2-7 subgroups the Partial Group index (PG) is determined from the PI only.

When the combined Partial Group Indices are negative, the Group Index should be reported as zero.







AASHTO SOIL CLASSIFICATION SYSTEM

General Classification				ranular Mater less passing				(m	Silt-Clay ore than 35%	Materials passing No	. 200)
**************************************	A	1-1		er-denotation vol	A	-2					A-7
Group Classification	A-1-a	A-1-b	A-3	A-2-4	A-2-5	A-2-6	A-2-7	14	A-5	A-6	A-7-5, A-7-6
Sieve analysis, % passing: No. 10 No. 40 No. 200	50 max 30 max 15 max	50 max 25 max	51 min 10 max	35 max	35 max	35 max	35 max	36 min	36 min	36 min	36 min
Characteristics of frac- tion passing No. 40: Liquid limit Plasticity index	6 n		N.P.	40 max 10 max	41 min 10 max	40 max 11 min	41 min 11 min	40 max 10 max	41 min 10 max	40 max 11 min	41 min
Usual types of signifi- cant constituent ma- terials	Stone frag gravel ar sand	-	Fine sand	Silty or clayey gravel and sand			Silty soils		Clayey soils		
General rating as sub- grade		Exc	ellent to g	ood	POTOTO II info di di di di minimuma peri peri peri peri peri peri peri peri			Fair to	poor		

[†] Plasticity index of A-7-5 subgroup is equal to or less than LL minus 30. Plasticity index of A-7-6 subgroup is greater than LL minus 30.



STRUCTURE BORING LOG

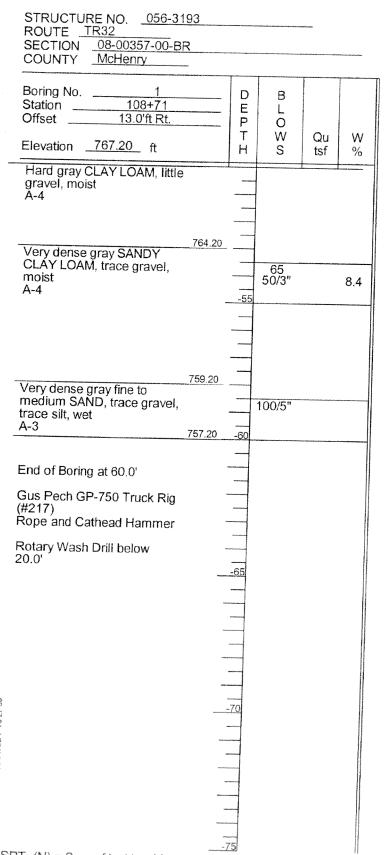
Page 1 of 2
Date Started 9/20/09

ROUTE TR32	DESC	RIPTIC	N T	loe Ro	ad ov	er Rush Creek		Date Co	mpleted	9/;	20/09
SECT. <u>08-00357-00-BR</u>	The state of the s	STRU	JCT. N	10. (056-31	93	DRILLED B	Y <u>TSC</u>	L-72,49)1	
COUNTY McHenry	LOCA	ATION	<u>E. I</u>	End So	outh A	butment					5
Boring No. 1 Station 108+71 Offset 13.0'ft Rt. Surface Elev. 817.20 ft		D E P T H	B L O V S	Qu tsf	W %	Surface Water Ele Groundwater Elev when drilling	ev v.: 809. N/	D E P T	B L O W S	Qu tsf	W %
FILL - Brown and black SANDY LOAM, little gravel, trace organic, moist A-2-4			5 5 6		11.0	Very dense gray S to some gravel, we A-1-b	AND, little et		19 28 30		
Soft black and brown	811.70	-5	6 7 4		13.1			-30	8 16 36		
ORGANIC CLAY, moist A-8	809.20		3 4 6	B 0.4	76.2		784	.20			
and GRAVEL, wet to saturated A-1-b	-	-10	9 9 9			Very dense gray SA CLAY LOAM, trace moist A-4	NDY	-35	47 50/5"		8.9
Stiff to very stiff gray CLAY LOAM, trace gravel,	804.20		9 10 11 6	P		Very dense gray fine medium SAND, trac	779 e to	20			
occasional sand seams, moist A-4	demons	-15	11 6 5	2.0 P	9.7	wet A-3	e siit,	-40	31 50/5"		Commi tti di serima pada andra ana mana
Medium dense gray fine to medium SAND, trace gravel, wet	799.20		5 9 7 7	2.0	10.2				26 50/5"	467462-Anthroposassons	
A-3 Very dense gray SAND, little o some gravel, wet A-1-b	⁷ 96.70	2 3 5	3					-45			
PT (N) = Sum of last two blow		12 33 38 25	3			Hard gray CLAY LOA gravel, moist A-4			26 E 47 6.0	3 07 7	8.
PT. (N) = Sum of last two blow ations, Depths, Offset, and Ele	values ir vations a	n samp are in F	ile. (Q eet		Bulge	S=Shear P=Penetrat	ion Test		may of the first transmission of the contract	indon 1994 in a gran ng mga gang ng mga ng	

STRUCTURE BORING LOG

Page 2 of 2
Date Started 9/20/09

Date Completed 9/20/09



SPT. (N) = Sum of last two blow values in sample. (Qu) B=Bulge S=Shear P=Penetration Test Stations, Depths, Offset, and Elevations are in Feet

STRUCTURE BORING LOG

Page 1 of 2
Date Started 10/16/09

	ROUTE TR32	DESCRIP*	TION _	Noe Roa	ad over	r Rush Creek	D	ate Cor	npleted	10/	16/09
r	SECT. <u>08-00357-00-BR</u>	ST	TRUCT.	NO. <u>0</u> :	<u>56-319</u>	3	DRILLED BY	TSC	L-72,49	1	
	COUNTY McHenry										5E
; ;	Boring No. 2 Station 109+17 Offset 16.0'ft Lt Surface Elev. 809.00 ft	D	B L O W	Qu tsf	W %	Surface Water Elev. Groundwater Elev.: when drilling at Completion after Hr		D E P	B L O W S	Qu tsf	W %
	Loose light brown small GRAVEL, some sand, trace organic, very moist A-1-a Medium dense brown SAND and GRAVEL, saturated A-1-a Medium dense brown SAND y LOAM, little gravel, wet A-2-4 Medium dense brown fine to medium SAND, trace gravel, saturated A-3	807.90 806.00 803.50 801.00 -10 798.50	3 3 3 3 3 4 8 11 11 14		13.3	Dense to very dense SAND, little to some saturated A-1-b	brown gravel,	-30	14 18 24 19 31 31 31 31 22 22 29		
D S S A	Dense to very dense brown SAND and GRAVEL, aturated -1-a	796.00	13 15 18 18 20 21			Dense brown SAND, I some gravel, saturated A-1-b	772.00 ittle to i	-50000000000000000000000000000000000000	19 19 24		
30RING 72481.GPJ IDOT.GDT 10.22.09	AND, little to some gravel, sturated 1-b 1. (N) = Sum of last two blows ions, Depths, Offset, and Elev	-20 -25 values in sa	13 20 24 18 24 32 15 22 29 mple. (0	Qu) B=6	litt sa A-	ery dense brown SAN tle to some gravel, aturated -1-b S=Shear P=Penetration		-45	16 19 20 20 2 7		

STRUCTURE BORING LOG

Page 2 of 2
Date Started 10/16/09 Date Completed ___10/16/09

STRUCTURE NO. 056-3 ROUTE TR32					
SECTION 08-00357-00-B COUNTY McHenry	R			Orangenesis successiving	
Boring No. 2 Station 109+17 Offset 16.0'ft Lt Elevation 759.00 ft	D E P T H	BLOWS	Qu tsf	W %	
Very dense brown SAND little to some gravel, saturated A-1-b					
	55	18 30 36	-		
End of Boring at 60.0'	749.00 -60	24 32 34			
_	***************************************				
Diedrich D-50 ATV Drill Rig CME Automatic Hammer					
3.25" (83 mm) ID HSA	-65				
SPT. (N) = Sum of last two blow Stations, Depths, Offset, and Electrons	-70				
SPT. (N) = Sum of last two blow	 values in sam	ıple. (Q	u) B=B	 ulge S=:	Shear P=Penetration Ta
= stations, peptns, Offset, and Ele	vations are in	Feet	W.		> 554 44011 10

STRUCTURE BORING LOG

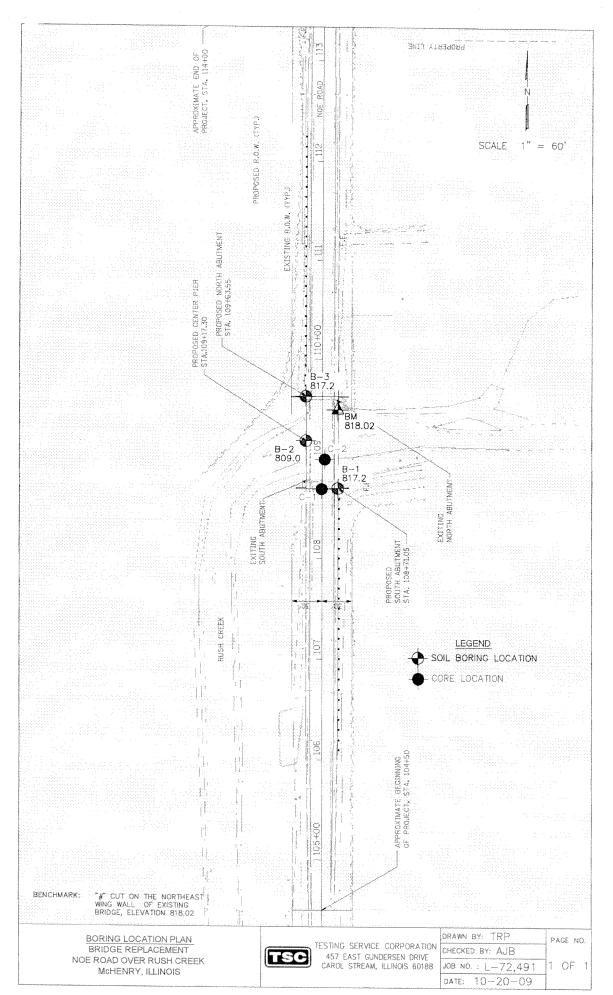
Page 1 of 2 Date Started 9/20/09

ROUTE TR32	DESCF	RIPTI	ON N	oe Roa	ad ove	r Rush Creek		Da	te Cor	npleted	9/2	0/09
SECT. <u>08-00357-00-BR</u>		STR	RUCT. N	O. <u>0</u>	56-319	93	DRILLE) BY	TSC	L-72,49	1	***************************************
COUNTY McHenry	LOCA	TION	1 <u>W. I</u>	End No	orth At	outment	S. 8SE/9	<u>SW</u> ,	TWP.	<u>44N</u>	, RNG.	5E
Boring No. 3 Station 109+64 Offset 11.0'ft Lt. Surface Elev. 817.20	t	D E P T H	B L O 🛭 S	Qu tsf	W %	Surface Water Ele Groundwater Elev. when drilling at Completion after F	: 8	306.7 306.2	DEPTH	B L O & S	Qu tsf	W %
FILL - Brown and gray	__ -816.90					See End Previous Very dense gray S	AND,	791.70				
SANDY LOĂM, some gravel, moist A-2-4			5 6 11		8.8	trace gravel, trace A-1-b	silt, wet			37 37 30		
			6 12 17		9.5					15 27 31	and the state of t	Martin de la participa de la companya del companya del companya de la companya de
	811.70	<u>-5</u>	17	·					-30	31		T
Black SILTY CLAY (Topsoil) some sand, A-7-6	,		2 3 5	P 1.5	67.9							
Medium dense gray SAND and GRAVEL, very moist to wet	809.20		9			Very dense gray SA GRAVEL, occasion	AND and al	784.20		26 50/6"	······································	***************************************
wet a-1-b	-	-10	13 15	Wilderson		Cobbles, wet A-1-a				50/6"	***************************************	***************************************
			9 12 14									
Dense brown and gray SANDY LOAM, some gravel, very moist A-2-4	804.20		8 16 27	kalenada kanan	7.8					100/5"		
Very dense gray SAND and GRAVEL, wet A-1-a	801.70	-15	26 25 30					-	-40		Anti-Market Market Strongers gardened	
Very dense gray fine to	799.20		hintona kalanina di mpa amminje egapegag			Very dense gray fine	e to	774.20				and the state of t
medium SAND, trace gravel, trace silt, wet A-3	shekasa	-20	26 31 45	****		medium SAND, trac trace to little clay, we A-3	e gravel,		-45	42 50/3"	A Commission of the Commission	11.3
GPJ (DOT, GDT 10 27	-		31 36 45	general militaria de la la magnituda de la mag								
Very dense gray SAND, some gravel, wet A-1-b	794.20		20 28 29		The second secon					56 50/5"	······································	9.3
SPT. (N) = Sum of last two blog Stations, Depths, Offset, and E	w values levations	in sa are i	mple. (Qu) B:		e S=Shear P=Penetra	ation Test	njima	-50		PROPERTY CONTROL CONTR	and the second

STRUCTURE BORING LOG

Page 2 of 2
Date Started 9/20/09 Date Completed ____9/20/09

	STRUCTURE NO. 056-3 ROUTE TR32 SECTION 08-00357-00-B COUNTY McHenry					-	
	Boring No. 3 Station 109+64 Offset 11.0'ft Lt.		DHPH	B L O W	Qu	W	
	Elevation 767.20 ft		Ĥ	S	tsf	%	
	Very dense gray fine to medium SAND, trace grave trace to little clay, wet A-3	764.20				The state of the s	
	Very dense gray SILTY LOAM, some fine sand, moist A-4	-	-55	64 50/5"		10.8	
	Very dense gray SANDY LOAM, trace to little gravel, moist A-2-4	759.20		100/5"	······································	8.1	
	A-Z-4	757.20	-60				
	End of Boring at 60.0'						
	Gus Pech GP-750 Truck Rig (#217) Rope and Cathead Hammer	,					
	3.25" (83 mm) ID HSA	-	-65				
		690 8400	-70			Medicina i seria de la compansión de la	
SDT 10 27 09		tanin ningan	- 70			dicinate ser più il dicinhe della della della control della	
G 72491.GPJ IDOT.G	PT. (N) = Sum of last two blov tations, Depths, Offset, and El					Anderson and Andreas (Andreas Andreas	
LDOT BORIN	PT. (N) = Sum of last two blov	v values i	Z5 n sar	mple. (C)u) Β=	Bulge	S=Shear P=Penetration Test
W	opero, Oriact, and El	cvations :	ai E II	i Feel			15



COFFERDAMS

Effective: October 15, 2011

Replace Article 502.06 with the following.

502.06 Cofferdams. A Cofferdam shall be defined as a temporary structure, consisting of engineered components, designed to isolate the work area from water to enable construction under dry conditions based on either the Estimated Water Surface Elevation (EWSE) or Cofferdam Design Water Elevation (CDWE) shown on the contract plans as specified below. When cofferdams are not specified in the contract documents and conditions are encountered where the excavation for the structure cannot be kept free of water for prosecuting the work by pumping and/or diverting water, the Contractor, with the written permission of the Engineer, will be permitted to construct a cofferdam.

The Contractor shall submit a cofferdam plan for each cofferdam to the Engineer for approval prior to the start of construction. Cofferdams shall not be installed or removed without the Engineer's approval. Work shall not be performed in flowing water except for the installation and removal of the cofferdam. The cofferdam plan shall address the following:

- (a) Cofferdam (Type 1). The Contractor shall submit a cofferdam plan which addresses the proposed methods of construction and removal; the construction sequence including staging; dewatering methods; erosion and sediment control measures; disposal of excavated material; effluent water control measures; backfilling; and the best management practices to prevent reintroduction of excavated material into the aquatic environment. The design and method of construction shall provide, within the measurement limits specified in Article 502.12, necessary clearance for forms, inspection of exterior of the forms, pumping, and protection of fresh concrete from water. For Type 1 cofferdams, it is anticipated the design will be based on the EWSE shown on the contract plans. The Contractor shall assume all liability, financial or otherwise for a Type 1 cofferdam designed for an elevation lower than the EWSE.
- (b) Cofferdam (Type 2). In addition to the requirements of Article 502.06(a), the Contractor's submittal shall include detailed drawings and design calculations, prepared and sealed by an Illinois Licensed Structural Engineer. For Type 2 cofferdams it is anticipated the design will be based on the CDWE shown on the contract plans. The Contractor shall assume all liability, financial or otherwise for a Type 2 cofferdam designed for an elevation lower than the CDWE.
- (c) Seal Coat. The seal coat concrete, when shown on the plans, is based on design assumptions in order to establish an estimated quantity. When seal coat is indeed utilized, it shall be considered an integral part of the overall cofferdam system and, therefore, its design shall be included in the overall cofferdam design submittal. If a seal coat was not specified but determined to be necessary, it shall be added to the contract by written permission of the Engineer. The seal coat concrete shall be constructed according to Article

503.14. After the excavation within the cofferdam has been completed and the piles have been driven (if applicable), and prior to placing the seal coat, the elevation of the bottom of the proposed seal coat shall be verified by soundings. The equipment and methods used to conduct the soundings shall meet the approval of the Engineer. Any material within the cofferdam above the approved bottom of the seal coat elevation shall be removed.

No component of the cofferdam shall extend into the substructure concrete or remain in place without written permission of the Engineer. Removal shall be according to the previously approved procedure. Unless otherwise approved in writing by the Engineer, all components of the cofferdam shall be removed.

Revise the first paragraph of 502.12(b) to read as follows.

(b) Measured Quantities. Structure excavation, when specified, will be measured for payment in its original position and the volume computed in cubic yards (cubic meters). Horizontal dimensions will not extend beyond vertical planes 2 ft (600 mm) outside of the edges of footings of bridges, walls, and corrugated steel plate arches. The vertical dimension for structure excavation will be the average depth from the surface of the material to be excavated to the bottom of the footing as shown on the plans or ordered in writing by the Engineer. The volume of any unstable and/or unsuitable material removed within the structure excavation will be measured for payment in cubic yards (cubic meters).

Revise the last paragraph of 502.12(b) to read as follows.

Cofferdam excavation will be measured for payment in cubic yards (cubic meters) in its original position within the cofferdam. Unless otherwise shown on the plans, the horizontal dimensions used in computing the volume will not extend beyond vertical planes 2 ft (600 mm) outside of the edges of the substructure footings or 4 ft (1.2 m) outside of the faces of the substructure stem wall, whichever is greater. The vertical dimensions will be the average depth from the surface of the material to be excavated to the elevation shown on the plans for bottom of the footing, stem wall, or seal coat, or as otherwise determined by the Engineer as the bottom of the excavation.

Revise the first sentence of the sixth paragraph of 502.13 to read as follows.

Cofferdams, when specified, will be paid for at the contract unit price per each for COFFERDAM (TYPE 1) or COFFERDAM (TYPE 2), at the locations specified.

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:

McHenry 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: August 1, 2013

<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 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. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

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.

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, \$/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} .

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.

<u>Basis of Payment</u>. 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

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 Option	<u>n</u> :						
Is your company opting to include this special provision as part of the contract?							
Yes		No					
Signature:				Date:			

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
Julie 1, 2010	750 and up	2002
1 2014 2/	100.000	
June 1, 2011 2/	100-299 300-599	2003 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: January 2, 2015

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

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

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

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, 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 20.00% 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.

<u>DBE LOCATOR REFERENCES</u>. 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 www.dot.il.gov.

<u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is a material bidding requirement. The failure of the bidder to comply will render the bid not responsive.

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.

- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The names and addresses of DBE firms that will participate in the contract;
 - (2) A description, including pay item numbers, of the work each DBE will perform;
 - (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
 - (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
 - (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
 - (6) If the contract goal is not met, evidence of good faith efforts; 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 performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not 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 Section 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.
- (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 delivered. 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. The 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.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the 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 regular dealer or manufacturer.

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

- (a) <u>NO AMENDMENT</u>. 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) <u>CHANGES TO WORK</u>. 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, 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). 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 listed 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

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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 1,200 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 Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) <u>ENFORCEMENT</u>. 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.

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:

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."

FRICTION AGGREGATE (BDE)

Effective: January 1, 2011 Revised: November 1, 2014

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	

Use	Mixture	Aggregates Allowed	
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Co Gravel Crushed Gravel Carbonate Crushed St Crystalline Crushed St Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete	one
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Co Crushed Gravel Carbonate Crushed St Crystalline Crushed St Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}	one ^{2/}
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 St Crystalline Crushed St 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 St Limestone) ^{2/} Crystalline Crushed St Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}	one (other than
		Up to 25% Limestone	With Dolomite

Use	Mixture	Aggregates Allowed	
		50% Limestone	Any Mixture D aggregate other than Dolomite
		75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone
HMA High ESAL	E Surface IL-9.5	Allowed Alone or in Co	ombination ^{5/} :
Tigil LO/(L	SMA Ndesign 80 Surface	Crushed Gravel Crystalline Crushed St Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete ^{3/} No Limestone.	tone
		Other Combinations A	llowed:
		Up to	With
		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 or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag
HMA High ESAL	F Surface IL-9.5	Allowed Alone or in Combination 5/:	
THE LOCK	SMA Ndesign 80 Surface	Crystalline Crushed Sto Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.	
		Other Combinations Al	lowed:

Use	Mixture	Aggregates Allowed	
		Up to	With
		50% Crushed Gravel, 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 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.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."

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	1101.19
(i)	Spray Paver	1102.06"

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, Non-Milled Concrete & Tined Concrete	0.05 (0.244)
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.

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	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

application of the tack coat during normal paving speeds. No wheel or other part of the paving machine shall come into contact with the tack coat before the HMA is applied. In addition to meeting the requirements of Article 1102.03, the spray paver shall also meet the requirements of Article 1102.05 for the tank, heating system, pump, thermometer, tachometer or synchronizer, and calibration. The spray bar shall be equipped with properly sized and spaced nozzles to apply a uniform application of tack coat at the specified rate for the full width of the mat being placed."

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	1000.04
(b) Carvariazed Corrugated Steel Pipe Arch	4000.04
(c) Bituminous Coaled Corrugated Steel Pine	1000.04
(d) Bituminous Coated Corrugated Steel Pipe Arch	1000.01
(c) Neserveu	
(f) Aluminized Steel Type 2 Corrugated Pipe	1006.01
(9) Adminized Steel Type 2 Coffugated Pine Arch	1000.04
(ii) i recoaled Galvallized Colfudated Steel Pine	4000 04
(i) I recoaled Galvanized Coffugated Steel Pine Arch	4000.04
() Corrugated Aluminum Alloy Pine	4000 00
(ii) Corrugated Aldminutt Alloy Pipe Arch	1000.00
(') Extra Oticingti Clay Fipe	4040.00
(iii) Concrete Gewer, Storin Diam, and Chiven Pine	4040
(1) Neimorced Concrete Culvert, Storm Drain, and Sewer Pine	4040
(a) Remoted College Elliptical Cilivert Storm Drain and Cower Dine	4040
(P) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Dine	1040
(9) 1 Olyvinyi Chloride (FVC) Pipe	4040.00
(1) Corragated Follyvirlyi Chilofide (PVC) Pine with a Smooth Interior	1040.00
(3) Corrugated Folypropylene (CPP) hine with smooth Interior	4040.00
(i) Conagated Folyethylette (PE) Pipe with a Smooth Interior	1040 04
(a) i organizació (i L) i ipe willi a Sillootti Interior	1040 04
(v) Number Gaskets and Preformed Flexible Joint Sealants for Concrete Ding.	1050
(w) Mastic John Sealer for Pipe	1055
(A) External Sealing Bang	4057
()) I inc Aggregate (Note I)	1000 04
(2) Codisc Aggregate (NOte 2)	400405
(ad) I devaged Napid Haldelilla Moltal Of Concrete	4040
(bb) Honoralik Glout	400400
(cc) Remorement bars and Welded Wire Fabric	4000 40
(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 Pine
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pine
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pine
С	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pine
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reilliorced Concrete Arch Culvert, Storm Drain, and Sewer Pine
	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 Precoated Galvanized Corrugated Steel Pipe Arch
	Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Arch
-	Polyvinyl Chloride (PVC) Pipe
ļ	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
- 1	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pine
-	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Bing
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pine
ľ	Texible Pipes:
	Galvanized Corrugated Steel Pipe
1	Galvanized Corrugated Steel Pipe Arch
	Bituminous Coated Corrugated Steel Pipe
	Bituminous Coated Corrugated Steel Pipe Arch
	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch Precoated Galvanized Corrugated Steel Pipe
1	Precoated Galvanized Corrugated Steel Pipe Precoated Galvanized Corrugated Steel Pipe Arch
	Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Corrugated Aluminum Alloy Pipe Arch
	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"
1	Corrugated Polypropylene (CPP) Pipe 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	0770
a Disa	- 1	l ype 6	Fill Height:	Greater than 25'	not exceeding 30'	>	>	>	/	> >	• >	,	> >	> >	>	>	>	>	>	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 E	c add -	Fill Height:	Greater than 20'	25'	2	≥	≥	2	: ≥	≥		: ≥	^ ≥	A.	≥ ;	≥ :	2	>	2020	2020	2030	2040	2050	2060
"Table IA: Classes of Reinforced Concrete Pipe ive Diameters of Pipe and Fill Heights over the	Tvne 4	1 227.	Fill Height:	Greater than 15' not exceeding	20,	2	≥	2	≥	≥	2	2	≥	2	2	≥ ≥	≥ ≥	2 3	≥ ;	≥ ;	2	1680	1690	1/00	1/10
"Table IA: Class	Type 3		Fill Height:	not exceeding	15'				- Characteristic Control of Contr	***************************************			=	=										1360	1300
for the Resp	Type 2		Greater than 3'	not exceeding	10,		-						=			< ppose	- main							e e e e e e e e e e e e e e e e e e e	
	Type 1	Fill Hoish		3' and less	1	≥ ≥	≥ ≥	<u> </u>	= =	= 2	A1		= :				-				-	-	=	===	
		Nominal	Diameter	Ė	12	1 4	, ¢	21		30 4	30	2 5	4 4	04	54	09	99	72	78	84	06	96	102	108	Notes

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

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 Type 7 Type 7 Type 7 Type 9	ype 5 Type 6 Type 7	Height: Fill Height: Fill Height:	Greater than 25'	not exceeding 30'	5"x1"	0.064	0.064	(0.079)	(0.079)	(0.009)	(0.109)	0.109	(0.109E)	0.109 (0.138E) 0.109 0.109	0.109 (0.138E) 0.109 (0.138) (0.138E) 0.138	0.109 (0.138E) (0.138) (0.138) 0.138E (0.138E)	(0.138) (0.138E) 0.138 0.138 0.138E (0.138E)	(0.138) (0.168E) (0.138E) 0.138E (0.168E) (0.138E)	(0.138) H0.168E (0.138E) 0.138E H0.168E 0.138E	0.138 H0.168E (0.138E)	0.138 0.158E (0.168E)	0.136 (0.168E)	(0.136 (0.168E) (0.168E) H0.138E	(0.168) (0.168E) H0.138E	(0.100) (0.168E) 0.168E	(0.155) H0.138E H0.168E	(0.158) H0.138E	H0.138E H0.168E	10.168E H0.168E H0.168E
TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"X	4 Type 5	ght: Fill Height:	an 15' Greater than 20'	2 2/3" x	5"x1" - 1/2" 3"x1"	0.064	0.064	0.064	(0.079)	(0.079)	(0.079)	(0.109)	(0.109)	0.109 (0.138) (0.109)	0.109 (0.138) 0.109	0.109 (0.138) 0.109	0.109 (0.138) 0.109	0.109 0.138 (0.138)	(0.138) 0.168 (0.138)	(0.138) 0.100 (0.138)	(0.138)	(0.138) (0.138)	0.138	0.138	0 138	(0.168) (0.168)	(0.168) (0.168)	(0.168)	0.160
TABLE IB: THICKNESS OF IPE AND FILL HEIGHTS OVER	lype 3	Fill Height: Fill Height:	Greater than 10' Greater than 15' not exceeding 15' not exceeding 20'	3"41" 5"41" 22/	×	0.064	0.064	0.004	490.0	0.084	(6/0.0)	(6/0.0)	(0.079)	(0.109) (0.109)	0.109 0.109	0.109	0.109 0.109		0.109 0.168	0.109		0.109 (0.138)	0.109 (0.138) (0.138)	0.109 (0.138) (0.138)	(0.138) (0.138) (0.138)			0.138 0.138 (0.168)	0.168 0.168
ESPECTIVE DIAMETER OF PI	***************************************		ater than 3' xceeding 10'	2 2/3" x 3"x1" 5"x1" 2 2/3" x			0.064						6.00 6.00	0.079 0.079 0.109	0.079 (0.109) 0.079	0.079 (0.109) 0.109	(0.109) (0.109) 0.138	(0.109) 0.109 0.168	0.109	(0.109) 0.109	(0.109) 0.109	(0.109) 0.109	0.109 0.109	0.109	0.109 0.109	0.138 0.138	0.138 0.138	0.138	0.168 0.168
FOR THE RI	FII Height		3' and less 1' min. cover	2 2/3" x 3"x1" 5"x1" 2 2				0.079)	0.079)	(0.109E) 0.0	(0.109E)	0.079	0.109 (0.109) 0.109 (0.1	0.109 (0.109) 0.109 (0.1	0.109 0.109 0.109		0.138 0.109 (0.138) 0.1	0.168 0.109 (0.138) 0.168	0.168 (0.138) (0.138) 0.11	(0.138) (0.138)	(0.138) (0.138)	0.1092 0.1092	0.109Z(0.138Z)	0.109Z(0.138Z)		0.138Z 0.138Z	0.1382 0.1382	0.138Z 0.138Z	44 0.168Z 0.168Z
	nətə	msiQ *.r	Isnimol _{ni}	N	12	15	18	2	24	30	36	42	48	54	09	99	72	78	84	06	96	102	80 ;	4 6	07 :	126	132	82	144

Notes.

* 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 "0" can be reduced by one gage thickness if helical seam fabrication is allowed.

A thickness preceded by "H" indicates only helical seam fabrication is allowed.

Elongation according to Article 542.04(e)

Z 1'-6" Minimum fill

16		ype 1		_	TVDP 2	•	L	1	,	-											
ı ə ı	-	Fill Height			Fill Height	, ±	-	Till Holah	344	-	Type 4	4		Type 5	5	L	Type 6			Tyne 7	
	•	' :			n i	į		D	9.1.		FIII Height	H.		Fill Height	ıht:		Fill Height	ıt:		Fill Height	1
) Isnim mm	0.3	1 m and less 0.3 m min. cover	ss ver	Gre not e	Greater than 1 m not exceeding 3 m	n 1 m ig 3 m	not G	Greater than 3 m not exceeding 4.5 m	an 3 m 1g 4.5 m	<u>ي</u> ق	Greater than 4.5 m not exceeding 6 m	14.5 m	Ď to	Greater than 6 m	in 6 m	Gre	Greater than 7.5 m	7.5 m	Q.	Greater than 9 m	ш 6
ION	ന	75 x 25	75 x 25 125 x 25	68 x 13	75 x 25	75 x 25 125 x 25	5 68 x 13	3 75 x 25	5 125 x 25	88 X	3 75 x 25	125 × 25	å	75 95	200		inor exceeding 9 m	m a B	\perp	not exceeding 10.5 m	10.5 m
5	ww.	E	E E	mm	E	шш		E E			mm			75 X Z5	125 x 25		S	5	õ	-	125 x 25
375	1.63	- diamen		1.63	****		1.63			1.63			1,63			1 63		E	um ;	E	E
2 6	2 6			1.63			1.63		***************************************	1.63			1.63			3 6			3		
420	(2.01)			1.63			1.63			1,63			1 63	*******		20.0			(2.01)		
525	(2.01)			1.63			1.63			1 63			3 5			(2.01)			(2.01)		
	(2.01)			1.63			1.63			1,63			(4.0.7)			(2.01)			(2.01)		
750	(2.77E)			1.63		····	163			3 6			(2.01)			(2.01)			(2.77)		
006	(2.77E)			163			3	-		(10.3)			(2.01)			(2.77)			2.77		
1050	2.01	····	*******	1.63			(4.01)	·		(2.01)			(2.77)			2.77			(3.51E)		
1200	2.77	(2.77)	2.77	(2.77)	2.01	2 01	(5.5)		1	(2.07)			(2.77)		*****	(2.77E)			(2.77E)		
1350	2.77	(2.77)	2.77	(2.77)	2.01	2 0 1	277	5 77	2.77	//->	(2.77)	2.77	(3.51)	(2.77)	2.77	(3.51E)	2.77	2.77	(3.51E)	2.77	(3.51)
1500	2.77	2.77	2.77	2.77	2.01	(2.77)	277	(5.77)	27.7	7.7	(2.7)	2.77	(3.51)	2.77	2.77	(3.51E)	2.77	(3.51)	(3.51E)	3.51	3.51
1650	(3.51)	2.77	2.77	2.77	2.01	(2.77)	277	(5.7.7)	27.7	7 7	(4.17)	2.77	(3.51)	2.77	2.77	(3.51E)	(3.51)	(3.51)	3.51E ((3.51E) ((3.51E)
1800	3.51	2.77	(3.51)	3.51	(77.7)	(77.0)	3.51	(5.77)	2.77	77.7	7.7.7	2.77	(3.51)	2.77	(3.51)	(3.51E)	3.51	3.51	3.51E ((3.51E)	3.51E
1950	4.27	2.77	(3.51)	4.27	(2.77)	2.77	4.27	277	277	5.01	2.77	2.77	3.51	(3.51)	(3.51)	(4.27E)	(3.51E)	3.51E	(4.27E)	(3.51E)	3.51E
2100	4.27	(3.51)	(3.51)	4.27	(2.77)	2.77	4.27	2.77	277	12.1	17.7	(10.5)	4.27	(3.51)	(3.51)	H 4.27E (3.51E)	(3.51E)	3.51E	H 4.27E	3.51E ((4.27E)
2250	······································	(3.51)	(3.51)		(2.77)	2.77		2.77	277	1.27	(2.54)	(3.51)	4.2/	(3.51)	3.51	H 4.27E		3.51E	H 4.27E (4.27E)		(4.27E)
2400			(3.51)		(2.77)	2.77		2.77	277		(3.51)	(3.51)		(3.51)	3.51			(4.27E)	<u>•</u>	(4.27E) ((4.27E)
2550			2.77Z		(2.77)	2.77		2.77	(3.51)		(3.51)	(5.5)		(3.51)	3.51			(4.27E)	<u> </u>	(4.27E)	(4.27E)
2700	1	2.77Z	(3.51Z)		2.77	2.77		2.77	(3.51)		(3.5)	(3.0.1)		(3.51)	3.51			(4.27E)	I	H 3.51E H	H 4.27E
2850		2.772	(3.51Z)		2.77	2.77		277	(3.51)		0.01	0.0		3.51	(4.27)		(4.27E)	(4.27E)	퓌	H 3.51E H	H 4.27E
3000	•	2.772	(3.51Z)	***************************************	2.77	2.77		(3.51)	(3.51)		(5)	. i	***************************************	(4.27)	(4.27)		(4.27E)	4.27E	<u> </u>	H 3.51E H	H 4.27E
3150		3.512	3.512		3.51	3.51		3.51	3.51		(3.01)	3.57 (5.93	***************************************	(4.27)	(4.27)			H 4.27E	I	H 4.27E H	H 4.27E
3300		3.51Z	3.512		3,51	3.51		3.51	3.51		12.0	(4.27)	1	(4.27)	(4.27)			H 4.27E	I	H 4.27E H	H 4.27E
3450		3.512	3.512		3.51	3.51		3.51	. e.		(4.27)	(4.27)			4.27			H 4.27E	I	H 4.27E H	H 4.27E
3600	_	4 077				_	_	-	-	_			-	7270	100 7	_			-		

Aluminized Type 2 Steel or Precoated Galvanized Steel 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.
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)
Z 450 mm Minimum Fill

	***************************************	Τ		o o	35.	=	T	*************	****				960	80F	5E)	5F)	5E)	SE)	(E)	Θ	Щ) (iii	<u> </u>	, 2E	- E	4E	4F
			Type /	Greater than 30'	not exceeding 35'	2" 3"x1"	\perp				.,,		H 0,060	H 0.060F	(0,105E)	(0.135F)	(0.135E)	(0.135E)		(0.164E)	(0.164E)	(0.164E)	(0.164E)	H 0.135E	H 0.135E	H 0.164E	H 0 164F
	ATIONS			Greate	not exc	2 2/3"x1/2"		090.0	(0.075)	H 0.060	H 0.060E	(0.105E)	H 0.075E	H 0.075E	0.105E	0.105E	(0.135E)	(0.164E)	H 0.164E	H 0.164E							
	CORRUG/	Type 6	Fill Height	Greater than 25'	not exceeding 30'	3"x1"							H 0.060	H 0.060	0.105	(0.105E)	(0.105E)	(0.135E)	(0.135E)	(0.135E)	(0.135E)	(0.164E)	(0.164E)	(0.164E)	(0.164E)	(0.164E)	H 0.164E
	"AND 3"x1"	Tur		Greater	not exce	2 2/3"x1/2"		0.060	090.0	(0.075)	H 0.060	(0.105)	H 0.075E	H 0.075E	0.105E	0.105E	0.105E	0.135E	0.164E	H 0.164E							
PIPE	R 2 2/3"x1/2	9.5	light:	han 20'	ding 25	3"x1"			***************************************				H 0.060	H 0.060	(0.075)	(0.105)	(0.105)	(0.105)	(0.135)	(0.135)	(0.135)	(0.135)	(0.135)	(0.135)	(0.164)	(0.164)	0.164
TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE	THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS	Type 5	Fill Height:	Greater than 20'	not exceeding 25	2 2/3"x1/2"	0800	000.0	0.000	090.0	(0.075)	(0.105)	(0.105)	(0.135)	0.105	0.105	0.105	0.135	0.164	0.164							
TED ALUMI	= 10P OF T	4	ight:	han 15'	02 81110	3"x1"						000	090.0	H 0.060	090.0	(0.075)	(0.075)	(0.105)	(0.105)	(0.105)	(0.105)	(0.135)	(0.135)	(0.135)	0.135	0.135	0.164
CORRUGA	S OVER IH	Type 4	Fill Height:	Greater than 15'		2 2/3"x1/2"	0.060	0.00	000.0	0.000	0.060	(0.075)	(0.103)	(0.105)	0.105	0.105	0,105	0.133	0.104	0.0				-			
KNESS OF	רר חבופח ו	e 3	ight:	han 10' ding 15'		3"x1"		******				HOOR	200.0	1 0.060	0000	Dan d	0.060	(0.075)	(370.0)	(0.073)	0.103)	0.100	0.105	2 6	0.135	0.133	0.164
LE IC: THIC		Type 3	Fill Height:	Greater than 10' not exceeding 15'		7/1× 2/7 7	090.0	090'0	0 060	0900	0.000	0.025	(0.405)	0.103)	20.0	20.00	0.100	164	0 164	5							***************************************
TAB AETER OF 1		9.2	ight	reater than 3' exceeding 10'	311/41	1 × 0						H 0.060	HOOR	0000	0000	2000	0.060	0 0 0	0.060	0 075	0 105	0 105	0.105	0 135	0.135	0 164	1000
CTIVE DIAN		Type 2	Fill Height:	Greater than 3' not exceeding 10	2 2/3"×1/2"	3	090.0	090.0	090.0	0 060	0.060	0.075	0.075	0 105	0.105	0.105	0.135	0.164	0.164						**********		
FOR THE RESPECTIVE		-	ight.	less	3"x1"	Š						H 0.060	H 0.060E	(0.075)	(0.075)	(0 105)	(0.105)	(0.105)	(0.105)	(0.135)	(0.135)	(0.135)	(0.135)	0.135Z	0.135Z	0.164Z	0 1647
FOR 1		Type 1	Fill Height	3' and less 1' min. cover	2 2/3"×1/2"		(0.075)	(0.075)	(0.075)	H 0.060E	(0.105E)	H 0.075E	(0.135E)	0.105E	0.105E	0.105E	0.135E	0.164E	0.164E						***********		viole.
	د ا	ətər	Dian	lsnim ni	οN		2 !	ر	18	21	24	30	36	42	48	54	09	99	72	78	84	06	96	102	108	114	120

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	TABLE IC: THICKNESS OF CORRUGATED ALLIMINIM ALLOY CITE	(NESS OF	CORRIG	ATED ALLIN	AINI INA ALL	70.0				
			FOR THE	E RESPEC	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)	TER OF P	IPE AND F VD 75 mm (Metric)	X 25 mm CC	IS OVER T	HE TOP OI	THE PIP	f1.1		
eı	Ty	Type 1	Tyi	Type 2	Tvp	Type 3	Ž.	Type 4	1					
1əu	ŧ	Fill Height	Ē	Fill Height	Fill Height	ojoht.			dK i	i ype o	lype 6	9 9	Type 7	2 Z
	1	• :			=		Ē	rIII Height:	Ī	Fill Height:	Fill Height	eight:	Fill Height:	ight:
lsnin m	0.3 m n	0.3 m min. cover	Greater not exce	Greater than 1 m not exceeding 3 m	Greater than 3 m not exceeding 4.5 m	Greater than 3 m of exceeding 4.5 m	Greater t	Greater than 4.5 m not exceeding 6 m	Greater than 6 m	Greater than 6 m	Greater than 7.5 m		Greater than 9 m	nan 9 m
ioN	68 x 13	~	68 x 13	75 x 25	68 x 13	75 x 25	68 x 13	75 x 25	68 × 12	76 95	ייסו פארפם		not exceeding 10.5 m	ng 10.5 m
	E E	mm E	mm	mm	mm	шш	mm	mm.	2 K E	75 X 25	26 X 13	75 x 25 mm	68 × 13	75 x 25
300	(1.91)		1.52		1.52		1.52		4 65					
375	(1.91)		1.52		1.52		1 5		20.1		1.52		1.52	
450	(1.91)		1.52		1 0		ZC		1.52		1.52		(1.91)	
525	H 1 52F				1.32		1.52		1.52		(1.91)		H 1.52	
900	(2 R7E)	-	70.		1.52		1.52		(1.91)		H 1.52		H 152F	
750	(4:01L)		76.		1.52		(1.91)		(2.67)		(2.67)		(2 87E)	
200	П.S. Г	٠,	1.91	H 1.52	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 152	H 1 91E	7	(4.0.47)	
200	(3.43E)		1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	(3.43)	H 1 52	1 1 0 1 1	1 1 50	T 1.0	76.1 H
0601	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	1.52	72.0	70:00	1 1 1 1 1	7C.1 L	л П	H 1.52E
1200	2.67E	(1.91)	2.67	1.52	2.67	5.5	787	20. 1	70.7	(:8 :	7.6/E	2.67	2.67E	(2.67E)
1350	2.67E	(2.67)	2.67	1.52	267	1 53	2.07	(1.31)	7.07	(5.67)	2.67E	(2.67E)	2.67E	(3.43E)
1500	3.43E	(2.67)	3,43	1.52	3.43	(101)	70.7	(1.8.1)	7.67	(2.67)		(2.67E)	(3.43E)	(3.43E)
1650	4.17E	(2.67)	4.17	1.52	4 17	2 6 5	5 1	(4.07)	3.43	(2.67)		(3.43E)	(4.17E)	(3.43E)
1800	4.17E	(2.67)	417	1.50	117	(1,31)	71.4	(7.67)	4.17	(3.43)	4.17E	(3.43E)	H 4.17E	(3.43E)
1950		(3.43)		191	-	(1.8.1)	4	(70.7)	4.17	(3.43)	H 4.17E	(3.43E)	H 4.17E	(4.17E)
2100		(3.43)		2.67		7 67		(70.7)		(3.43)		(3.43E)		(4.17E)
2250		(3.43)		267		2.07		(3.43)		(3.43)		(4.17E)		(4.17E)
2400		(3.43)	**********	2.67		7 0.0		(3.43)		(3.43)		(4.17E)	***************************************	(4.17E)
2550		3.432		3.43		70.7		(3.43)		(3.43)		(4.17E)		H 3.43E
2700		3.432		3.43		54.5		3.43	Moteoday	(4.17)		(4.17E)		H 3,43E
2850		4.17Z		4 17		0.40		3.43		(4.17)		(4.17E)		H 4.17E
3000		4.172		4 17		7 7 7		4.17		4.17		H 4.17E	Windows	H 4.17E
Notes	,		1			4. 1.		4.17		4.17		H 4 17F		

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

	ŀ				Table IIA: T FOR	A: THIC	THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES R THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE	OR CORI CTIVE E(RUGATE	D STEEL NT ROUI	PIPE AF ND SIZE	CCHES / OF PIPE	AND COR	RUGATE L HEIGH	D ALUMI TS OVER	NUM ALI	LOY PIP	E ARCHI	S			
р	ర `	Corrugated	Corr	Corrugated	1	0,000				Type 1			_		Type 2					F		
uno	₹	Atuminum	ž ž	Steel &	- S	Steel	Min			Fill Height	ıt:				Till Linith					c adk i		
A In	ni e	Pipe Arch		Pipe Arch	Pipe 5	Pipe Arch 5" x 1"	Cover	·······)			•	-					ш	Fill Height:	¥	
əlsviu	ZIS	7/1 × cc		×	<u>'</u>					3' and less	ss		S.	ater than	Greater than 3' not exceeding 10'	ceeding	10,	Grea	Greater than 10' not exceeding 15'	10' not e	exceedin	g 15'
p∃	Span	an Rise	Span	Rise		Rise	Steel &		Steel		Alur	Aluminum		Steel		Aluminum	mnu		o di		A 1.	A f
		- 1	CIE)	(iu.)	<u>=</u>	<u>.</u>	Aluminum	2 2/3" x	3"x1"	5" x 1"	2 2/3" x	3"x1"	2 2/3" x	3"71"	5" 4"	2	0.11.411	2 2/3" x	-		2 2/3" >	
15	17	13			L		1'-6"	1900			7/1		-	_			ž ,	1/2"	3.X1	x F	1/2"	3"x1"
130	21	15			-		, <u>, , , , , , , , , , , , , , , , , , </u>	400.0		-	0.060	*********	0.064			090'0		0.064			0900	L
21	24	18			····		1,-6	0.004			0.060		0.064	····	~~~	0.060		0.064			0.060	
24	28	50			L	Ī	41.01	000	\downarrow		(0.075)		0.064			090.0	•	0.064	******		0.00	
30							بة م 	(0.079)			(0.105)		0.064			0.075		0.064		I	0.000	
36	42	29			*********	***************************************	- - -	(0.079)			(0.105)		0.064			0.075		(6.0.0)			(0.105)	
42	49	33					1,-6"	6 (5.0)	\downarrow		0.105		0.064			0.105		0.064			0.105	
48	57	38	53	41	53	4	1,-6	0.00	(0 400)			1	(0.109)			0.105		(0.109)	-		0.105	
25	99	43	90	46	9	46	,- •	0 109	(0.109)	0.109)	0.135	0.060	0.109	0.079	0.079	0.135	090.0	0.109	0.079	(0.109)	0.135	090.0
9	7.1	47	99	51	99	51	1'-6"	130	200		100	(0.070)	0.108	0.079	0.079	0.164	0.060	0.109 (((0.109)	0.109	0.164	(0.075)
99		52	73	22	73	55		0.138	(0.109)		0.164	(0.075)		0.079	(0.109)	0.164	0.060	0.138 (((0.109)	0.109	0.164	(0.075)
72	83	57	81	59	87	29	1'-6"	0.168	(0.109)	0.109		0.075	0.168	0.079			0.075	0.168 (((0.109)	0.109		0.075
78			87	63	87	63	1'-6"			4-	I	0.105	0.168	0.079	(0.109)		0.105	0.168 (((0.109)	0.109		0.105
84	·		92	29	92	29	16"		0.109	0.108		0.105		(0.109)	0.109		0.105		0.109	0.109		0.105
8	1		103	7.1	103	7.1	1,-6,		0.109	0 109		000		(0.109)	0.109		0.105		0.109	0.109		0.105
96			112	75	112	75	1:-6"		0 109	(0 13B)		200		(601.0)	0.109	Ì	0.135		0.109 0	0.109		0.135
102	*******		117	79	117	79	1,-6"		0 100	(0.130)		0.0		0.109	0.109		0.164		0.109 (0	(0.138)		0.164
108		1	128	83	128	83	1,-6"		0.138	0.138		0.104		0.109	0,109		0.164		0.109 (0	(0.138)		0.164
1			137	87	137	87	1,-6"		0 138	730		I		0.138	0.138	1	1		0.138 0	0.138		
120		1	142	91	142	91	1'-6"		0.168	0.168				0.138	0.138			-		0.138		
* Acies	irmini	Aliminized Type 2 Steel at December 1	0		1									00.100	00 0		1		0.168 0	0.168		

Notes:

* Adminized 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 "()" 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.

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.

FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE Type 3	·	- Order	000									
Reinforced		FOR 1	D. CLASS THE RESP	ES OF REI ECTIVE EC	NFORCED QUIVALENT	CONCRETE ELL ROUND SIZE O	IPTICALL AI IF PIPE AND	ND REINFO	RCED CON	CRETE AR	CH PIPE	
Reinforced Reinforced Rinforced Minimum Fill Height: Concrete Concrete Cover Span Rise Span Rise RCCP HE & A HE Arch HE-III A-III A-III HE-III A-III HE-III A-III HE-III A-III HE-III A-III HE-III A-III A-III HE-III A-III A-III A-III HE-III A-III A-III A-III A-III HE-III A-III A-III	• • • • • • • • • • • • • • • • • • •											
Valent of Size Concrete (in.) Neminate (in.) Minimum of Size Fill Height: Stand less Fill Height: Greater than 3' not seconding 10'. A Size Span Rise Span Rise Rise <td>***************************************</td> <td>Rein</td> <td>forced</td> <td>Ċ</td> <td></td> <td></td> <td>Tyf</td> <td>)e 1</td> <td>TVD</td> <td>e 2</td> <td>^</td> <td>3</td>	***************************************	Rein	forced	Ċ			Tyf)e 1	TVD	e 2	^	3
Span Rise RCCP HE & A HE Arch HE Arch HE Arch HE Arch HE HE-III ArIII HE-III ArIIII HE-III ArIII HE-III ArIII HE-III ArIII HE-III ArIII HE-III ArIII HE-III ArIII HE-III ArIIII HE-III ArIIII HE-III ArIIII HE-III ArIIII HE-III	Equivalent Round Size (in.)	Cor Elliptic	ncrete cal pipe in.)	Kein Cor Arch p	Iforced Icrete Iipe (in.)	Minimum Cover	F⊪ H 3'ar	eight: nd less	Fill He Greater th exceed	eight: ian 3' not ing 10'	Fill H Greater th	eight: lan 10' not ling 15'
5 23 14 18 11 1'-0" HE-III A-III HE-III A-III HE-III A-III HE-IV	· · · · · · · · · · · · · · · · · · ·	Span	Risp	Snan	Dio	11.000				,) n
8 23 14 18 11 1'-0" HE-III A-III HE-III A-III HE-IV 1 28 13 1/2 1'-0" HE-III A-III HE-IV HE-IV 3 19 28 1/2 18 1'-0" HE-III A-III HE-IV HE-IV 6 45 29 43 3/4 26 5/8 1'-0" HE-III A-III HE-IV HE-IV 8 60 38 58 1/2 36 1'-0" HE-III A-III HE-IV HE-IV 9 45 29 43 3/4 26 5/8 1'-0" HE-III A-III HE-IV HE-IV 8 60 38 58 1/2 36 1'-0" HE-III A-III HE-IV 9 76 48 73 45 1'-0" HE-II A-III HE-IV 9 58 54 1'-0" HE-II A-III HE-III A-III HE-IV <t< td=""><td>45</td><td></td><td></td><td>chair</td><td>Aise</td><td>RCCP HE & A</td><td>뽀</td><td>Arch</td><td>里</td><td>Arch</td><td>出</td><td>Arch</td></t<>	45			chair	Aise	RCCP HE & A	뽀	Arch	里	Arch	出	Arch
5 23 14 22 13 1/2 1 · · · · · · · · · · · · · · · · · · ·		23	4	18		1,-0,,	HH-HH		= 1			5
1 30 19 26 15 1/2 1'-0" HE-III A-III HE-IV	0 7	23	4	22	13 1/2	1, 0	= 4	= <		= : 	HE-IN	A-IV
4 30 19 28 1/2 18 17-0° HE-III A-III HE-III A-III HE-IV HE-IV <td>7.7</td> <td>30</td> <td>10</td> <td>56</td> <td>15 1/2</td> <td>, ,</td> <td></td> <td>= =</td> <td></td> <td>— -∀</td> <td>HE-I</td> <td>A-IV</td>	7.7	30	10	56	15 1/2	, ,		= =		— -∀	HE-I	A-IV
7 34 22 36 1/4 22 1/2 1 -0" HE-III A-III HE-IV HE-IV 8 24 36 1/4 22 1/2 1 -0" HE-III A-III HE-IV HE-IV 5 45 29 43 3/4 26 5/8 1 -0" HE-III A-III HE-IV HE-IV 8 50 38 58 1/2 36 1 -0" HE-I A-II HE-III A-III HE-IV 9 76 48 73 45 1 -0" HE-I A-II HE-III A-III 1460 8 53 88 54 1 -0" HE-I A-II HE-III A-III 1470 9 58 88 54 1 -0" HE-I A-II HE-III A-III 1470	24	30	19	28 1/2	0, 7	ρ δ		H-∀-	= #	H-M	HE-IV	A-IV
0 38 24 36 1/4 22 1/2 1 -0" HE-III A-III HE-III A-III HE-IV 5 45 29 43 3/4 26 5/8 1 -0" HE-III A-III HE-IV HE-IV 8 53 34 51 1/8 31 5/16 1 -0" HE-II A-III HE-IV HE-IV 9 58 43 65 40 1 -0" HE-I A-III HE-III A-III HE-IV 10 76 48 73 45 1 -0" HE-I A-II HE-III A-III 1460 10 83 53 88 54 1 -0" HE-I A-II HE-III A-III 1470 10 HE-III A-III HE-III A-III 1470 1470	27	34	22	36 1/4	22 475	7 7		A-III	三出	A-III	HE-IV	A-IV
6 45 29 43 3/4 26 5/8 1'-0" HE-III A-III HE-III A-III HE-IV 8 53 34 51 1/8 31 5/16 1'-0" HE-II A-III HE-IV HE-IV 4 68 43 65 40 1'-0" HE-I A-II HE-IV HE-IV 5 83 53 88 54 1'-0" HE-I A-II HE-III A-III 1460 6 91 58 88 54 1'-0" HE-I A-II HE-III A-III 1470 7 HE-III A-III HE-III A-III HA-II A-III 1470	30	38	24	36 1/4	22 1/2	- - - -	三 出 :	A-III	三里里	A-III	HE-IV	A-IV
2 53 34 511/8 315/16 1'-0" HE-II A-III HE-IV HE-IV 8 60 38 581/2 36 1'-0" HE-I A-III HE-IV HE-IV 7 76 48 73 45 1'-0" HE-I A-III HE-III A-III 1460 8 53 88 54 1'-0" HE-I A-II HE-III A-III 1470 9 58 88 54 1'-0" HE-I A-II HE-III A-III 1470	36	45	29	43 3/4	26 5/8	÷ -	= : ± :	⊪-Y	量业	H-H	HE-I∨	K
8 60 38 58 1/2 36 1 -0" HE-I A-II HE-III A-III HE-IV 1 68 43 65 40 1 -0" HE-I A-II HE-III A-III 1460 1 76 48 73 45 1 -0" HE-I A-II HE-III A-III 1460 2 83 53 88 54 1 -0" HE-I A-II HE-III A-III 1470 2 91 58 88 54 1 -0" HE-I A-II HE-III A-III 1470	42	53	34	51 1/8	31 5/16			A-II	≡-H	A-III	HE-IV	A-IV
4 68 43 65 40 1'-0" HE-I A-II HE-III A-III 1460 5 78 73 45 1'-0" HE-I A-II HE-III A-III 1460 2 91 58 54 1'-0" HE-I A-II HE-III A-III 1470 4 1'-0" HE-I A-II HE-III A-III 1470	48	09	38	58 1/2	3 %	ې ځ 	- -	H-A	= ₩	A-III	HE-IV	A-IV
76 48 73 45 11-0" HE-I A-II HE-III A-III 1460 2 91 58 54 11-0" HE-I A-II HE-III A-III 1470 4 11-0" HE-I A-II HE-III A-III 1470	54	89	43	65	40	ې ځ 		H-A	= Ψ	H-H	1460	1450
8 53 88 54 1'-0" HE-I A-II HE-III A-III 1460 91 58 88 54 1'-0" HE-I A-II HE-III A-III 1470	09	76	48	7.3	45	- - -	뷘	A-II	二二	A-III	1460	1460
2 91 58 88 54 1'-0" HE-I A-II HE-III A-III 1470	99	83	53	88	5 4	- ÷	<u> </u>	H-H	= - - - -	A-III	1460	1470
1470 HE-III HE-III A-III 1470	72	91	28	88	7.	- ÷	——————————————————————————————————————	H-H	— ≡- Ψ	H-H	1470	1480
	Notes:					-	-10	H-H		A-III	1470	1480

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

		Table IIB: CL FOR THE R	ASSES OF I	REINFORCE E EQUIVALEI	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 (Metric)	ELLIPTICALL AN ZE OF PIPE AND (Metric)	ND REINFORC FILL HEIGHTS	ED CONCRE S OVER THE	TOP OF PIP	PE	
							Type 4				
000	Reir	Reinforced	Reint	Reinforced		Ś.	l ad	Typ	Type 2	Ty	Type 3
Equivalent Round Size (mm)	Co Elliptical	Concrete Elliptical pipe (mm)	Con Arch pi	Concrete Arch pipe (mm)	Minimum Cover	T Fill ⊤	Fill Height: 1 m and less	Fill Height: Greater than 1 m not exceeding 3 m	eight: an 1 m not ng 3 m	Fill H Greater th exceedi	Fill Height: Greater than 3 m not exceeding 4.5 m
	Span	Rise	Span	Rise	RCCP HE & A	里	Arch	里	Arch	#	dzy A
375	584	356								!	5
450	584	356	45/	279	0.3 m	≡ ₩	H-H	#-#	A-III	HE-IV	A-IV
525	762	483	099	307	0.3 m	= : ¥ !	₩-₩	量量	⊪-W	HE-IV	. ×-×
009	762	483	724	457	0.0 0.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	₩ ₩ ₩	≣-∀	皇	H-H	HE-IV	A-IV
989	864	559	921	572	0.0 E	=- ! 	A-III	≡	A-III	HE-IV	A-IV
750	965	610	921	572	0.0	= = # ±	₩-W	≡ Ψ	A-III	HE-IV	A-IV
006	1143	737	1111	9/9	E 800		H-A	≡ Ψ :	H-III	HE-I∨	A-IV
1050	1346	864	1299	795	0.3 m	- 37	H-H	=	HIII	HE-IV	A-IV
1200	1524	965	1486	914	E 0.3		= = = = = = = = = = = = = = = = = = =	= :	HR	HE-IV	A-IV
1350	1727	1092	1651	1016	0.3 m	<u> </u>		= :	Ε-Ε	70	70
1500	1930	1219	1854	1143	0.3 m	- 4	= = =	= = = = = = = = = = = = = = = = = = = =	A-III	70	70
1676	2108	1346	2235	1372	E 80		= :	= 出:	H-III-	70	70
1800	2311	1473	2235	1372	2 6		= :	三 上	∃ -∀	20	70
Notes:					= 0.0		A-1	≡- H	A-III	70	70
A niimher indicates the D i and the	stor tho D.	1 1 1 1 1 1									

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

CPE					(TAE	3LE IIIA:	PLAST	TABLE IIIA: PLASTIC PIPE PERMITTED	PERMIT	TED							
Type 2	t car.T	Type 4	1		FORA	GIVEN	PIPE DIA	METER	AND FI	LL HEIG	HT OVE	THE TO	OP OF TH	HE PIPE					
The legic content than 3', Fill Height: Greater than 10', Fill Height: Greater than 10', The legic content than 10',	Fill Haight: 2' or	o he	-10	La Company				Type 2					Type 3				-		
CPE CPP PVC CPVC PE CPE CPP PVC CPVC PE CPP CPP CPP CPP PVC CPVC PE CPVC PVC PVC PVC PVC PVC PVC PVC PVC PV	with 1	₩	- E	nin Tin	_	_	-III Height not e	t: Greate	er than 3 or 10'		14.	ill Height:	Greater	than 10		Fill He	ight: Gr	eater th	an 15'.
CPF CPF	ם טייםט טיים		L	Ç	1							101	xceeding	15.			not excee	eding 20	٠,
	3	_	ш	7 II	<u>.</u>	PVC	CPVC	Ж	CPE	СРР	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	H.	Q d
* * * * * * * * * * * * * * * * * * *	×		×	×	ĄN	×	>	,	Ţ									i	5
	×		×	×	· >	< >	< >	< :	× .	₹ Z	×	×	×	×	Ϋ́	×	×	×	VIV
4 4	\dagger	1	Γ.	1	{	<	<	×	×	×	×	×	×	Ϋ́	×	· >	: >	< >	<u> </u>
4 ×	z 	Z	∢	×	×	×	×	AN	×	×	>	,					<	<	NA
* * * * * * * * * * * * * * * * * * *	 ×		~	×	×	×	×	· >	< >	< >	< ;	< :	Z Z	¥	×	×	×	AN	×
AN X	×	_	A	¥	Ą	: ×	< >	< 5	< 5	< ;	× :	×	×	ΑN	×	×	×	×	Ä
X X X X X X X X X X X X X X X X X X X	×		×	×	×	 	< >	<u>{</u> ;	¥,	¥	×	×	ΝA	NA	ž	×	×	Ϋ́	Z Z
X X X X X X X X X X X X X X X X X X X				×	< ×	< >	< >	< >	× :	×	×	×	AA	ΑN	Α̈́	×	×	×	ΔN
X X X X X X X X X X X X X X X X X X X			×	×		< ×	< >	< >	× >	× ;	×	×	×	Ϋ́	×	×	×	×	ξ X
X AN X NA X NA X NA X NA X X X X X X X X	AN	1	L	×	NA N	×	< Z	</td <td></td> <td>× :</td> <td>×</td> <td>×</td> <td>×</td> <td>A A</td> <td>AA</td> <td>×</td> <td>×</td> <td>×</td> <td>Ž</td>		× :	×	×	×	A A	AA	×	×	×	Ž
NA X NA X NA X NA X NA X	AN		~~	×	×	· ×	<u> </u>	< >	<u> </u>	<u>~</u>	×	¥	×	A	NA	×	¥	×	AM
		ı						<	¥.	ΑĀ	×	ΑN	×	ΑN	¥	×	Ž	×	ΔN

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

					FOR A	GIVEN	TA Taga	TABLE IIIA: PLASTIC PIPE PERMITTED	PLASTI	IC PIPE I	PERMIT	TED							
	-				5		(Metric) Civil Tipe Diameter and FILL HEIGHT OVER THE TOP OF THE PIPE (Metric)	אוווווו	AND FIL (Me	FILL HEIGH (Metric)	IT OVER	THE TO	P OF TI	1E PIPE					
-			Type 1					Time	-										
		Fill Height: 1 m and le	ht 1m	and lac	0		111111111111111111111111111111111111111	7 201					Type 3				Typo		I
Diameter		with 0	.3 m m	with 0.3 m min. cover	ő	1	Fill Height: Greater than 1 m, not exceeding 3 m	eight: Greater than not exceeding 3 m	: than 1 n 13 m	Ľ,	正	Fill Height: Greater than 3 m,	Greate	than 3 n	۱, ۲	Fill He	Fill Height: Greater than 4.5	ater th	an 4.5
(mm)												XX IOI	not exceeding 4.5 m	4.5 m		Ε	m, not exceeding 6 m	eding 6	Ε
) A	CPVC	A H	CPE	СРР	PVC	CPVC	PE	CPE	СРР	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	ggC
250	×	×	×	>	< 2	<u> </u> ,];											I	- 5
300	×	: >	< >	< >	≨ >	< :	×	×	×	Ϋ́	×	×	×	×	ΔN	>	>	,	1
				<	Υ	×	× 	×	×	×	×	>	>		===	<	<	<	Ž
375	×	×	ž	×	×	×	×	S N	,	1	{ ;	<	<	¥	×	×	×	×	A A
450	×	×	×	×	×	: ×	< >	<u></u>	< >	< ;	× :	×	¥ Z	Ϋ́	×	×	×	ž	×
525	×	×	N A	Ϋ́	N A	×	< ×	< 2	< 5	× ;	× :	×	×	¥ V	×	×	×	×	Y X
009	×	×	×	×	×	×		\	ξ ;	₹ ;	×	×	¥	ΑA	¥	×	×	¥	Ž
750	×	×	×	×	` ×	< ×	< >	< >	< ;	× :	×	×	Ϋ́	A A	ΑĀ	×	×	×	AN
006	×	×	×	×	×	< ×	< >	< >	 < :	× :	×	×	×	¥	×	×	×	×	
1000	×	ž	×	×	ΔN	< >	< 2	< ;	× :	×	×	×	×	ΑĀ	ΑN	×	×	×	- A
1200	×	A A	×	: ×	÷ ×	< >	<u> </u>	< >	Y :	Ž	×	¥	×	ΑN	Ϋ́	×	AN AN	×	S N
Notes:							¥.	×	Y V	₹	×	Α	×	¥	¥	×	Ą	· ×	2 2
PVC. Polyaginyl Oblogida (D)(C)	Ohagina	Chloud																<	ζ.

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

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

					5.0		*******				T			T			T	-
				l ype 7	Fill Height: Greater than 9 m, not exceeding 10.5 m	2												
	THE PIPE				Fill Height: Gr	CPVC			× :	×	×	×	×	×	×	×	ΑN	Ş
	I ABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE				in reignit. Greater than 7.5 m, not exceeding 9 m													
	IABLE IIIB: PLASTIC PIPE PERMITTED DIAMETER AND FILL HEIGHT OVER THE	(memc)	Type 6		reater than 7.5	CPVC		×	×		× :	× :	×	×	×:	×	¥ :	ZA
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	I ABLE IIIB; P : DIAMETER AN			Fill Locate	reigi	PVC		×	×	>	< >	< >	< >	< >	< >	< >	< >	<
	FOR A GIVEN PIPE			. not exceeding 7.5 m	B													
		þ	c add i	Fill Height: Greater than 6 m. n		CPVC	>	< :	×	×	×	×	×	×	×	Ϋ́	¥	
				Fill Height: G		PVC	×	< >	< ;	×	×	×	×	×	×	×	×	
Walter Walter Comments				Nominal	(mm)		250	300	375	2/2	450	525	009	750	006	1000	1200	Notes

Polyvinyl Chloride (PVC) pipe with a smooth interior Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior Polyethylene (PE) pipe with a smooth interior This material may be used for the given pipe diameter and fill height Not Available" Notes: PVC CPVC PE X NA

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."

LRFD STORM SEWER BURIAL TABLES (BDE)

Effective: November 1, 2013 | Revised: April 1, 2015

Revise Article 550.02 of the Standard Specifications to read as follows:

"Item	Article Section
(a) Clay Sewer Pipe	1040.02
(b) Extra Strength Clay Pipe	1040.02
(c) Concrete Sewer, Storm Drain, and Culvert Pipe	1042
(d) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	1042
(e) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe (Note	e 1) 1042
(f) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe (Note 1)	1042
(g) Polyvinyl Chloride (PVC) Pipe	1040.03
(h) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	1040.03
(i) Corrugated Polypropylene (CPP) Pipe with Smooth Interior	1040.08
(j) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe	1056
(k) Mastic Joint Sealer for Pipe (l) External Sealing Band	1055
(I) External Sealing Band	1057
(m) Fine Aggregate (Note 2)	1003.04
(n) Coarse Aggregate (Note 3)	1004.05
(o) Reinforcement Bars and Welded Wire Fabric	1006.10
(p) Handling Hole Plugs	
(q) Polyethylene (PE) Pipe with a Smooth Interior	1040.04
(r) Corrugated Polyethylene (PE) Pipe with a Smooth Interior	1040.04

Note 1. The class of elliptical and arch pipe used for various storm sewer sizes and heights of fill shall conform to the requirements for circular pipe.

Note 2. The fine aggregate shall be moist.

Note 3. The coarse aggregate shall be wet."



Revise the table for permitted materials in Article 550.03 of the Standard Specifications as follows:

"Class	Materials
Α	Rigid Pipes:
The state of the s	Clay Sewer Pipe
	Extra Strength Clay Pipe
	Concrete Sewer, Storm Drain, and Culvert Pipe
	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
В	Rigid Pipes:
	Clay Sewer Pipe
	Extra Strength Clay Pipe
	Concrete Sewer, Storm Drain, and Culvert Pipe
	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
	Flexible Pipes:
	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride Pipe (PVC) with a Smooth Interior
	Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polyethylene (PE) Pipe with a Smooth Interior
	Corrugated Polypropylane (CPP) Pina with a Smooth Interior"
	Corrugated Polypropylene (CPP) Pipe with a Smooth Interior"

Replace the storm sewers tables in Article 550.03 of the Standard Specifications with the following:



			СРР	ΔN	ź×	×	×	Ž	×	NA	×	A	×	¥ V	×	₹ Z	×	₹	AN	×	×	NA	Y N	×	Ž
		** The state of th	CPE	×	< ×	×	×	ΑN	×	Y.	×	×	×	Š	Š	Y Y	ž	¥	¥	¥	¥	AN	ž	×	AA
		3,	PE	×	×	ž	×	¥	×	AA	×	¥	×	×	×	AA	¥	¥	¥	Ϋ́	¥	AN	¥ Z	¥	ΑN
	2	Greater than 3'	CPVC	×	: ×	×	×	×	×	A	×	Ä	×	¥.	Ä	A	¥	ΑN	NA	N A	×	AN	¥	¥	ΑN
PIPE	Type 2	Fill Height: Greater th not exceeding 10'	PVC	×	×	×	×	×	×	ΑN	×	ž	×	×	×	¥	¥	AA	A A	¥	¥	¥	¥	¥	ΑΝ
QUIRED		E	ESCP	×	×	×	×	×	×	×	×	×	×	×	×	AN	¥	NA	Ϋ́	Ϋ́	¥	¥	Ϋ́	Ϋ́	NA
TH REQUI			CSP	-		-	2	7	7	8	က	NA	NA	A A	A	ΑN	₹	ΝΑ	∠ Z	Ϋ́	¥	¥	¥	¥	ΑN
STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED YEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF			RCCP	¥	=	=	=	=	=	=	_	=	=	=	=	=	=		==	=	=	=	=	=	=
STORM SEWERS ERMITTED AND STR AND FILL HEIGHTS			СРР	¥	×	×	×	¥	×	ΑN	×	ΑN	×	¥ Z	×	ž	×	¥	_ Y	¥	ΑĀ	¥	¥	¥	¥
STORN PERMITT S AND FI			CPE	×	×	×	×	Ϋ́	×	ž	×	¥	×	×	×	ž	¥	¥	₹	≨	AA	Ϋ́	Ϋ́	¥	AA
TERIAL I			PE	×	×	ΑN	×	ž	×	ž	×	ΑĀ	×	×	×	ž	ž	Ā	¥.	¥	¥	Ϋ́	Ϋ́	ΑĀ	¥ V
STORM S KIND OF MATERIAL PERMITTEE FOR A GIVEN PIPE DIAMETERS AND FILL	-	Fill Height: 3' and less With 1' minimum cover	CPVC	×	×	×	×	×	×	¥	×	¥	×	¥:	¥ N	¥ X	¥.	¥.	Z Z	¥ X	¥	A A	Š	A A	NA
KIN A GIVEN	Type 1	Fill Height: 3 With 1' minin	PVC	×	×	×	×	×	×	¥ Z	×	¥.	×:	×:	×	¥	₹ :	AN:	Y :	¥:	AA	ž	Ž	¥	AN.
FOR		Witt	ESCP	×	×	NA NA	¥:	¥ :	¥.	ž:	¥:	¥2	Ž;	× ;	×	Ž:	Ž:	Y :	Z :	₹ :	A A	¥ X	¥ Z	₹:	NA
			CSP	က	¥ V	NA :	₹ :	Z :	ΨZ.	ď:	Ž:	Ψ.	¥:	Ž S	¥ :	₹:	Z :	¥ :	χ ;	Ž:	W.	¥:	¥:	Y :	NA
			RCCP	¥.	≥	> :	≥ :	= :	=	= }	≥ :	= =	= =	== 2		= :	=======================================	= =			= :		= :	= :	1
		Nominal Diameter in.		9 9	2.	3.5	2 3	17 6	47	/7	S &	33	8 4	7 0	07	4.8	20 8	200	7 7	0 7	400	S 8	8 5	102	PCCP Poinforced Con

P Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
Concrete Sewer, Storm drain, and Culvert Pipe
Polyvinyl Chloride Pipe
C Corrugated Polyvinyl Chloride Pipe
P Extra Strength Clay Pipe
Polyethylene Pipe with a Smooth Interior
Corrugated Polyethylene Pipe with a Smooth Interior
Corrugated Polyethylene Pipe with a Smooth Interior

This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. May also use Standard Strength Clay Pipe RCCP CSP PVC CPVC CPE CPE VA

		ın 1 m	PE CPE CPP	×	×	×	: ×	₹ Z	×	AN	×	×	×	Y Z	Ϋ́	NA	Ϋ́	X X	AN	Ą	AX	AN	Ž	¥	•
) IPF	Type 2	Fill Height: Greater than not exceeding 3 m	PVC CPVC	+			×			_			_		*****	_						_	*******		
QUIRED TOP OF THE PIPE		Fill Heig not	ESCP	+		Whiteholen	×						_					******						*****	
s) ENGTH REQ OVER THE T			CSP	F	-		2	7	2	3	က	۲	AA	Ϋ́Z	Ν	ΑN	¥ Z	Ϋ́	Ϋ́	ž	ž	AA	¥ X	ž	VIV
STORM SEWERS (Metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED /EN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF			RCCP	AA	=		=	==	=	=	_	==	=	=	=	=	=	=	=	=	=	=	=		=
STORM SEWERS (Metric) L PERMITTED AND STRE RS AND FILL HEIGHTS (СРР	A A	×	×	×	¥	×	ž	× —	ΑĀ	×	¥	×	¥	×	¥	₹	¥	NA	ΑN	¥	¥	ΔN
STORM AL PERM ERS AND			CPE	×	×	×	×	¥	×	¥ ×	×	AN	×	×	×	Ϋ́	¥	Ϋ́Z	₹ Z	ž	ž	¥	¥	ž	Ž
MATERIA DIAMETE		ss	PE	×	× 	Ϋ́	×	¥ —	×	ž	× 	¥	×	×	×	¥	¥ —	¥	ž	¥	Ϋ́	ž	¥	¥	Δ Z
STORM S KIND OF MATERIAL PERMI FOR A GIVEN PIPE DIAMETERS AND	- D	Fill Height: 1 m and less With 300 mm minimum cover	CPVC	×	×	×	×	×	×	ž	×	¥	×	ž	¥	ž	¥	¥	¥.	¥	AM	¥	¥	¥	ž
K R A GIVE	Туре	Height: 1 00 mm m	PVC	×	×	×	×	×:	×	≨ —	×	AA	×	×	×	₹	¥ Z	¥	¥:	₹ Z	AM	¥	A A	Υ Σ	¥
O		Fill F	ESCP	×	×	Ϋ́	¥:	≨ :	¥ Z	∀ Z	₹ Z	¥	¥.	×	×	¥.	₹ Z	AA	₹:	Y :	AN	Δ Z	Α V	∢ Z	¥ Z
			CSP	က	₹:	¥	Ž:	₹ :	NA	¥:	≨ :	NA	¥:	¥.	NA	X :	¥:	NA.	Z:	¥:	NA	ž:	¥:	¥:	Ϋ́
			œ	N A								-	= :						= :		=				=
		Nominal Diameter in.		250	300	3/5	450	222	000	6/0	750	628	900	1050	1200	1350	1500	0001	1800	1820	2100	2250	2400	0007	2/00

Concrete Sewer, Storm drain, and Sewer Pipe
Concrete Sewer, Storm drain, and Culvert Pipe
Concrete Sewer, Storm drain, and Culvert Pipe
Corrugated Polyvinyl Chloride Pipe
Extra Strength Clay Pipe
Polyethylene Pipe with a Smooth Interior
Corrugated Polyethylene Pipe with a Smooth Interior
Corrugated Polyptopylene pipe with a Smooth Interior
This material may be used for the given pipe diameter and fill height.
This material is Not Acceptable for the given pipe diameter and fill height.
May also use Standard Strength Clay Pipe

	Τ	T	Ι,	Τ			Τ			Τ			Τ			Τ			Τ			Τ				٦
		***************************************	СРР	AN	Z	×	Ž	Ž	Ž	X	Z	Ž	AN	Ž	×	Ž	Ž	¥	X	ž	Ž	AN	Ž	Ž	Ž	
			PE	×	(×	ž	×	ž	×	AA	×	ž	×	×	×	¥	Ϋ́	Ä	¥	¥	Ž	AN	AN	Ą	Ϋ́	
		than 15' 20'	CPVC	×	×	×	×	×	×	NA	×	¥	×	×	Ą	ΑN	Ϋ́	¥	Ϋ́Z	ž	¥	¥	ž	Ą	¥	
ш	Type 4	eight: Greater than of exceeding 20	PVC	×	×	×	×	×	×	Ā	×	¥	×	×	×	AN	ΑN	A	ΑN	Ϋ́	Ϋ́	NA	Ϋ́	Ϋ́	X	
THE PIP		Fill Height: Greater than not exceeding 20'	ESCP	×	Ž	¥	¥	¥	¥ Z	¥	¥	¥	¥	¥	¥	ΑN	Ϋ́	Ν Α	ΑN	Ϋ́Z	N A	ΔX	Ϋ́	×	ž	7
EQUIRE			CSP	3	Ž	Ϋ́	Α	¥	¥	ΑN	Ä	Ä	AA	Ä	Ą	ΑN	Ϋ́	NA	ΑĀ	¥	ΑN	NA	Y Y	¥	Ϋ́	
SENGTH R			RCCP	Ą	≥	2	2	≥	≥	2	≥	2	2	≥	≥	2	≥	2	2	≥	2	1680	1690	1700	1710	
WERS AND STR HEIGHTS			СРР	AN	×	×	×	¥	Α̈́	ΑN	×	AA	NA	Ϋ́	ΑN	ΝA	ž	Ϋ́	¥	ž	¥	¥	¥	¥	¥	
ORM SE MITTED ID FILL H			CPE	×	ΑN	ΝA	Ϋ́	Ϋ́	Ν	NA	¥	Ϋ́	¥	ž	NA	AA	ž	¥	ž	ž	ΑA	ž	₹	Ϋ́	Α̈́	
ST NAL PER TERS AN		,0,	PE	×	×	ΑĀ	×	¥	×	ΑN	×	₹	×	×	×	¥	ž	¥	ž	ž	Ā	¥	¥	¥	Α̈́	au
F MATER	3	Fill Height: Greater than 10' not exceeding 15'	CPVC	×	×	×	×	×	×	N A	×	AA	×	Ϋ́	ΑĀ	A A	Ä	NA	Ϋ́	Ϋ́	ΑN	Ϋ́	Ϋ́	Ϋ́	NA	and Sawer Dine
STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 3	Type	eight: Greater the	PVC	×	×	×	×	×	×	ž	×	¥	×	×	×	¥	¥	¥	¥	¥	¥	¥	¥	ž	NA	rain and
		Fill Hei	ESCP	×	×	×	×	ĕ Z	AA	¥	NA NA	AN	¥	¥	NA	¥:	∀ Z	ΑΝ N	∀ Z	₹ Z	NA	¥ Z	ď Z	Ϋ́	1	rt Storm Orain
			CSP	2	2	3	¥ Z	¥	₹	Ϋ́	Ϋ́	ΑN	ž	ž	Α A	Ž:	¥:	Y Y	¥ Z	ž	¥.	Š Š	¥ Z	¥		Tete Culvert
			RCCP	AA		=	-			=	=	=			=		-				=				1360	Reinforced Concrete
		Nominal Diameter in.		10	12	15	2,5	5.5	24	27	30	33	36	42	48	54	200	90	7.7	8 ;	84	S :	96	102	\approx	RCCP Reinfo

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
Concrete Sewer, Storm drain, and Culvert Pipe
Polyvinyl Chloride Pipe
Corrugated Polyvinyl Chloride Pipe
Extra Strength Clay Pipe
Polyvinyl Chloride Pipe
Extra Strength Clay Pipe
Polyvinyl Chloride Pipe
Extra Strength Clay Pipe
Polyvinyl Chloride Pipe
Corrugated Polyvinyl Chloride Pipe with a Smooth Interior
Corrugated Polypropylene Pipe with a Smooth Interior
Corrugated Polypropylene Pipe with a Smooth Interior
Corrugated Polypropylene Pipe with a Smooth Interior
This material is Not Acceptable for the given pipe diameter and fill height.
This material is Not Acceptable for the given pipe diameter and fill height.
May also use Standard Strength Clay Pipe
RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.

FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE					NO CNIX	MATERIA	STORM	STORM SEWERS (metric)	S (metric)	OUT-DIVE	00000					
Type 3 Fill Height: Greater than 3 m not exceeding 4.5 m CSP ESCP PVC CPVC PE CPE CPP RCCP CSP ESCP 2	- 1		FC	JR A GIV	EN PIPE	DIAMETE	ERS AND	FILE FILE	EIGHTS (VER THE	TOP OF	THE PIPE				
CSP ESCP PVC CPVC PE CPE CPP RCCP CSP ESCP	- 1	***************************************	Atanamananananananananananananananananana		Type	3							Type 4			
CSP ESCP PVC CPVC PE CPP CSP ESCP PVC CPVC PE CPVC PV CPV	1	entaan, deservation deservatio		Fill Heig	jht: Grea exceedin	ter than 3 ig 4.5 m	E				LL.	ill Height: not e		than 4.5 m 6 m		
	$\ddot{\circ}$			ESCP	PVC	CPVC	핊	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPP
** * * * * * * * * * * * * * * * * * *	≥		2	×	×	×	×	×	AN	ΑN	8	×	×	×	×	ΔN
\$\frac{1}{2} \times \frac{1}{2}	=		~	×	×	×	×	¥	×	≥	×	Ž	×	< ×	< ×	₹ Z
X X X X X X X X X X X X X X X X X X X	=	1	3	×	×	×	ΑĀ	¥	×	≥	¥	Ϋ́	×	×	ξ	×
	=			×	×	×	×	ΑĀ	×	2	¥	NA	×	×	×	AN
N	=		⊴ :	¥	×	×	Ϋ́	¥	¥	≥	Ϋ́	Ϋ́	×	×	¥	Ž
N	=	-	¥	¥	×	×	×	¥	¥	≥	Ϋ́	¥	×	×	×	Ž
N	=	and the Community		Ϋ́	Υ Y	Ä	NA	ΑN	Ā	≥	¥	AA	AN	AN	AA	AA
NA		e la la cionada		¥	×	×	×	¥	×	≥	A	ž	×	×	×	Ž
N	=	1	¥	¥	¥	ΑĀ	Α	NA	NA	≥	¥	Ą	¥	Ą	¥	¥
N	= :			ž	×	×	×	Α̈́	NA	2	¥	¥	×	×	×	A
NA	=		⋖	¥	×	ΑĀ	×	¥	¥	≥	Ä	¥	×	₹ Z	×	Ž
NA	=	+	¥	¥	×	ΑN	×	AA	NA	≥	Ϋ́	Ϋ́	×	¥	×	¥
NA	= :			۷ Z	¥	¥	¥ Z	Ϋ́	AN	Α	NA	AA	Ϋ́	ΑN	¥	AA
NA	= :		⋖ .	₹:	ž	¥	ž	¥	¥	≥	ΑĀ	AA	¥	A A	¥	Ϋ́
NA	=	1	¥.	NA	Y V	AA	AA	¥	NA	2	ΑĀ	Ä	¥	Ϋ́Z	¥	¥
NA	=			¥ Z	Υ Z	Ϋ́	¥	Ϋ́	ΑN	2	A	AA	¥	ΑN	AN	AN
NA	= :		∀	¥.	ž	Ϋ́	ž	¥	ΑĀ	≥	¥	Ä	¥	Ϋ́	×	¥
NA N	=	+	A	¥	Ϋ́	AN	ΝΑ	NA	NA	≥	¥	Š	¥	Ϋ́	¥	Ϋ́
NA N	==			¥	ž	Ϋ́	¥	Ϋ́	ΝA	80	ΑN	AA	¥	ž	AN	NA
NA N	=		¥	A A	¥	Ϋ́	¥	Ϋ́	¥	80	¥	¥	¥	ž	Ž	AN
NA N	=		∢	¥	¥	¥	ž	¥	¥	80	¥	¥	¥	Ž	¥	Z Z
	2		⋖	ΑĀ	ž	Ϋ́	ž	Ϋ́	ž	80	Ϋ́	Ą	ΔN	\d	ΔN	Į V

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Concrete Sewer, Storm drain, and Culvert Pipe Polyvinyl Chloride Pipe Corrugated Polyvinyl Chloride Pipe

RCCCP CSP PVC CPVC ESCP CPE CPE NA

Extra Strength (1977).

First Strength (1977).

Corrugated Polyethylene Pipe with a Smooth Interior

Corrugated Polyethylene Pipe with a Smooth Interior

Corrugated Polypropylene Pipe with a Smooth Interior

This material may be used for the given pipe diameter and fill height.

This material is Not Acceptable for the given pipe diameter and fill height.

May also use Standard Strength Clay Pipe

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to produce a 25.4 micro-meter crack.

PE	Type 7	Fill Height: Greater than 30' not exceeding 35'	CPVC	×	×	×	×	×	×	AN	×	Ą	×	ΑΝ	Ą	AN	¥	AN	AN	¥	¥	AA	AA	Ą	¥	
STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE	Ty	Fill Height: Gi not exce	RCCP	AN	>	>	>	>	>	>	>	>	>	>	>	>	>	>	۸	2730	2740	2750	2750	2760	2770	
STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED EN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF		r than 25' ₁ 30'	CPVC	×	×	×	×	×	×	ΑΝ	×	₹ Z	×	ž	Ϋ́	NA	Š	NA	ΝΑ	Ą	Ϋ́	ΑN	¥	ž	Ą	
VERS IND STRE EIGHTS O	Type 6	Fill Height: Greater than 25' not exceeding 30'	PVC	×	×	×	×	×	×	ΑĀ	×	Ϋ́	×	×	×	Ν	Š	NA	NA	Š	Ϋ́	N A	ž	¥	ΝA	ar Dina
STORM SEWERS ERMITTED AND S' AND FILL HEIGHT		Fill Heigh	RCCP	AA	>	>	>	>	>	>	>	>	>	>	>	>	>	>	>	2370	2380	2390	2400	2410	2410	and Samer
S ERIAL PEF AETERS A		than 20' 25'	CPVC	×	×	×	×	×	×	NA	×	Ϋ́	×	¥	ΑΝ	ΑĀ	Š	¥	¥ X	₹	AA	₹	₹	Š Š	AA	Storm Drain
O OF MAT PIPE DIAN	Type 5	Fill Height: Greater than 20' not exceeding 25'	PVC	×	×	×	×	×	×	¥	×	Α̈́	×	×	×	Α̈́	Ϋ́Z	A A	¥	Ϋ́	ΑN	Ϋ́	Š	Š.	ΑN	
KINI R A GIVEN		Fill Height not e	RCCP	Ą	≥	≥	≥	≥	2	≥	≥	2	≥	≥	≥	≥	≥	≥	>	2020	2020	2030	2040	2050	2060	Reinforced Concrete Culvert
FO	***********	Nominal Diameter		10	12	15	80	21	24	27	30	33	36	42	48	54	000	99	72	78	84	06	96	102	108	RCCP Reinford

RCCP PVC CPVC ESCP NA Note

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
Polyvinyl Chloride Pipe
Corrugated Polywinyl Chloride Pipe
Extra Strength Clay Pipe
Extra Strength Clay Pipe
This material may be used for the given pipe diameter and fill height.
This material is Not Acceptable for the given pipe diameter and fill height.
RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a 0.01 in crack.

STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE	Type 5 Type 6 Type 7	Fill Height: Greater than 20' Fill Height: Greater than 30' Fill Height: Greater than 30' not exceeding 35' not exceeding 35'	RCCP PVC CPVC RCCP PVC CPVC RCCP CPVC	AN ×	> × ×	× × ×	> × ×	> × ×	> × × ×	V NA NA V	> × × ×	NA NA V NA NA V	> × ×	₹	V AN X V AN X	V NA NA V	NA NA V AN NA V	NA NA V	NA NA V AN V	NA NA 110 NA NA	NA NA 110 NA NA 130	NA NA 110 NA NA 130	NA NA 120 NA NA 130	NA NA 120 NA NA	NA 120 NA NA 130
FOR		Nominal Diameter in.		250	300	375	450	525	009	675	750	825	006	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400	2550	2700

RCCP PVC CPVC ESCP X NA Note

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
Polyvinyl Chloride Pipe
Corrugated Polyvinyl Chloride Pipe
Extra Strength Clay Pipe
This material may be used for the given pipe diameter and fill height.
This material is Not Acceptable for the given pipe diameter and fill height.
RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to produce a 25.4 micro-meter crack.

Revise the sixth paragraph of Article 550.06 of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Revise the first and second paragraphs of Article 550.08 of the Standard Specifications to read:

"550.08 Deflection Testing for Storm Sewers. All PVC, PE, and CPP storm sewers 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 storm sewers with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP storm sewers with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise the fifth paragraph of Article 550.08 to read as follows.

"The outside diameter of the mandrel shall be 95 percent of the base inside diameter. For all PVC pipe the base inside diameter shall be defined using ASTM D 3034 methodology. For all PE and CPP pipe, the base inside diameter shall be defined as the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

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."

80325

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."

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 Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FO
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 AA (43 degree rotation)								
	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)

	-	Type At (Average or	U and 90	degree rota	auon)		
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)

	•	1) 00 / (2 ()	ype / 12 (/ tverage or o and so 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 ZZ (Average of 0 and 90 degree rotation)

		1900 22	(Average i	or or and	ou degree	Totation)			
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."

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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.



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 single-user 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.

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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.

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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.