

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@illinois.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: The **Illinois Office Affidavit** (Not applicable to federally funded projects) followed by 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 your proposal Proposal Bid Bond (if applicable) using the current Proposal Bid Bond form provided in the proposal package. The Power of Attorney page should be stapled to the Proposal Bid Bond. If you are using an electronic bond, include your bid bond number on the Proposal Bid Bond and attach the Proof of Insurance printed from the Surety’s Web Site.

Disadvantaged Business Utilization Plan and/or Good Faith Effort – The last items in your bid should be the DBE Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE 2025) and supporting paperwork. If you have 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 Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 10 AM. The actual reading of the bids does not begin until approximately 10:30 AM.

Following the Letting, the As-Read Tabulation of Bids will be posted by the end of the day. You will find the link on the main Web page for the current letting.

QUESTIONS: pre-letting up to execution of the contract

| | |
|--|--------------|
| Contractor pre-qualification | 217-782-3413 |
| Small Business, Disadvantaged Business Enterprise (DBE) | 217-785-4611 |
| Contracts, Bids, Letting process or Internet downloads | 217-782-7806 |
| Estimates Unit..... | 217-785-3483 |
| Aeronautics..... | 217-785-8515 |
| 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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RETURN WITH BID

| |
|-----------------------|
| Proposal Submitted By |
| Name |
| Address |
| City |

Letting January 30, 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



**Illinois Department
of Transportation**

Springfield, Illinois 62764

**Contract No. 66982
KANKAKEE County
Section (46-1)HBK-1
Route FAI 57
Project ACHPP-ACNHPP-0057(309)
District 3 Construction Funds**

PLEASE MARK THE APPROPRIATE BOX BELOW:

- A Bid Bond is included.
- A Cashier's Check or a Certified Check is included
- An Annual Bid Bond is included or is on file with IDOT.

Prepared by

Checked by

F

Page intentionally left blank

RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

Taxpayer Identification Number (Mandatory) _____

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

**Contract No. 66982
KANKAKEE County
Section (46-1)HBK-1
Project ACHPP-ACNHPP-0057(309)
Route FAI 57
District 3 Construction Funds**

Construction of a new structure and interchange at I-57 and 6000N, widening of 6000N and intersection improvements at US 45/52 and IL 50, along with other associated work, located in Bourbonnais.

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.

RETURN WITH BID

6. **COMBINATION BIDS.** The undersigned bidder further agrees that if awarded the contract for the sections contained in the following combination, he/she will perform the work in accordance with the requirements of each individual contract comprising the combination bid specified in the schedule below, and that the combination bid shall be prorated against each section in proportion to the bid submitted for the same. If an error is found to exist in the gross sum bid for one or more of the individual sections included in a combination, the combination bid shall be corrected as provided in the specifications.

When a combination bid is submitted, the schedule below must be completed in each proposal comprising the combination.

If alternate bids are submitted for one or more of the sections comprising the combination, a combination bid must be submitted for each alternate.

Schedule of Combination Bids

| Combination No. | Sections Included in Combination | Combination Bid | |
|-----------------|----------------------------------|-----------------|-------|
| | | Dollars | Cents |
| | | | |
| | | | |
| | | | |
| | | | |

7. **SCHEDULE OF PRICES.** The undersigned bidder submits herewith, in accordance with the rules and instructions, a schedule of prices for the items of work for which bids are sought. The unit prices bid are in U.S. dollars and cents, and all extensions and summations have been made. The bidder understands that the quantities appearing in the bid schedule are approximate and are provided for the purpose of obtaining a gross sum for the comparison of bids. If there is an error in the extension of the unit prices, the unit prices will govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
8. **AUTHORITY TO DO BUSINESS IN ILLINOIS.** Section 20-43 of the Illinois Procurement Code (the Code) (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to transact business or conduct affairs in the State of Illinois prior to submitting the bid.
9. **EXECUTION OF CONTRACT:** The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer (CPO) or the State Purchasing Officer (SPO) is for approval of the procurement process and execution of the contract by the Department. Neither the CPO nor the SPO shall be responsible for administration of the contract or determinations respecting performance or payment there under except as otherwise permitted in the Code.
10. **The services of a subcontractor will be used.**

Check box Yes
 Check box No

For known subcontractors with subcontracts with an annual value of more than \$50,000, the contract shall include their name, address, general type of work to be performed, and the dollar allocation for each subcontractor.
 (30 ILCS 500/20-120)

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

66982

State Job # - C-93-162-09

County Name - KANKAKEE- -
 Code - 91 - -
 District - 3 - -
 Section Number - (46-1)HBK-1

Project Number
 ACHPP-ACNHPP-0057/309/

Route
 FAI 57

| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|------------------------|-----------------|-------------|---|------------|---|-------------|
| XX004339 | BIKEPATH APP GDRL ADJ | FOOT | 93.000 | | | | |
| XZ127900 | RETAINING WALL REMOV | FOOT | 327.000 | | | | |
| X0300015 | CONC WINGWALL REMOV | EACH | 2.000 | | | | |
| X0324159 | WHITEWASH CONC PAVT | SQ YD | 225,257.000 | | | | |
| X0325201 | SHOULDER RUM STRIP RM | SQ YD | 2,468.000 | | | | |
| X0326020 | UTILITY PROTECTION PAD | SQ YD | 815.000 | | | | |
| X0326208 | ALTERNATE RTE SIGNING | L SUM | 1.000 | | | | |
| X0326880 | MESSAGE BOARD VEH DRV | HOURL | 278.000 | | | | |
| X0326907 | PORT VHMNT CH MSS SGN | CAL MO | 12.000 | | | | |
| X4400110 | TEMP PAVT REMOVAL | SQ YD | 4,624.000 | | | | |
| X4810200 | AGGREGATE SHLD REMOVL | CU YD | 1,514.000 | | | | |
| X5011100 | FOUNDATION REM | EACH | 2.000 | | | | |
| X5210160 | HLMR BRG GUID EXP 450 | EACH | 13.000 | | | | |
| X5421565 | MET END SEC 28X20 SPL | EACH | 2.000 | | | | |
| X5860110 | GRANULAR BACKFILL STR | CU YD | 380.000 | | | | |

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|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| X6013600 | PIPE UNDERDRAIN 4 MOD | FOOT | 44,302.000 | | | | |
| X6020074 | INLETS TA T3V F&G | EACH | 128.000 | | | | |
| X6020075 | INLETS TB T3V F&G | EACH | 39.000 | | | | |
| X6020084 | MANHOLE SPECIAL | EACH | 11.000 | | | | |
| X6020090 | MANOLE W/RESTRICT PLT | EACH | 6.000 | | | | |
| X6020290 | MAN TA 7D SPL F&G | EACH | 1.000 | | | | |
| X6022040 | MAN TA 4 DIA T11VF&G | EACH | 8.000 | | | | |
| X6023506 | INLETS TA W/SPL FR OL | EACH | 8.000 | | | | |
| X6061055 | CONCRETE ISLAND SPL | SQ FT | 18,463.000 | | | | |
| X6061100 | CONC MED TSB SPL | SQ FT | 9,427.000 | | | | |
| X6431110 | REM ATTEN BASE | EACH | 2.000 | | | | |
| X6431120 | REM IMP ATTEN SM | EACH | 2.000 | | | | |
| X7010208 | TC-PROT 701402 SPL | EACH | 6.000 | | | | |
| X7010216 | TRAF CONT & PROT SPL | L SUM | 1.000 | | | | |
| X7010410 | SPEED DISPLAY TRAILER | CAL MO | 17.000 | | | | |

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|-------------|----------------------|-----------------|------------|---|------------|---|-------------|
| X7010805 | TR C-PROT 701401 SPL | L SUM | 1.000 | | | | |
| X7830070 | GRV RCSD PVT MRKG 5 | FOOT | 83,155.000 | | | | |
| X7830074 | GRV RCSD PVT MRKG 7 | FOOT | 14,578.000 | | | | |
| X7830076 | GRV RCSD PVT MRKG 9 | FOOT | 26,057.000 | | | | |
| X7830078 | GRV RCSD PVT MRKG 13 | FOOT | 13,801.000 | | | | |
| X7830090 | GRV RCSD PVT MRKG 25 | FOOT | 1,113.000 | | | | |
| X8110521 | CON AT ST 1 SS | FOOT | 10.000 | | | | |
| X8110522 | CON AT ST 2 SS | FOOT | 40.000 | | | | |
| X8410102 | TEMP LIGHTING SYSTEM | L SUM | 1.000 | | | | |
| X8570226 | FAC T4 CAB SPL | EACH | 3.000 | | | | |
| X8860100 | LOOP DET TESTING | EACH | 4.000 | | | | |
| Z0007601 | BLDG REMOV NO 1 | L SUM | 1.000 | | | | |
| Z0007602 | BLDG REMOV NO 2 | L SUM | 1.000 | | | | |
| Z0007603 | BLDG REMOV NO 3 | L SUM | 1.000 | | | | |
| Z0007604 | BLDG REMOV NO 4 | L SUM | 1.000 | | | | |

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|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| Z0007606 | BLDG REMOV NO 6 | L SUM | 1.000 | | | | |
| Z0007607 | BLDG REMOV NO 7 | L SUM | 1.000 | | | | |
| Z0007608 | BLDG REMOV NO 8 | L SUM | 1.000 | | | | |
| Z0007610 | BLDG REMOV NO 10 | L SUM | 1.000 | | | | |
| Z0013798 | CONSTRUCTION LAYOUT | L SUM | 1.000 | | | | |
| Z0018004 | DRAINAGE SCUPPR DS-12 | EACH | 8.000 | | | | |
| Z0023900 | FILL EXIST WELLS | EACH | 1.000 | | | | |
| Z0033056 | OPTIM TRAF SIGNAL SYS | EACH | 1.000 | | | | |
| Z0034105 | MATL TRANSFER DEVICE | TON | 5,177.000 | | | | |
| Z0046304 | P UNDR FOR STRUCT 4 | FOOT | 276.000 | | | | |
| Z0048665 | RR PROT LIABILITY INS | L SUM | 1.000 | | | | |
| Z0049904 | R&D NON-FR ASB BLD 4 | L SUM | 1.000 | | | | |
| Z0049906 | R&D NON-FR ASB BLD 6 | L SUM | 1.000 | | | | |
| Z0049907 | R&D NON-FR ASB BLD 7 | L SUM | 1.000 | | | | |
| Z0062456 | TEMP PAVEMENT | SQ YD | 12,418.000 | | | | |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| Z0065752 | SLOT DR 12" W/6" SLOT | FOOT | 243.000 | | | | |
| Z0067200 | STEEL CASINGS 10 | FOOT | 140.000 | | | | |
| Z0073002 | TEMP SOIL RETEN SYSTM | SQ FT | 343.000 | | | | |
| Z0076600 | TRAINEES | HOUR | 2,500.000 | | 0.800 | | 2,000.000 |
| Z0076604 | TRAINEES TPG | HOUR | 2,500.000 | | 15.000 | | 37,500.000 |
| 20100110 | TREE REMOV 6-15 | UNIT | 1,609.000 | | | | |
| 20100210 | TREE REMOV OVER 15 | UNIT | 1,315.000 | | | | |
| 20100500 | TREE REMOV ACRES | ACRE | 1.000 | | | | |
| 20101000 | TEMPORARY FENCE | FOOT | 1,279.000 | | | | |
| 20200100 | EARTH EXCAVATION | CU YD | 82,399.000 | | | | |
| 20200200 | ROCK EXCAVATION | CU YD | 4,760.000 | | | | |
| 20400800 | FURNISHED EXCAVATION | CU YD | 307,394.000 | | | | |
| 20700220 | POROUS GRAN EMBANK | CU YD | 1,435.000 | | | | |
| 20800150 | TRENCH BACKFILL | CU YD | 17,337.000 | | | | |
| 20900110 | POROUS GRAN BACKFILL | CU YD | 48.000 | | | | |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 25000210 | SEEDING CL 2A | ACRE | 74.000 | | | | |
| 25000300 | SEEDING CL 3 | ACRE | 3.000 | | | | |
| 25000310 | SEEDING CL 4 | ACRE | 0.100 | | | | |
| 25000322 | SEEDING CL 5A | ACRE | 0.100 | | | | |
| 25000400 | NITROGEN FERT NUTR | POUND | 6,908.000 | | | | |
| 25000500 | PHOSPHORUS FERT NUTR | POUND | 6,908.000 | | | | |
| 25000600 | POTASSIUM FERT NUTR | POUND | 6,908.000 | | | | |
| 25100115 | MULCH METHOD 2 | ACRE | 22.000 | | | | |
| 25100630 | EROSION CONTR BLANKET | SQ YD | 270,931.000 | | | | |
| 28000250 | TEMP EROS CONTR SEED | POUND | 8,000.000 | | | | |
| 28000305 | TEMP DITCH CHECKS | FOOT | 5,000.000 | | | | |
| 28000400 | PERIMETER EROS BAR | FOOT | 7,828.000 | | | | |
| 28000500 | INLET & PIPE PROTECT | EACH | 175.000 | | | | |
| 28000510 | INLET FILTERS | EACH | 370.000 | | | | |
| 28001000 | AGGREGATE - EROS CONT | TON | 13.000 | | | | |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 28100105 | STONE RIPRAP CL A3 | SQ YD | 544.000 | | | | |
| 28100107 | STONE RIPRAP CL A4 | SQ YD | 5,541.000 | | | | |
| 28100109 | STONE RIPRAP CL A5 | SQ YD | 113.000 | | | | |
| 28200200 | FILTER FABRIC | SQ YD | 5,307.000 | | | | |
| 28500100 | FAB FORM CONC REV MAT | SQ YD | 1,173.000 | | | | |
| 30300112 | AGG SUBGRADE IMPR 12 | SQ YD | 207,686.000 | | | | |
| 30300124 | AGG SUBGRADE IMPR 24 | SQ YD | 22,377.000 | | | | |
| 31102300 | SUB GRAN MAT C 6 | SQ YD | 3,707.000 | | | | |
| 31200500 | STAB SUBBASE HMA 4 | SQ YD | 140,104.000 | | | | |
| 35100500 | AGG BASE CSE A 6 | SQ YD | 12,688.000 | | | | |
| 35100700 | AGG BASE CSE A 8 | SQ YD | 472.000 | | | | |
| 35101400 | AGG BASE CSE B | TON | 2,681.000 | | | | |
| 40200800 | AGG SURF CSE B | TON | 873.000 | | | | |
| 40201000 | AGGREGATE-TEMP ACCESS | TON | 6,044.000 | | | | |
| 40600275 | BIT MATLS PR CT | POUND | 48,190.000 | | | | |

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|-------------|----------------------|-----------------|------------|---|------------|---|-------------|
| 40600990 | TEMPORARY RAMP | SQ YD | 175.000 | | | | |
| 40603080 | HMA BC IL-19.0 N50 | TON | 265.000 | | | | |
| 40603305 | HMA SC "C" N30 | TON | 1,295.000 | | | | |
| 40603310 | HMA SC "C" N50 | TON | 685.000 | | | | |
| 40603570 | P HMA SC "E" N90 | TON | 5,177.000 | | | | |
| 40800050 | INCIDENTAL HMA SURF | TON | 8.000 | | | | |
| 42000401 | PCC PVT 9 JOINTED | SQ YD | 28,144.000 | | | | |
| 42000411 | PCC PVT 9 1/2 JOINTD | SQ YD | 82,758.000 | | | | |
| 42000501 | PCC PVT 10 JOINTED | SQ YD | 58,503.000 | | | | |
| 42001200 | PAVEMENT FABRIC | SQ YD | 90.000 | | | | |
| 42300200 | PCC DRIVEWAY PAVT 6 | SQ YD | 1,723.000 | | | | |
| 42300600 | PCC DRIVEWAY PAVT 10 | SQ YD | 4,363.000 | | | | |
| 42400100 | PC CONC SIDEWALK 4 | SQ FT | 39,046.000 | | | | |
| 42400800 | DETECTABLE WARNINGS | SQ FT | 962.000 | | | | |
| 44000100 | PAVEMENT REM | SQ YD | 58,381.000 | | | | |

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 CONTRACT
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State Job # - C-93-162-09

County Name - KANKAKEE- -

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District - 3 - -

Section Number - (46-1)HBK-1

Project Number
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Route
 FAI 57

| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|----------------------|-----------------|------------|---|------------|---|-------------|
| 44000157 | HMA SURF REM 2 | SQ YD | 52,179.000 | | | | |
| 44000200 | DRIVE PAVEMENT REM | SQ YD | 3,666.000 | | | | |
| 44000500 | COMB CURB GUTTER REM | FOOT | 1,428.000 | | | | |
| 44000600 | SIDEWALK REM | SQ FT | 778.000 | | | | |
| 44004250 | PAVED SHLD REMOVAL | SQ YD | 12,631.000 | | | | |
| 48101500 | AGGREGATE SHLDS B 6 | SQ YD | 4,246.000 | | | | |
| 48300400 | PCC SHOULDERS 9 | SQ YD | 14,625.000 | | | | |
| 48300410 | PCC SHOULDERS 9 1/2 | SQ YD | 70.000 | | | | |
| 48300500 | PCC SHOULDERS 10 | SQ YD | 5,012.000 | | | | |
| 50100300 | REM EXIST STRUCT N1 | EACH | 1.000 | | | | |
| 50100400 | REM EXIST STRUCT N2 | EACH | 1.000 | | | | |
| 50100500 | REM EXIST STRUCT N3 | EACH | 1.000 | | | | |
| 50104400 | CONC HDWL REM | EACH | 3.000 | | | | |
| 50105220 | PIPE CULVERT REMOV | FOOT | 702.000 | | | | |
| 50157300 | PROTECTIVE SHIELD | SQ YD | 437.000 | | | | |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 50200100 | STRUCTURE EXCAVATION | CU YD | 2,686.000 | | | | |
| 50200400 | ROCK EXC STRUCT | CU YD | 25.000 | | | | |
| 50300225 | CONC STRUCT | CU YD | 414.500 | | | | |
| 50300255 | CONC SUP-STR | CU YD | 1,118.700 | | | | |
| 50300260 | BR DECK GROOVING | SQ YD | 2,302.000 | | | | |
| 50300280 | CONCRETE ENCASEMENT | CU YD | 16.400 | | | | |
| 50300300 | PROTECTIVE COAT | SQ YD | 3,480.000 | | | | |
| 50500105 | F & E STRUCT STEEL | L SUM | 1.000 | | | | |
| 50500505 | STUD SHEAR CONNECTORS | EACH | 12,480.000 | | | | |
| 50800205 | REINF BARS, EPOXY CTD | POUND | 330,140.000 | | | | |
| 50800515 | BAR SPLICERS | EACH | 206.000 | | | | |
| 50901720 | BICYCLE RAILING | FOOT | 630.000 | | | | |
| 50901730 | BRIDGE FENCE RAILING | FOOT | 272.000 | | | | |
| 50901735 | BR FEN RAIL (SDWALK) | FOOT | 280.000 | | | | |
| 50901750 | PARAPET RAILING | FOOT | 753.000 | | | | |

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| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|----------------------|-----------------|-----------|---|------------|---|-------------|
| 50901760 | PIPE HANDRAIL | FOOT | 99.000 | | | | |
| 51100100 | SLOPE WALL 4 | SQ YD | 1,077.000 | | | | |
| 51201800 | FUR STL PILE HP14X73 | FOOT | 2,128.000 | | | | |
| 51202305 | DRIVING PILES | FOOT | 2,128.000 | | | | |
| 51203800 | TEST PILE ST HP14X73 | EACH | 3.000 | | | | |
| 51204650 | PILE SHOES | EACH | 60.000 | | | | |
| 51500100 | NAME PLATES | EACH | 1.000 | | | | |
| 52100520 | ANCHOR BOLTS 1 | EACH | 52.000 | | | | |
| 52100530 | ANCHOR BOLTS 1 1/4 | EACH | 26.000 | | | | |
| 54001001 | BOX CUL END SEC C1 | EACH | 4.000 | | | | |
| 54001002 | BOX CUL END SEC C2 | EACH | 2.000 | | | | |
| 54001003 | BOX CUL END SEC C3 | EACH | 2.000 | | | | |
| 54001004 | BOX CUL END SEC C4 | EACH | 2.000 | | | | |
| 54001005 | BOX CUL END SEC C5 | EACH | 2.000 | | | | |
| 54001006 | BOX CUL END SEC C6 | EACH | 2.000 | | | | |

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|-------------|----------------------|-----------------|-----------|---|------------|---|-------------|
| 54001007 | BOX CUL END SEC C7 | EACH | 1.000 | | | | |
| 54001008 | BOX CUL END SEC C8 | EACH | 1.000 | | | | |
| 54002020 | EXPAN BOLTS 3/4 | EACH | 12.000 | | | | |
| 54010302 | PCBC 3X2 | FOOT | 2,594.000 | | | | |
| 54010402 | PCBC 4X2 | FOOT | 1,517.000 | | | | |
| 54010804 | PCBC 8X4 | FOOT | 432.000 | | | | |
| 54011204 | PCBC 12X4 | FOOT | 195.000 | | | | |
| 54011206 | PCBC 12X6 | FOOT | 159.000 | | | | |
| 542A0229 | P CUL CL A 1 24 | FOOT | 860.000 | | | | |
| 542A0241 | P CUL CL A 1 36 | FOOT | 759.000 | | | | |
| 542A5473 | P CUL CL A 1 EQRS 18 | FOOT | 355.000 | | | | |
| 542A5479 | P CUL CL A 1 EQRS 24 | FOOT | 270.000 | | | | |
| 542D0213 | P CUL CL D 1 8 | FOOT | 83.000 | | | | |
| 542D0220 | P CUL CL D 1 15 | FOOT | 880.000 | | | | |
| 542D0223 | P CUL CL D 1 18 | FOOT | 921.000 | | | | |

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|-------------|----------------------|-----------------|----------|---|------------|---|-------------|
| 542D5473 | P CUL CL D 1 EQRS 18 | FOOT | 26.000 | | | | |
| 542D5479 | P CUL CL D 1 EQRS 24 | FOOT | 63.000 | | | | |
| 5421A015 | P CUL CL A 1 15 TEMP | FOOT | 120.000 | | | | |
| 5421A024 | P CUL CL A 1 24 TEMP | FOOT | 120.000 | | | | |
| 5421D012 | P CUL CL D 1 12 TEMP | FOOT | 480.000 | | | | |
| 5421D018 | P CUL CL D 1 18 TEMP | FOOT | 50.000 | | | | |
| 54213450 | END SECTIONS 15 | EACH | 34.000 | | | | |
| 54213453 | END SECTIONS 18 | EACH | 22.000 | | | | |
| 54213459 | END SECTIONS 24 | EACH | 16.000 | | | | |
| 54213657 | PRC FLAR END SEC 12 | EACH | 46.000 | | | | |
| 54213660 | PRC FLAR END SEC 15 | EACH | 12.000 | | | | |
| 54213663 | PRC FLAR END SEC 18 | EACH | 11.000 | | | | |
| 54213669 | PRC FLAR END SEC 24 | EACH | 8.000 | | | | |
| 54213681 | PRC FLAR END SEC 36 | EACH | 2.000 | | | | |
| 54213693 | PRC FLAR END SEC 48 | EACH | 1.000 | | | | |

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| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| 54214293 | END SEC EQV R-S 18 | EACH | 2.000 | | | | |
| 54214713 | PRCF END S EL EQRS 18 | EACH | 4.000 | | | | |
| 54214719 | PRCF END S EL EQRS 24 | EACH | 2.000 | | | | |
| 54215543 | MET END SEC 8 | EACH | 4.000 | | | | |
| 54246205 | INLET BOX 542526 | EACH | 6.000 | | | | |
| 54248510 | CONCRETE COLLAR | CU YD | 8.000 | | | | |
| 54260311 | TRAVERS PIPE GRATE | FOOT | 94.000 | | | | |
| 54261436 | CONC ES 542001 36 1:4 | EACH | 2.000 | | | | |
| 54263436 | CONC ES 542011 36 1:4 | EACH | 1.000 | | | | |
| 550A0050 | STORM SEW CL A 1 12 | FOOT | 11,777.000 | | | | |
| 550A0070 | STORM SEW CL A 1 15 | FOOT | 1,678.000 | | | | |
| 550A0090 | STORM SEW CL A 1 18 | FOOT | 927.000 | | | | |
| 550A0120 | STORM SEW CL A 1 24 | FOOT | 982.000 | | | | |
| 550A0140 | STORM SEW CL A 1 30 | FOOT | 120.000 | | | | |
| 550A0180 | STORM SEW CL A 1 42 | FOOT | 2,088.000 | | | | |

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| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-----------|---|------------|---|-------------|
| 550A0190 | STORM SEW CL A 1 48 | FOOT | 2,474.000 | | | | |
| 550A0210 | STORM SEW CL A 1 60 | FOOT | 716.000 | | | | |
| 550A0230 | STORM SEW CL A 1 72 | FOOT | 297.000 | | | | |
| 550A2320 | SS RG CL A 1 12 | FOOT | 153.000 | | | | |
| 550A2330 | SS RG CL A 1 15 | FOOT | 328.000 | | | | |
| 550A2360 | SS RG CL A 1 24 | FOOT | 95.000 | | | | |
| 550A4500 | SS CL A 1 EQRS 36 | FOOT | 462.000 | | | | |
| 55100500 | STORM SEWER REM 12 | FOOT | 339.000 | | | | |
| 59100100 | GEOCOMPOSITE WALL DR | SQ YD | 220.000 | | | | |
| 60100060 | CONC HDWL FOR P DRAIN | EACH | 56.000 | | | | |
| 60100915 | PIPE DRAINS 6 | FOOT | 300.000 | | | | |
| 60100925 | PIPE DRAINS 8 | FOOT | 300.000 | | | | |
| 60100935 | PIPE DRAINS 10 | FOOT | 300.000 | | | | |
| 60100945 | PIPE DRAINS 12 | FOOT | 300.000 | | | | |
| 60100965 | PIPE DRAINS 18 | FOOT | 300.000 | | | | |

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| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|----------------------|-----------------|----------|---|------------|---|-------------|
| 60108100 | PIPE UNDERDRAIN 4 SP | FOOT | 890.000 | | | | |
| 60218300 | MAN TA 4 DIA T1F OL | EACH | 16.000 | | | | |
| 60218400 | MAN TA 4 DIA T1F CL | EACH | 2.000 | | | | |
| 60219570 | MAN TA 4 DIA T3V F&G | EACH | 29.000 | | | | |
| 60221000 | MAN TA 5 DIA T1F OL | EACH | 3.000 | | | | |
| 60221100 | MAN TA 5 DIA T1F CL | EACH | 5.000 | | | | |
| 60223700 | MAN TA 6 DIA T1F OL | EACH | 5.000 | | | | |
| 60223800 | MAN TA 6 DIA T1F CL | EACH | 5.000 | | | | |
| 60224120 | MAN TA 6 DIA T3V F&G | EACH | 49.000 | | | | |
| 60224129 | MAN TA 7 DIA T3V F&G | EACH | 41.000 | | | | |
| 60224445 | MAN TA 7 DIA T1F OL | EACH | 5.000 | | | | |
| 60224446 | MAN TA 7 DIA T1F CL | EACH | 1.000 | | | | |
| 60224457 | MAN TA 8 DIA T1F OL | EACH | 4.000 | | | | |
| 60224459 | MAN TA 8 DIA T1F CL | EACH | 1.000 | | | | |
| 60235700 | INLETS TA T3F&G | EACH | 7.000 | | | | |

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|-------------|----------------------|-----------------|-------------|---|------------|---|-------------|
| 60236200 | INLETS TA T8G | EACH | 2.000 | | | | |
| 60236800 | INLETS TA T11F&G | EACH | 4.000 | | | | |
| 60236825 | INLETS TA T11V F&G | EACH | 12.000 | | | | |
| 60240220 | INLETS TB T3F&G | EACH | 3.000 | | | | |
| 60240310 | INLETS TB T11F&G | EACH | 2.000 | | | | |
| 60240312 | INLETS TB T11V F&G | EACH | 2.000 | | | | |
| 60500040 | REMOV MANHOLES | EACH | 2.000 | | | | |
| 60500060 | REMOV INLETS | EACH | 5.000 | | | | |
| 60603800 | COMB CC&G TB6.12 | FOOT | 5,514.000 | | | | |
| 60605000 | COMB CC&G TB6.24 | FOOT | 44,258.000 | | | | |
| 60608300 | COMB CC&G TM2.12 | FOOT | 294.000 | | | | |
| 60616800 | PAVED DITCH TB-15 | FOOT | 20.000 | | | | |
| 60618300 | CONC MEDIAN SURF 4 | SQ FT | 149,051.000 | | | | |
| 60624600 | CORRUGATED MED | SQ FT | 5,716.000 | | | | |
| 61100500 | EXPLOR TRENCH 52 | FOOT | 20,600.000 | | | | |

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|-------------|-----------------------|-----------------|-----------|---|------------|---|-------------|
| 61100605 | MISC CONCRETE | CU YD | 6.500 | | | | |
| 61101007 | STORM SEW PROT A 6 | FOOT | 1,000.000 | | | | |
| 61101009 | STORM SEW PROT A 8 | FOOT | 1,000.000 | | | | |
| 61101011 | STORM SEW PROT A 10 | FOOT | 1,000.000 | | | | |
| 61101013 | STORM SEW PROT A 12 | FOOT | 1,000.000 | | | | |
| 61101020 | STORM SEW PROT A 18 | FOOT | 1,000.000 | | | | |
| 61133100 | FLD TILE JUN VAULT 2D | EACH | 20.000 | | | | |
| 61133200 | FLD TILE JUN VAULT 3D | EACH | 10.000 | | | | |
| 61139900 | STORM SEWER SPEC 6 | FOOT | 1,000.000 | | | | |
| 61140000 | STORM SEWER SPEC 8 | FOOT | 1,000.000 | | | | |
| 61140100 | STORM SEWER SPEC 10 | FOOT | 1,000.000 | | | | |
| 61140200 | STORM SEWER SPEC 12 | FOOT | 1,000.000 | | | | |
| 61140600 | STORM SEWER SPEC 18 | FOOT | 1,000.000 | | | | |
| 63000001 | SPBGR TY A 6FT POSTS | FOOT | 363.000 | | | | |
| 63100045 | TRAF BAR TERM T2 | EACH | 1.000 | | | | |

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|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| 63100085 | TRAF BAR TERM T6 | EACH | 3.000 | | | | |
| 63100167 | TR BAR TRM T1 SPL TAN | EACH | 2.000 | | | | |
| 63200310 | GUARDRAIL REMOV | FOOT | 2,391.000 | | | | |
| 63500105 | DELINEATORS | EACH | 139.000 | | | | |
| 63700175 | CONC BAR 1F 42HT | FOOT | 474.000 | | | | |
| 63700805 | CONC BAR TRANS | FOOT | 15.000 | | | | |
| 63700900 | CONC BARRIER BASE | FOOT | 474.000 | | | | |
| 64200116 | SHOULDER RUM STRIP 16 | FOOT | 24,847.000 | | | | |
| 64300450 | IMP ATTN NRD TL3 | EACH | 8.000 | | | | |
| 64301090 | ATTENUATOR BASE | SQ YD | 112.000 | | | | |
| 66500105 | WOV W FENCE 4 | FOOT | 10,833.000 | | | | |
| 66600105 | FUR ERECT ROW MARKERS | EACH | 101.000 | | | | |
| 66700205 | PERM SURV MKRS T1 | EACH | 28.000 | | | | |
| 66900200 | NON SPL WASTE DISPOSL | CU YD | 14,000.000 | | | | |
| 66900450 | SPL WASTE PLNS/REPORT | L SUM | 1.000 | | | | |

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|-------------|-----------------------|-----------------|-------------|---|------------|---|-------------|
| 66900530 | SOIL DISPOSAL ANALY | EACH | 3.000 | | | | |
| 67000400 | ENGR FIELD OFFICE A | CAL MO | 24.000 | | | | |
| 67100100 | MOBILIZATION | L SUM | 1.000 | | | | |
| 70103815 | TR CONT SURVEILLANCE | CAL DA | 510.000 | | | | |
| 70106800 | CHANGEABLE MESSAGE SN | CAL MO | 265.000 | | | | |
| 70200100 | NIGHT WORK ZONE LIGHT | L SUM | 1.000 | | | | |
| 70300210 | TEMP PVT MK LTR & SYM | SQ FT | 346.000 | | | | |
| 70300220 | TEMP PVT MK LINE 4 | FOOT | 142,266.000 | | | | |
| 70300280 | TEMP PVT MK LINE 24 | FOOT | 287.000 | | | | |
| 70400100 | TEMP CONC BARRIER | FOOT | 11,875.000 | | | | |
| 70400200 | REL TEMP CONC BARRIER | FOOT | 2,550.000 | | | | |
| 70600250 | IMP ATTN TEMP NRD TL3 | EACH | 4.000 | | | | |
| 70600260 | IMP ATTN TEMP FRN TL3 | EACH | 4.000 | | | | |
| 70600332 | IMP ATTN REL FRN TL3 | EACH | 4.000 | | | | |
| 72000100 | SIGN PANEL T1 | SQ FT | 1,051.000 | | | | |

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|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| 72000200 | SIGN PANEL T2 | SQ FT | 779.000 | | | | |
| 72000300 | SIGN PANEL T3 | SQ FT | 2,814.000 | | | | |
| 72400310 | REMOV SIGN PANEL T1 | SQ FT | 15.000 | | | | |
| 72700100 | STR STL SIN SUP BA | POUND | 18,637.000 | | | | |
| 72700200 | TUB STL SN SUPPORT BA | POUND | 1,072.000 | | | | |
| 72800100 | TELES STL SIN SUPPORT | FOOT | 379.000 | | | | |
| 72900100 | METAL POST TY A | FOOT | 833.000 | | | | |
| 73000100 | WOOD SIN SUPPORT | FOOT | 2,426.000 | | | | |
| 73300200 | OVHD SIN STR-SPAN T2A | FOOT | 242.000 | | | | |
| 73301810 | OSS WALKWAY TY A | FOOT | 216.000 | | | | |
| 73302210 | OSS CANT 3CA 3-0X7-0 | FOOT | 64.000 | | | | |
| 73400200 | DRILL SHAFT CONC FDN | CU YD | 105.300 | | | | |
| 78003110 | PREF PL PM TB LINE 4 | FOOT | 84,294.000 | | | | |
| 78003130 | PREF PL PM TB LINE 6 | FOOT | 14,578.000 | | | | |
| 78003140 | PREF PL PM TB LINE 8 | FOOT | 28,419.000 | | | | |

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|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| 78003150 | PREF PL PM TB LINE 12 | FOOT | 14,040.000 | | | | |
| 78003180 | PREF PL PM TB LINE 24 | FOOT | 1,065.000 | | | | |
| 78009000 | MOD URETH PM LTR-SYM | SQ FT | 3,303.000 | | | | |
| 78009004 | MOD URETH PM LINE 4 | FOOT | 2,832.000 | | | | |
| 78009006 | MOD URETH PM LINE 6 | FOOT | 3,954.000 | | | | |
| 78100100 | RAISED REFL PAVT MKR | EACH | 990.000 | | | | |
| 78200300 | PRISMATIC CURB REFL | EACH | 1,062.000 | | | | |
| 78200410 | GUARDRAIL MKR TYPE A | EACH | 10.000 | | | | |
| 78200520 | BAR WALL MKR TYPE B | EACH | 5.000 | | | | |
| 78201000 | TERMINAL MARKER - DA | EACH | 3.000 | | | | |
| 78300200 | RAISED REF PVT MK REM | EACH | 375.000 | | | | |
| 80400100 | ELECT SERV INSTALL | EACH | 4.000 | | | | |
| 80500100 | SERV INSTALL TY A | EACH | 4.000 | | | | |
| 81028190 | UNDRGRD C GALVS 1 1/2 | FOOT | 79.000 | | | | |
| 81028200 | UNDRGRD C GALVS 2 | FOOT | 80.000 | | | | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

66982

State Job # - C-93-162-09

County Name - KANKAKEE -
 Code - 91 - -
 District - 3 - -
 Section Number - (46-1)HBK-1

Project Number
 ACHPP-ACNHPP-0057/309/

Route
 FAI 57

| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|------------------------|-----------------|------------|---|------------|---|-------------|
| 81028320 | UNDRGRD C PVC 1 | FOOT | 1,320.000 | | | | |
| 81028350 | UNDRGRD C PVC 2 | FOOT | 13,301.000 | | | | |
| 81028370 | UNDRGRD C PVC 3 | FOOT | 509.000 | | | | |
| 81028390 | UNDRGRD C PVC 4 | FOOT | 2,621.000 | | | | |
| 81028760 | UNDRGRD C CNC 2 1/2 | FOOT | 1,629.000 | | | | |
| 81028770 | UNDRGRD C CNC 3 | FOOT | 350.000 | | | | |
| 81028790 | UNDRGRD C CNC 4 | FOOT | 150.000 | | | | |
| 81100600 | CON AT ST 2 GALVS | FOOT | 600.000 | | | | |
| 81300555 | JUN BX SS AS 12X12X8 | EACH | 8.000 | | | | |
| 81400700 | HANDHOLE PCC | EACH | 48.000 | | | | |
| 81400720 | DBL HANDHOLE PCC | EACH | 4.000 | | | | |
| 81603000 | UD 2#8 #8G XLPUSE 3/4 | FOOT | 10,974.000 | | | | |
| 81603030 | UD 2#4 #6G XLPUSE 1 | FOOT | 5,050.000 | | | | |
| 81603040 | UD 2#6 #8G XLPUSE 1 | FOOT | 8,235.000 | | | | |
| 81603070 | UD 2#2#4G XLPUSE 1 1/4 | FOOT | 2,277.000 | | | | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
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Project Number
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Route
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| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| 81702120 | EC C XLP USE 1C 8 | FOOT | 12,948.000 | | | | |
| 81702140 | EC C XLP USE 1C 4 | FOOT | 640.000 | | | | |
| 81702150 | EC C XLP USE 1C 2 | FOOT | 1,280.000 | | | | |
| 82102400 | LUM SV HOR MT 400W | EACH | 82.000 | | | | |
| 82105600 | LUM SV HM HOR MT 400W | EACH | 84.000 | | | | |
| 82107300 | UNDERPAS LUM 150W HPS | EACH | 4.000 | | | | |
| 82500340 | LT CONT PEDM 480V 60 | EACH | 2.000 | | | | |
| 82500380 | LT CONT BASEM 480V200 | EACH | 1.000 | | | | |
| 83004600 | LT P A 50MH 15DA | EACH | 56.000 | | | | |
| 83502300 | LT TOWER 100MH LM 4 | EACH | 5.000 | | | | |
| 83502400 | LT TOWER 100MH LM 6 | EACH | 1.000 | | | | |
| 83503300 | LT TOWER 110MH LM 4 | EACH | 4.000 | | | | |
| 83503400 | LT TOWER 110MH LM 6 | EACH | 7.000 | | | | |
| 83600357 | LP F M 15BC 8" X 8' | EACH | 56.000 | | | | |
| 83700300 | LT TOWER FDN 48D | FOOT | 269.000 | | | | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
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Project Number
 ACHPP-ACNHPP-0057/309/

Route
 FAI 57

| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| 83800650 | BKWY DEV COU SS SCRNS | EACH | 224.000 | | | | |
| 84200600 | REM LT U NO SALV | EACH | 2.000 | | | | |
| 86000300 | MASTER CONT IN T5 CAB | EACH | 1.000 | | | | |
| 86200200 | UNINTER POWER SUP STD | EACH | 4.000 | | | | |
| 86400100 | TRANSCEIVER - FIB OPT | EACH | 4.000 | | | | |
| 87100140 | FO CAB C 62.5/125 12F | FOOT | 8,205.000 | | | | |
| 87300305 | ELCBL T LEAD 14 1PR | FOOT | 18,882.000 | | | | |
| 87300925 | ELCBL C TRACER 14 1C | FOOT | 8,205.000 | | | | |
| 87301215 | ELCBL C SIGNAL 14 2C | FOOT | 12,590.000 | | | | |
| 87301225 | ELCBL C SIGNAL 14 3C | FOOT | 17,546.000 | | | | |
| 87301245 | ELCBL C SIGNAL 14 5C | FOOT | 28,622.000 | | | | |
| 87301255 | ELCBL C SIGNAL 14 7C | FOOT | 7,836.000 | | | | |
| 87301295 | ELCBL C SIGNAL 20 3C | FOOT | 4,636.000 | | | | |
| 87301750 | ELCBL C RAILRD 14 3C | FOOT | 1,000.000 | | | | |
| 87301805 | ELCBL C SERV 6 2C | FOOT | 143.000 | | | | |

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| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|-----------|---|------------|---|-------------|
| 87301900 | ELCBL C EGRDC 6 1C | FOOT | 5,816.000 | | | | |
| 87502440 | TS POST GALVS 10 | EACH | 10.000 | | | | |
| 87502510 | TS POST GALVS 17 | EACH | 42.000 | | | | |
| 87702890 | STL COMB MAA&P 32 | EACH | 1.000 | | | | |
| 87702920 | STL COMB MAA&P 38 | EACH | 2.000 | | | | |
| 87702930 | STL COMB MAA&P 40 | EACH | 1.000 | | | | |
| 87703050 | STL COMB MAA&P 64 | EACH | 1.000 | | | | |
| 87703080 | STL COMB MAA&P 68 | EACH | 2.000 | | | | |
| 87703100 | STL COMB MAA&P 72 | EACH | 1.000 | | | | |
| 87703120 | STL COMB MAA&P 75 | EACH | 4.000 | | | | |
| 87704355 | S C MAA&P DMA 28 & 55 | EACH | 1.000 | | | | |
| 87704420 | S C MAA&P DMA 38 & 46 | EACH | 1.000 | | | | |
| 87800100 | CONC FDN TY A | FOOT | 150.000 | | | | |
| 87800150 | CONC FDN TY C | FOOT | 12.000 | | | | |
| 87800415 | CONC FDN TY E 36D | FOOT | 76.000 | | | | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
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State Job # - C-93-162-09

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Section Number - (46-1)HBK-1

Project Number
 ACHPP-ACNHPP-0057/309/

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| Item Number | Pay Item Description | Unit of Measure | Quantity | x | Unit Price | = | Total Price |
|-------------|-----------------------|-----------------|------------|---|------------|---|-------------|
| 87800420 | CONC FDN TY E 42D | FOOT | 152.000 | | | | |
| 88040070 | SH P LED 1F 3S BM | EACH | 31.000 | | | | |
| 88040090 | SH P LED 1F 3S MAM | EACH | 55.000 | | | | |
| 88040150 | SH P LED 1F 5S BM | EACH | 17.000 | | | | |
| 88040160 | SH P LED 1F 5S MAM | EACH | 8.000 | | | | |
| 88102810 | PED SH P LED 1F BM | EACH | 14.000 | | | | |
| 88102825 | PED SH P LED 1F BM CT | EACH | 32.000 | | | | |
| 88200410 | TS BACKPLATE L F PLAS | EACH | 111.000 | | | | |
| 88500100 | INDUCTIVE LOOP DETECT | EACH | 51.000 | | | | |
| 88600200 | DET LOOP T2 | FOOT | 12,024.000 | | | | |
| 88700090 | CONFIRMATION BEACON | EACH | 14.000 | | | | |
| 88700200 | LIGHT DETECTOR | EACH | 14.000 | | | | |
| 88700300 | LIGHT DETECTOR AMP | EACH | 14.000 | | | | |
| 88800100 | PED PUSH-BUTTON | EACH | 46.000 | | | | |

RETURN WITH BID

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.

RETURN WITH BID

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.

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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.

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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 subcontractor 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

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.

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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 appropriate statement:

Company has no business operations in Iran to disclose.

Company has business operations in Iran as disclosed on the attached document.

RETURN WITH BID

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.**

Additionally, 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.

NA-FEDERAL

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.

RETURN WITH BID

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:

Name and address of person: _____
All costs, fees, compensation, reimbursements and other remuneration paid to said person: _____

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

RETURN WITH BID

IV. DISCLOSURES

- A. The disclosures hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder. The 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. Disclosure Forms. 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. Disclosure Form Instructions

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 per individual per bid 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 NOT APPLICABLE STATEMENT of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

RETURN WITH BID

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 NOT APPLICABLE STATEMENT on Form A does not 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.

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

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

Disclosure of the information contained in this Form is required by 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

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

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

- 2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services. Yes ___ No ___

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

- 1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
2. Are you currently appointed to or employed by any agency of the State of Illinois? If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor provide the name the State agency for which you are employed and your annual salary.

RETURN WITH BID

3. 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, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor? Yes ___ No ___
4. 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, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No ___

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

Yes ___ No ___

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

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___
2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____
-
3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess 100% of the annual salary of the Governor? Yes ___ No ___
4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ___ No ___

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. Yes ___ No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ___ No ___

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ___ No ___

RETURN WITH BID

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

3. Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

RETURN WITH BID

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 Representative 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 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.

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Financial Related Information Disclosure

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

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for all bids.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The BIDDER shall identify whether it has any pending contracts (including leases), bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No ___

If "No" is checked, the bidder only needs to complete the signature box on this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Representative, Date

OWNERSHIP CERTIFICATION

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership.

Any remaining ownership interest is held by individuals receiving less than \$106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

Yes No N/A (Form A disclosure(s) established 100% ownership)

RETURN WITH BID

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.

RETURN WITH BID

**Contract No. 66982
KANKAKEE County
Section (46-1)HBK-1
Project ACHPP-ACNHPP-0057(309)
Route FAI 57
District 3 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.

The undersigned bidder projects that: (number) _____ new hires would be recruited from the area in which the contract project is located; and/or (number) _____ new hires would be recruited from the area in which the bidder's principal office or base of operation is located.

- C. Included in "Total Employees" under Table A is a projection of numbers of persons to be employed directly by the undersigned bidder as well as a projection of numbers of persons to be employed by subcontractors.

The undersigned bidder estimates that (number) _____ persons will be directly employed by the prime contractor and that (number) _____ persons will be employed by subcontractors.

PART III. AFFIRMATIVE ACTION PLAN

- A. The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under **PART II** is determined to be an underutilization of minority persons or women in any job category, and in the event that the undersigned bidder is awarded this contract, he/she will, prior to commencement of work, develop and submit a written Affirmative Action Plan including a specific timetable (geared to the completion stages of the contract) whereby deficiencies in minority and/or female employee utilization are corrected. Such Affirmative Action Plan will be subject to approval by the contracting agency and the **Illinois Department of Human Rights**.
- B. The undersigned bidder understands and agrees that the minority and female employee utilization projection submitted herein, and the goals and timetable included under an Affirmative Action Plan if required, are deemed to be part of the contract specifications.

Company _____ Telephone Number _____

Address _____

NOTICE REGARDING SIGNATURE

The Bidder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs to be completed only if revisions are required.

Signature: _____ Title: _____ Date: _____

- Instructions: All tables must include subcontractor personnel in addition to prime contractor personnel.
- Table A - Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work.
- Table B - Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed.
- Table C - Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A.

RETURN WITH BID

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

RETURN WITH BID

**Contract No. 66982
KANKAKEE County
Section (46-1)HBK-1
Project ACHPP-ACNHPP-0057(309)
Route FAI 57
District 3 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.

(IF AN INDIVIDUAL)

Firm Name _____
Signature of Owner _____
Business Address _____

(IF A CO-PARTNERSHIP)

Firm Name _____
By _____
Business Address _____
Name and Address of All Members of the Firm: _____

(IF A CORPORATION)

Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____
Attest _____
Signature _____
(IF A JOINT VENTURE, USE THIS SECTION FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW)
Business Address _____

(IF A JOINT VENTURE)

Corporate Name _____
By _____
Signature of Authorized Representative _____
Typed or printed name and title of Authorized Representative _____
Attest _____
Signature _____
Business Address _____

If more than two parties are in the joint venture, please attach an additional signature sheet.



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 _____

as SURETY, and held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in the bid proposal under "Proposal Guaranty" in effect on the date of the Invitation for Bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that whereas, the PRINCIPAL may submit bid proposal(s) to the STATE OF ILLINOIS, acting through the Department of Transportation, for various improvements published in the Transportation Bulletin during the effective term indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal(s) of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

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)

By _____
(Signature and Title)

By _____
(Signature of Attorney-in-Fact)

Notary for PRINCIPAL

Notary for SURETY

STATE OF _____
COUNTY OF _____

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)

Signed and attested before me on _____ (date)

by _____
(Name of Notary Public)

by _____
(Name of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Date Commission Expires)

(Date Commission Expires)

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

| 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.



Item No. _____

Letting Date _____

KNOW ALL PERSONS BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

as SURETY, and held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in the bid proposal under "Proposal Guaranty" in effect on the date of the Invitation for Bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that whereas, the PRINCIPAL has submitted a bid proposal to the STATE OF ILLINOIS, acting through the Department of Transportation, for the improvement designated by the Transportation Bulletin Item Number and Letting Date indicated above.

NOW, THEREFORE, if the Department shall accept the bid proposal of the PRINCIPAL; and if the PRINCIPAL shall, within the time and as specified in the bidding and contract documents; and if, after award by the Department, the PRINCIPAL shall enter into a contract in accordance with the terms of the bidding and contract documents including evidence of the required insurance coverages and providing such bond as specified with good and sufficient surety for the faithful performance of such contract and for the prompt payment of labor and material furnished in the prosecution thereof; or if, in the event of the failure of the PRINCIPAL to enter into such contract and to give the specified bond, the PRINCIPAL pays to the Department the difference not to exceed the penalty hereof between the amount specified in the bid proposal and such larger amount for which the Department may contract with another party to perform the work covered by said bid proposal, then this obligation shall be null and void, otherwise, it shall remain in full force and effect.

IN THE EVENT the Department determines the PRINCIPAL has failed to comply with any requirement as set forth in the preceding paragraph, then Surety shall pay the penal sum to the Department within fifteen (15) days of written demand therefor. If Surety does not make full payment within such period of time, the Department may bring an action to collect the amount owed. Surety is liable to the Department for all its expenses, including attorney's fees, incurred in any litigation in which it prevails either in whole or in part.

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)

By _____
(Signature and Title)

By _____
(Signature of Attorney-in-Fact)

Notary for PRINCIPAL

Notary for SURETY

STATE OF _____
COUNTY OF _____

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)
by _____

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)

(Date Commission Expires)

(Date Commission Expires)

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

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

(1) Policy

It is public policy that disadvantageded 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

The contractor agrees to ensure that disadvantageded 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 _____ (Percent) _____ (Dollar Amount) |
| Project _____ | |
| County _____ | |
| Letting Date _____ | |
| Contract No. _____ | |
| Letting Item No. _____ | |

(4) Assurance

I, acting in my capacity as an officer of the undersigned bidder (or bidders if a joint venture), hereby assure the Department that on this project my company : (check one)

Meets or exceeds contract award goals and has provided documented participation as follows:
Disadvantaged Business Participation _____ percent

Attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

Failed to meet contract award goals and has included good faith effort documentation to meet the goals and that my company has provided participation as follows:

Disadvantaged Business Participation _____ percent

The contract goals should be accordingly modified or waived. Attached is all information required by the Special Provision in support of this request including good faith effort. Also attached are the signed participation statements, forms SBE 2025, required by the Special Provision evidencing availability and use of each business participating in this plan and assuring that each business will perform a commercially useful function in the work of the contract.

Company

By _____

Title _____

Date _____

The "as read" Low Bidder is required to comply with the Special Provision.

Submit only one utilization plan for each project. The utilization plan shall be submitted in accordance with the special provision.

Bureau of Small Business Enterprises **Local Let Projects**
2300 South Dirksen Parkway Submit forms to the
Springfield, Illinois 62764 Local Agency

PROPOSAL ENVELOPE



PROPOSALS

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

| Item No. | Item No. | Item No. |
|----------|----------|----------|
| | | |
| | | |
| | | |
| | | |

Submitted By:

| |
|-----------|
| Name: |
| Address: |
| |
| |
| Phone No. |

Bidders should use an IDOT proposal envelope or affix this form to the front of a 10" x 13" envelope for the submittal of bids. If proposals are mailed, they should be enclosed in a second or outer envelope addressed to:

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

NOTICE

Individual bids, including Bid Bond and/or supplemental information if required, should be securely stapled.

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

None of the following material needs to be returned with the bid package unless the special provisions require documentation and/or other information to be submitted.

**Contract No. 66982
KANKAKEE County
Section (46-1)HBK-1
Project ACHPP-ACNHPP-0057(309)
Route FAI 57
District 3 Construction Funds**



Illinois Department of Transportation

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 State Required Ethical Standards Governing Subcontractors.

RETURN WITH SUBCONTRACT

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.

RETURN WITH SUBCONTRACT

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 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 subcontractor 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.

| | | |
|--|--|--|
| <hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center;">Name of Subcontracting Company</p> | | |
| <hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center;">Authorized Officer</p> | | <hr style="border: none; border-top: 1px solid black; margin-bottom: 5px;"/> <p style="text-align: center;">Date</p> |

RETURN WITH SUBCONTRACT
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. Disclosure Forms. 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. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 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? YES ___ NO ___
3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES ___ NO ___

(Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)

4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO ___

(Note: Only one set of forms needs to be completed per individual per subcontract 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 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 NOT APPLICABLE STATEMENT on page 2 of Form A must be signed and dated by an individual that is authorized to execute contracts for your company.

RETURN WITH SUBCONTRACT

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 NOT APPLICABLE STATEMENT on Form A does not allow the subcontractor to ignore Form B. Form B must be completed, checked, and dated or the subcontract will not be approved.*

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

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

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

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

Disclosure of the information contained in this Form is required by 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 open-ended contracts. **A publicly traded company may submit a 10K disclosure (or equivalent if applicable) in satisfaction of the requirements set forth in Form A. See Disclosure Form Instructions.**

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

DISCLOSURE OF FINANCIAL INFORMATION

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

| | |
|---|-------|
| FOR INDIVIDUAL (type or print information) | |
| NAME: | _____ |
| ADDRESS | _____ |
| Type of ownership/distributable income share: | |
| stock _____ sole proprietorship _____ Partnership _____ other: (explain on separate sheet): | |
| % or \$ value of ownership/distributable income share: | _____ |

2. Disclosure of Potential Conflicts of Interest. Check "Yes" or "No" to indicate which, if any, of the following potential conflict of interest relationships apply. If the answer to any question is "Yes", please attach additional pages and describe.

(a) State employment, currently or in the previous 3 years, including contractual employment of services.

Yes ___ No ___

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

1. Are you currently an officer or employee of either the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ___ No ___

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

RETURN WITH SUBCONTRACT

3. 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, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?
Yes ___ No ___

4. 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, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
Yes ___ No ___

(b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes ___ No ___

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

1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority?
Yes ___ No ___

2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary. _____

3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?
Yes ___ No ___

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
Yes ___ No ___

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.
Yes ___ No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter.
Yes ___ No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years.
Yes ___ No ___

(f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter.
Yes ___ No ___

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government.
Yes ___ No ___

RETURN WITH SUBCONTRACT

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___ No ___

(i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___

3 Communication Disclosure.

Disclose the name and address of each lobbyist and other agent of the bidder or offeror who is not identified in Section 2 of this form, who is has communicated, is communicating, or may communicate with any State officer or employee concerning the bid or offer. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the process and throughout the term of the contract. If no person is identified, enter "None" on the line below:

Name and address of person(s): _____

RETURN WITH SUBCONTRACT

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: _____ Date _____
Signature of Individual or Authorized Officer

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.

_____ Date _____
Signature of Authorized Officer

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

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

Disclosure of the information contained in this Form is required by Section 50-35 of the Code (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B 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 open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes ___ No ___ If "No" is checked, the subcontractor only needs to complete the signature box on this page.

2. If "Yes" is checked. Identify each such relationship by showing State of Illinois agency name and other descriptive information such as bid or project number (attach additional pages as necessary). SEE DISCLOSURE FORM INSTRUCTIONS:

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature box with fields: Signature of Authorized Officer, Date

OWNERSHIP CERTIFICATION

Please certify that the following statement is true if the individuals for all submitted Form A disclosures do not total 100% of ownership

Any remaining ownership interest is held by individuals receiving less than \$106,447.20 of the bidding entity's or parent entity's distributive income or holding less than a 5% ownership interest.

Yes No N/A (Form A disclosure(s) established 100% ownership)



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.m. January 30, 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. 66982
KANKAKEE County
Section (46-1)HBK-1
Project ACHPP-ACNHPP-0057(309)
Route FAI 57
District 3 Construction Funds**

Construction of a new structure and interchange at I-57 and 6000N, widening of 6000N and intersection improvements at US 45/52 and IL 50, along with other associated work, located in Bourbonnais.

- 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

Erica J. Borggren,
Acting Secretary

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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STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction, Adopted January 1, 2012", the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, which apply to and govern the construction of FAI Route 57 (I-57), Project ACHPP-ACNHPP-0057(309), Section (46-1)HBK-1, in Kankakee County, Contract 66982, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

Contract No. 66982

LOCATION OF PROJECT

This project is located in Kankakee along I-57 approximately 3 miles north of the existing I-57/IL 50 Interchange in Bourbonnais and is located between the US 45/52 intersection with 6000N Road and the IL 50 intersection with 6000N Road.

DESCRIPTION OF PROJECT

Project work consists of constructing a diamond interchange for 6000N Road and I-57. The improvement consists of a new bridge over I-57, reconstructing and widening 6000N and intersection improvements at US 45/52 and IL 50. Other items include storm sewer, shared use path, sidewalk, embankment, curb and gutter and landscape restoration. Installation of roadway lighting, traffic signals and other related items to complete the work as described herein.

TRAFFIC CONTROL PLAN

(Revised August 15, 2005; Revised October 10, 2012)

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

Special attention is called to the following sections of the Standard Specifications, the Highway Standards, and the special provisions relating to traffic control:

Standard Specifications:

- Section 701 - Work Zone Traffic Control and Protection
- Section 702 - Nighttime Work Zone Lighting
- Section 703 - Work Zone Pavement Marking
- Section 704 - Temporary Concrete Barrier
- Section 783 - Pavement Marking and Marker Removal
- Section 1106 - Work Zone Traffic Control Devices

Supplemental Specifications:

- Section 504 - Precast Concrete Structures
- Section 701 - Work Zone Traffic Control and Protection
- Section 706 - Impact Attenuators, Temporary
- Section 1101 - General Equipment
- Section 1106 - Work Zone Traffic Control Devices

IDOT Highway Standards:

| | | | | | |
|--------|--------|--------|--------|--------|--------|
| 420001 | 701001 | 701006 | 701011 | 701101 | 701106 |
| 701301 | 701306 | 701311 | 701326 | 701331 | 701401 |
| 701402 | 701423 | 701426 | 701428 | 701431 | 701451 |
| 701501 | 701601 | 701606 | 701701 | 701901 | 704001 |
| BLR 17 | BLR 21 | BLR 22 | | | |

In addition, the following also relate to traffic control for this project:

RECURRING SPECIAL PROVISIONS

- Night Time Inspection of Roadway Lighting
- Work Zone Public Information Signs
- Guardrail and Barrier Wall Delineation

SPECIAL PROVISIONS

- Alternate Route Signing
- Automated Flagger Assistance Device (BDE)
- Changeable Message Sign
- Contractor Access
- Equipment Illumination
- Keeping Roads Open to Traffic
- Maximum Drop-offs for Two-Lane, Two-Way Traffic
- Pavement Marking Removal/Work Zone Pavement Marking Removal
- Plastic Drums
- Portable Vehicle Mounted Changeable Message Sign
- Radar Speed Trailer
- Traffic Control and Protection (Special)
- Traffic Control and Protection, Standards 701400 (Special) and 701401 (Special)
- Traffic Control and Protection, Standards 701400 (Special) and 701402 (Special)
- Traffic Control Setup and Removal Freeway/Expressway (BDE)
- Uneven Lanes

TRAFFIC CONTROL SURVEILLANCE: In addition to the Standard Specifications for Article 701.10 Surveillance, this item will be required when Traffic Standards 701101, 701326, 701331, 701400 (Special), 701401, 701402, 701423, 701428, 701431, 701451, 701601, 701606, 701701, BLR 17, BLR 21, and BLR 22 are in place. This surveillance work shall be included within the unit price per calendar day for TRAFFIC CONTROL SURVEILLANCE.

Limitations of Construction:

- 1) During the construction seasons, a single traffic lane is defined as an 11' or greater open traveled width of the roadway. Any lane width less than 11' on a roadway open to through traffic will be considered obstructed. During the winter shutdown season, a single traffic lane is defined as a 12' or greater open traveled width of the roadway. Any lane width less than 12' will be considered obstructed.
- 2) During Stage 1, 6000 North shall be closed to through traffic from US 45/52 to IL 50. The roadway shall remain "Open for Local Traffic Only" to provide access to adjacent businesses and residences as well as access for construction equipment. However, the roadway shall be closed to local traffic across the proposed interchange which shall be defined to exclude the closest driveway on each side of I-57. Those portions of the roadway remaining open for local traffic only shall typically have a minimum pavement width of 16'. However, a minimum of one 11' lane in each direction shall be provided for a minimum of 100' on each side of the CNRR tracks. During the winter shutdown season, lane widths shall be a minimum of 12'.
- 3) During Stage 2, 6000 North shall be closed to through traffic from US 45/52 to 1000 East. The roadway shall remain "Open for Local Traffic Only" to provide access to adjacent businesses and residences as well as access for construction equipment. However, the roadway shall be closed to local traffic across the proposed interchange which shall be defined to, but exclude the closest driveway on each side of I-57. A minimum of one 12' lane in each direction shall be open to local traffic at all times, except the closed portion across the interchange.
- 4) During Stage 2, vertical elevation differentials shall prevent a direct connection of 6000 North to IL 50 within the existing intersection. The Contractor shall provide a temporary intersection as shown on the MOT plans to accommodate truck turning movements. Changeable Message Signs as well as appropriate detour signing shall be provided to warn and inform IL 50 drivers of the relocated intersection.
- 5) During Stage 2, 6000 North shall be closed to through traffic from IL 50 to the east project limit. The Contractor shall coordinate with adjacent residents to provide necessary access to their home and property.
- 6) No unattended lane closures will be allowed with the exception of the night time closure which is permitted for IL Route 50 as described in the special provision, "Keeping Roads Open to Traffic".

- 7) Night time work will be allowed on this project for work performed along I-57 pursuant to the provisions of the special provision, "Keeping Roads Open to Traffic". Night time work will require the use of nighttime work zone lighting. Nighttime work zone lighting will be paid for at the contract Lump sum price for NIGHTTIME WORK ZONE LIGHTING in accordance with Section 702 of the Standard Specifications. All workers present in the work zone during nighttime hours shall wear ANSI Class 3 vest and pants.
- 8) The permanent I-57/6000 North interchange lighting shall be in operation when the ramp detours are used for the demolition of the existing 6000 North Bridge over I-57. The lighting shall also be used when the interchange ramps are carrying detoured traffic during the installation of bridge beams for the new structure.
- 9) 6000 North will be permitted by the Village of Bourbonnais to be closed to all traffic between Stonebridge Boulevard and US 45/52 for a maximum of 30 calendar days to facilitate the construction of the proposed culvert across 6000 North and associated storm sewer improvements and roadway improvements. If the proposed roadway improvements are not completed within the scheduled roadway closure, then the remaining work shall be staged to maintain traffic with flaggers adjacent to work activities and retain one lane of traffic in each direction when workers are not present. Should the Contractor fail to open the road within the 30 calendar day closure, the Contractor shall be subject to the provisions outlined in Article 108.09 of the Standard Specifications.
- 10) No temporary traffic control devices will be allowed to remain on the I-57 pavement or paved shoulders from the Friday before Thanksgiving to March 15 of any year without written approval of the Engineer except as required by IDOT Standard 701451 across the unopened interchange exit ramps to 6000 North.
- 11) During construction of the new pavements for US Route 45/52 and IL Route 50, the depth of excavation is expected to exceed 24 inches. Drop-off depths are expected to also exceed 24 inches along 6000 North at various locations. The Contractor shall schedule work activities to avoid exposure to the hazards within 3 feet of the open traffic lanes such that they do not exceed 96 hours. The Contractor shall be liable for liquidated damages in accordance with Article 108.09 of the Standard Specifications for any time periods that he/she fails to meet this construction parameter. In lieu of this restriction, the Contractor may choose to install temporary concrete barrier in accordance with Standard 701423. Payment for the temporary concrete barrier for this work will not be paid for separately and will be included within the lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).
- 12) The Contractor shall provide all materials and labor necessary to maintain the flexible delineators that are required as part of traffic control standards 701606 and 701431. The re-attachment of the flexible delineator to the base or the base to the pavement will be included within the lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

- 13) Whenever the Contractor uses the new ramps to detour I-57 traffic around bridge construction activities that require closure of I-57 beneath the bridge, the Contractor shall apply the Maintenance of Traffic detail included in the plans and titled, "Total Interstate Closure at Night." This detail includes two changeable message signs. These changeable message signs will be measured for each calendar night each sign is used for the interstate closure and traffic detour along the completed interchange ramps. The sum of all such calendar nights will be proportioned to a calendar-month basis. The changeable message signs will be paid for separately on a calendar-month basis for CHANGEABLE MESSAGE SIGN.
- 14) The Canadian National Railroad replacement of the 6000 North rail crossing shall be completed by the railroad. This closure shall be coordinated between the railroad and the Contractor. Access across the tracks to and from IL Route 50 shall be provided at all times for the three businesses located along 6000 North between 1000 East and the Canadian National Railroad, with the exception of the closure required for the rail road crossing work. Each business involves truck operations. Temporary railroad pavement markings and railroad crossing protection traffic control measures meeting the approval of the Engineer shall be provided by the Contractor as needed to maintain traffic. This work will be included in the cost for TRAFFIC CONTROL AND PROTECTION (SPECIAL).
- 15) The interchange ramps shall not be opened to traffic until the traffic signals have been installed and operational at all the intersections on 6000 North including US 45/52, the ramp intersections at I-57, and IL 50.
- 16) The permanent traffic signals for the IL 50 intersection with 6000 North shall be installed and operational prior to starting Stage 2D. The Contractor shall temporarily modify the signal phasing as needed to accommodate the lane configuration for work being performed during Stage 2D. This work will be included in the lump sum cost of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

Winter Shutdown :

During the winter shutdown period from the Friday before Thanksgiving through March 31, the Contractor shall schedule their work operations to provide the number of lanes and lane widths as described above and shown in the plans for US 45/52 and 6000N.

IL 50 shall have two-lane, two-way traffic.

TRAFFIC CONTROL AND PROTECTION (SPECIAL)

This work shall consist of furnishing, installing, maintaining, relocating and removing all traffic control required for the purpose of regulating, warning or directing traffic for all construction activities except those on I-57 which are covered by standards 701400(special), 701401, and 701402. This work shall be done in accordance with Article 107.14 and Section 701 of the Standard Specifications, the staging details and notes in the plans, applicable Highway Standards, the Special Provisions and as specified herein.

The plan details present a suggested means for implementing the necessary traffic control for this project. The plans do not attempt to detail or define all construction conditions which may require installation of traffic controls. The Contractor may revise or modify the traffic control as shown in the plans with the written permission of the Engineer. The cost of any traffic control devices that must remain upon completion of the contract will be included in this work.

Whenever the Contractor uses the new ramps to detour I-57 traffic around bridge construction activities that require closure of I-57 beneath the bridge, the Contractor shall apply the Maintenance of Traffic detail included in the plans and titled, "Total Interstate Closure at Night."

Existing regulatory traffic signing shall be relocated as needed for each stage of construction. In addition, the contractor shall furnish and install temporary regulatory signing at the locations shown in the plans. The Contractor shall maintain all temporarily relocated/furnished signs until the new permanent signing has been installed. The temporary relocation and maintenance of any regulatory or warning traffic signs will not be paid for separately but shall be governed by Article 107.25 of the Standard Specifications.

Method of Measurement:

All traffic control and protection required by this provision will be measured for payment on a lump sum basis. All traffic control necessary to construct the work shown in the plans shall be considered included in the cost bid for this item. No additional payment will be made for any alterations, modifications, or additions necessary to construct the various work items shown in the plans.

Basis of Payment:

Work required by this provision will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION (SPECIAL). There will be no adjustment of payment allowed for any change in value of work items associated with this item.

The furnishing and installation of temporary regulatory signing at the locations indicated in the plans will not be paid for separately, but will be included in the cost of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

Short term pavement marking installation, existing pavement marking removal, and all work zone pavement marking removal will be included in the cost of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

All other temporary pavement marking, lettering, and symbols will be measured and paid for separately.

TRAFFIC CONTROL AND PROTECTION, STANDARDS 701400 (SPECIAL) AND 701401 (SPECIAL)

(Effective August 7, 2008; Revised April 22, 2010)

Description. Replace any reference to Standard 701400 in Standard 701401 with the detail, Standard 701400 (Special), shown on the plans.

Construction Requirements. This work shall be done according to the applicable portions of Section 701 and 780 of the Standard Specifications, the details on the plans, and Standards 701401 and 701901.

Temporary thermoplastic rumble strips, when shown on the detail, shall be constructed of thermoplastic pavement markings placed to a thickness of one-half inch.

Method of Measurement. Traffic control and protection required under the detail, Standard 701400 (Special), will not be measured for payment.

Temporary thermoplastic rumble strips and lane drop arrows, when shown on the detail, will not be measured for payment.

Removal of temporary pavement markings will not be measured for payment.

In Article 701.19(c) Measured as Lump Sum of the Standard Specifications, replace Standard 701401 with Standard 701401 (Special).

Basis of Payment. This work will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, STANDARD 701401 (SPECIAL).

TRAFFIC CONTROL AND PROTECTION, STANDARDS 701400 (SPECIAL) AND 701402 (SPECIAL)

(Effective August 7, 2008; Revised April 22, 2010)

Description. Replace any reference to Standard 701400 in Standard 701402 with the detail, Standard 701400 (Special), shown on the plans.

Construction Requirements. This work shall be done according to the applicable portions of Section 701 and 780 of the Standard Specifications, the details on the plans, and Standards 701402 and 701901.

Temporary thermoplastic rumble strips, when shown on the detail, shall be constructed of thermoplastic pavement markings placed to a thickness of one-half inch.

Method of Measurement. Traffic control and protection required under the detail, Standard 701400 (Special), will not be measured for payment.

Temporary thermoplastic rumble strips and lane drop arrows, when shown on the detail, will not be measured for payment.

Removal of temporary pavement markings will not be measured for payment.

In Article 701.19(b) Add Standard 701402 (Special) to those items measured as each for each isolated stationary work area.

Basis of Payment. This work will be paid for at the contract unit price per each for TRAFFIC CONTROL AND PROTECTION, STANDARD 701402 (SPECIAL).

PLASTIC DRUMS

(Effective August 15, 2005; Revised March 26, 2007)

Plastic drums according to Standard 701901 with steady burning lights shall be used in lieu of cones, Type I and Type II barricades, and vertical barricades throughout lane closures.

COOPERATION BY CONTRACTOR

(Effective February 7, 2013)

Replace the 3rd paragraph of Article 105.06 with the following:

At the preconstruction meeting, the Contractor shall identify one superintendent, who will act as his agent for the entire duration of the project. This shall be a competent, English-speaking person, who will be at the project site at all times when the Contractor or Subcontractor is present. He or she must be capable of reading and thoroughly understanding the plans and specifications and be thoroughly experienced in the type of work being performed. The superintendent, who shall receive instructions from the Engineer or authorized representatives, shall have full authority to execute orders or directions of the Engineer without delay, and to promptly supply such materials, equipment, tools, labor and incidentals as may be required.

TEMPORARY PAVEMENT

(Effective: November 14, 2013)

This work shall consist of placing and maintaining either Hot-Mix Asphalt Binder and Surface Courses or a Portland Cement Concrete Base Course to serve as a temporary widening of existing highway pavements or temporary roadways at the locations shown on the plans or as directed by the Engineer. The Hot-Mix-Asphalt Option shall be used in locations as shown on the plans where the temporary pavement shall remain as permanent shoulders. In all other locations the choice of material options to be used for this item is left to the Contractor to choose. The Temporary Pavement options are defined as follows:

HOT-MIX ASPHALT OPTION

This work shall consist of constructing 7.25 inches of HOT-MIX ASPHALT consisting of 1.5 inches of HOT-MIX-ASPHALT SURFACE COURSE and 5.75 inches of HOT-MIX-ASPHALT BINDER COURSE on prepared subgrade at the locations shown on the plans. The binder shall be placed in 2 lifts. The minimum width shall be 2 feet.

If the Contractor chooses to retain the temporary HMA pavement in place under traffic over the winter or for use during portions of another construction season, then its initial HMA Binder construction thickness shall be increased to 6.5 inches to provide a total of 8 inches of HMA.

At those locations outside the highway pavement reconstruction limits where temporary pavements/reconstructed shoulders are intended to remain for use as permanent shoulders, the pavement section shall be modified to include a 6" depth of SUBBASE GRANULAR MATERIAL, TYPE C and its initial HMA Binder construction thickness shall be increased to 6.5 inches to provide a total of 8 inches of HMA. A crack sealant shall be applied along the longitudinal joint between existing pavement and new shoulder pavement. The temporary pavement cross-slope shall be 0.4%.

The locations of temporary pavement to remain as permanent shoulders are as follows:

- US 45/52 Pre-stage A
 - STA 257+30.00 to STA 265+40.74 NB Shoulder
 - STA 293+55.61 to STA 301+75.00 NB Shoulder
- US45/52 Pre-stage B
 - STA 260+00.00 to STA 265+40.72 SB Shoulder
 - STA 293+55.61 to STA 299+10.00 SB Shoulder
- IL Route 50 Pre-stage B
 - STA 578+16.73 to STA 590+38.11 SB Shoulder

Description: This work shall consist of designing, producing and constructing an HMA Surface Course and HMA Binder Course together with associated Hot-Mix-Asphalt (Prime Coat) on a prepared subgrade, according to Sections 311, 356, 406, 1030 and 1102 of the 2012 Standard Specifications. Where the temporary pavement is to remain as permanent shoulder the work shall be performed according to Sections 451 and 482.

Materials: HMA Surface Course shall be IL 9.5, Mix C, N50. The HMA Binder Course shall be IL-19.0, N 50. Since more than one HMA lift is necessary, the additional prime coat shall be applied for the subsequent lifts at the lesser rate (fog rate) shown on the Special Provision for Hot-Mix-Asphalt (Prime Coat). The Hot-Poured Joint Sealer along shoulder pavements to remain shall be according to article 1050.02.

Required Field Tests: Density. The density of the compacted HMA shall be according to Articles 1030.05(d)(3), (d)(4), and (d)(7). Thickness. Determination of pavement thickness for temporary pavements shall be made via cores. Procedures for core location selection and pay adjustment shall be according to Section 407.10 of the Standard Specifications.

Method of Measurement. This work shall be measured as follows:

Temporary HMA Pavement will be measured for payment in place and the quantity computed in square yards. The width of measurement shall be the width at the top HMA lift as shown on the plans.

Subbase granular material Type C will be measured for payment according to Article 311.08.

Bituminous Material (Prime Coat) will not be separately measured for payment.

Neither crack routing or crack filling work associated with sealing of the longitudinal joint between existing pavement and temporary pavement to remain will be measured separately for payment.

Basis of Payment. All work and materials required to complete the work listed above for the Hot-Mix Asphalt Option shall be included in the contract unit cost per Square Yard for TEMPORARY PAVEMENT.

The Bituminous Materials (Prime Coat) applied for construction of temporary pavement will be included in the unit cost for temporary pavement.

Crack routing and crack filling associated with sealing of the longitudinal joint between existing pavement and temporary pavement to remain will be included in the unit cost for temporary pavement.

Subbase Granular Material, Type C will be paid at the contract unit price per square yard for SUBBASE GRANULAR MATERIAL, TYPE C.

PORTLAND CEMENT CONCRETE OPTION

This work shall consist of constructing a 7.5 inch thick Portland Cement Concrete Base Course on prepared subgrade at the locations shown on the plans. The minimum width shall be 3 feet.

If the Contractor chooses to incorporate a working platform to facilitate construction, it shall be included in the cost of the PCC option. If the Contractor chooses to retain the temporary PCC pavement in place under traffic over the winter or for use during portions of another construction season, then its initial construction thickness shall be increased to 8 inches of PCC. This work shall be completed according to Sections 311, 353 and 354 of the Standard Specifications.

Pavement fabric shall not be utilized in the base course.

The Contractor shall saw longitudinal joints in base courses wider than 16 feet, according to the Standard 420001, except that uncoated steel tie bars may be used instead of epoxy coated tie bars. These joints shall not be sealed.

The Contractor shall saw transverse joints in the base course at 20 foot centers according to the detail for Sawed Construction Joints in Standard 420001, except that dowel bars are not required. These joints shall not be sealed.

All work and materials as listed above for the Portland Cement Concrete Option, including tie bars, sawed joints and all other required materials will be included in the contract unit price per Square Yard for TEMPORARY PAVEMENT.

TEMPORARY PAVEMENT REMOVAL

(Effective November 14, 2013)

Description. This item shall include all materials, labor, and equipment necessary to remove temporary pavement constructed for use in maintaining traffic throughout various stages of construction as detailed in the plans or as directed by the Engineer.

This work shall be done in accordance with the applicable portions of Section 440 of the Standard Specifications except as described herein. All work shall be to the satisfaction of the Engineer.

When portions of existing previously placed temporary pavement are to remain, provisions shall be made for satisfactory transitions between replacements and the portions remaining in place. A full depth, perpendicular, straight joint shall be sawn at the ends of all edges of portions to be removed. Any damage done to the temporary pavement that is to remain in place shall be repaired or removed as directed by the Engineer.

Materials resulting from the removal of temporary pavement shall be disposed of according to Article 202.03.

Method of Measurement. Temporary pavement removal will be measured for payment in place in square yards. Saw cutting of temporary pavement will not be separately measured for payment.

Basis of Payment. This work will be paid for at the contract unit price per square yard for TEMPORARY PAVEMENT REMOVAL which price shall be payment in full for all materials, labor, and equipment necessary to perform the work as herein specified.

PORTLAND CEMENT CONCRETE PAVING REQUIREMENTS FOR TEMPORARY PAVEMENT

The following requirements supersede those contained in Section 420 of the Standard Specifications when Portland Cement Concrete is used for Temporary Pavement:

Article 420.03(c). A mechanical concrete spreader will not be required.

Article 420.03(d). Revise Article 1103.13(b) to read: "The finishing machine shall be of a type approved by the Engineer, shall be self-propelled and shall be capable of striking off, consolidating and finishing concrete of the consistency required by the specifications to the proper crown and grade."

Article 420.03(e). A mechanical longitudinal float will not be required.

Article 420.09. Revise the first paragraph of Article 420.09(a)(1) Vibratory Method. to read:

"After the concrete has been struck off, it shall be given the required consolidation by the vibratory method or by other means which will obtain a uniform and satisfactory density throughout the pavement. If the vibratory method is used, the vibrating impulses shall be applied directly to the concrete through an apparatus especially designed for this purpose and so constructed as to operate satisfactorily ahead of, or as an integral part of, the finishing machine in such a manner that the vibratory impulses are transmitted through the concrete mass with sufficient intensity to consolidate it throughout its entire depth and width. Not more than one pass of the vibratory equipment shall be made over the pavement surface. The Contractor shall have a satisfactory tachometer available for checking the operating frequency of the vibrating elements."

Article 420.09(b). Longitudinal Floating, Hand Method, will be permitted.

TEMPORARY RAMP REMOVAL

(Effective June 26, 2013)

This work shall consist of removing temporary ramps constructed for use in maintaining traffic throughout various stages of construction as detailed in the plans or as directed by the Engineer.

Temporary transitional pavements placed per plan or as directed by the Engineer shall be removed as required and as directed by the Engineer.

This work shall be done in accordance with the applicable portions of Section 440 of the Standard Specifications, as described herein, as per details in the plans, and to the satisfaction of the engineer.

This work will not be paid for separately but shall be included in the cost of the various other pavement removal items in the contract.

TEMPORARY PAINT PAVEMENT MARKING

(Effective August 15, 2005)

In addition to the requirements of Section 703, Work Zone Pavement Marking, the Contractor shall replace the Short Term Pavement Marking with Temporary Paint Pavement Marking within 24 hours on all surfaces except the final wearing surface.

PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY)

In addition to the requirements of Section 542, Pipe Culverts, this work shall consist of connecting two PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY) to the 4' x 2' box culvert located at US 45 / 52. This connection shall be made in the following manner:

The inside edge of the box culvert shall be lined with polyethylene sheeting to a length of at least one foot from the discharge end of the box culvert. Two PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY) shall be inserted into the discharge end of the box culvert in a "stab" manner. The distance of the insertion shall be approximately 1 foot.

Polyethylene shall be placed around the exterior of the box culvert at the discharge end from the end to two feet upstream from the end.

Inert material is capable of resisting the temporary hydraulic pressure of concrete shall be inserted in the annular space between the exterior of the PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY) and the box culvert.

At the discharge end of the box culvert, earth shall be excavated from beneath the box culvert such that the box culvert is undermined on each side a minimum of 9 inches.

A concrete collar shall be cast around the connection. The concrete collar shall be a minimum of 6-inches thick and shall extend 18 inches over the exterior of the box culvert and 18 inches over the PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY). Concrete shall be worked into the undermined area beneath the box culvert at the joint between the two dissimilar pipes. Concrete shall be worked into the annular space between the exterior of the PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY) and the interior of the box culvert without disrupting the inert material that is intended to act as a temporary dam. Concrete shall also be worked into the exterior haunch space located between the two bottom halves of the PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY).

The polyethylene is intended to act as a bond breaker between the box culvert and the concrete.

The haunch space between the two PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY) shall be filled with flowable fill or concrete for the length of the temporary culverts.

The cost of the concrete collar as described shall be included in the cost of the PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY).

STATUS OF UTILITIES TO BE ADJUSTED:
 (Effective January 1, 2007; Revised January 24, 2011)

| <u>Name & Address of Utility</u> | <u>Type</u> | <u>Location</u> | <u>Estimated Date Relocation Complete</u> |
|--|---|---|--|
| ComEd, An Exelon Company Two Lincoln Centre, 8 th Floor Oakbrook Terrace, IL 60181 ComEd Ref# H11382UNV Approved permits: 3-13962-14 (WO 7833042) 3-13930-14 (WO 7787189) | Overhead Electric Distribution Overhead Electric Transmission and substation | Throughout project Crossing 6000N Rd Sta. 7521+20 | Conflicts throughout. Crews working. Anticipate all work complete by Dec. 2014 Transmission poles and fence at substation in conflict. Transmission pole work complete. Substation fence to be Relocated by ComEd during construction, to be coordinated with roadway work (retaining wall and relocated entrance). |
| Nicor Gas 1844 Ferry Road Naperville, IL 60563 Nicor Ref# SC8831 Approved permit: 3-14057-14 (WO 140234) | Buried Gas: 2" gas 4" gas 10"gas (MOP) 4" gas | Along 6000N Rd: Sta. 7512 to 7524 RT Sta. 7524 to 7540 RT Cross sta. 7522+40 Along IL 50: Sta. 543 to 554 LT | Conflicts throughout. Crews to start work in October 2014. Various areas cannot be completed until building removals have been performed. |
| AT&T 1000 Commerce Drive Oak Brook, IL 60523 AT&T Ref# KK1213R Approved permit: 3-13932-14 (WO 9373515) | Buried Telephone | Throughout | Conflicts throughout. Crews working. Various areas cannot be completed until building removals have been performed. |
| Comcast Cable 688 Industrial Drive Elmhurst, IL 60126 | Overhead and Buried CATV | Overhead on ComEd poles along 6000N Rd Sta. 7435 to 7447 LT. Buried along 45/52: Sta. 265 to 280 LT, Sta. 280 to 295 RT. | Relocate to new ComEd Poles (6 poles). Permit required. Conflicts throughout. Permit required. |
| Aqua Illinois 1000 S. Schuyler Ave. Kankakee, IL 60901 Approved permit: 3-14067-14 | 16"water main 12"water main 12"water main | Along IL 50 from Sta 525 – 578 RT Along 6000N Rd from Sta 7435 – 7447 LT Along 45/52 from Sta 265 – 279 LT | Conflicts throughout. Crews working. Anticipate complete by January 2015. Proposed water main to be installed along IL 50 will be 36" DI pipe. All existing water main will be abandoned in place. |

| <u>Name & Address of Utility</u> | <u>Type</u> | <u>Location</u> | <u>Estimated Date Relocation Complete</u> |
|---|---|---|---|
| Buckeye Partners, LP 12920 Bell Rd Lemont, IL 60439 | Buried 14" Pipeline | Crossing at: 45/52 Sta 272+70 6000N Sta 7458+10 I 57 ramps – Ramp A Sta 4418+60 Ramp B Sta 6422+25 | Buckeye to extend casings, relocate vent pipes and markers to proposed ROW. Approved reimbursable agreement to perform work. |
| Explorer Pipeline Company 6120 S. Yale Ave, Suite 1100 Tulsa, OK 74133 | Buried 24" Pipeline | Crossing at: 45/52 Sta 272+46 6000N Sta 7459+05 I 57 ramps – Ramp A Sta 4430+70 Ramp B Sta 6413+10 | Explorer to extend casings, relocated vent pipes and markers to proposed ROW. Approved reimbursable agreement to perform work. |
| Illinois Department of Central Management Services/ Illinois Century Network 120 W. Jefferson Street Springfield, IL 62702 | Buried Fiber optic – 144 fiber in 1 ¼" HDPE conduit | Buried fiber and hand holes along east side of I 57 at 5' inside existing ROW. | Conflicts at following: I 57 (from 1700' south of 6000N Rd to 1800' north of 6000N Rd), Ramp B (Sta 6415- 6419), Ramp D (Sta 5419- 5424) Permit required. |
| 360networks 900 Cambridge Ct. Godfrey, IL 62036 | Buried Fiber optic in 8" conduit | Crossing 6000N Rd at Sta. 7523+27 | No conflicts anticipated. |
| Windstream 102 E. Shafer St. Forsyth, IL 62535 | Buried Fiber optic in 1 ½" conduit | Crossing 6000N Rd at Sta. 7522+66 | Conflicts with ditch cuts and storm sewer. Windstream to lower fiber. Approved reimbursable agreement to perform work. |

| <u>Name & Address of Utility</u> | <u>Type</u> | <u>Location</u> | <u>Estimated Date Relocation Complete</u> |
|--|--|---|--|
| Illinois Central Railroad 17641 S. Ashland Ave. Homewood, IL 60430 (DOT/AAR 288 931M) | At-grade Railroad Crossing (2 tracks) | Crossing 6000N Rd just west of IL 50 | Railroad crossings to be reconstructed and signals relocated. Work to be performed by railroad crews during roadway project. Two week road closure anticipated. Railroad flaggers are required during roadway work in area of the tracks. Flaggers to be paid in accordance with Article 107.12 and 109.05. Coordination with railroad is required when installing traffic signal heads on new railroad cantilevers. |
| Village of Bourbonnais 600 Main St N.W. Bourbonnais, IL 60914 | Lift Station | 6000N Sta.7437+90 LT | Village to raise rim elevation and relocate controller. Work to be coordinated with construction. |
| Contact: Mike Chamness (815) 937-0817 | Sanitary Forcemain | 45/52 Sta 270+27 RT Culvert No. 2 | Village to relocate / lower existing forcemain. Permit Required. |

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Section 102 and Articles 105.07, 107.20, 107.37, 107.38, 107.39, 107.40, and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

The estimated utility relocation dates should be part of the progress schedule submitted by the Contractor.

** Above utility relocation information reflected as of October 1, 2014, relocation complete dates are unknown at this time. Most of the utility relocation work along US 45/52 and 6000N Rd from the railroad tracks westerly is anticipated to be complete by May 2015. The remainder of utility relocation work is to be performed during summer of 2015 once building removals have been completed.

HAUL ROADS

(Effective January 1, 2007)

It is not anticipated that haul over the local road systems will be necessary. The Contractor shall obtain and present to the Engineer, in writing, approval from the County Engineer involved before using any local road as a haul road.

The Contractor shall also obtain and present to the Engineer, in writing, releases of obligations from said County Engineer before final contract payment is made.

The Contractor's attention is also called to the following regulations regarding the use of any township road as a haul road for materials.

1. All vehicles must maintain a minimum speed of 35 mph while using any township road.
2. No vehicles shall be permitted access on or off township roads used for hauling except at the cross roads.
3. Attention is called to the special provision regarding dust control.

All hauling operations utilizing township roads shall be approved by the Engineer prior to their implementation.

QUALITY CONTROL LABORATORY FOR CONCRETE MIXTURES

Revise Article 1020.16(c)(2) of the Special Provision for Quality Control/Quality Assurance of Concrete Mixtures (BDE) to read:

“(2) Required Plant Tests. Sampling and testing shall be performed at the plant to control production of a mixture. The required minimum Contractor plant sampling and testing is indicated in Article 1020.16(g) Schedule A.”

Add to the end of the second paragraph of Article 1020.16(f)(1) of the Special Provision for Quality Control/Quality Assurance of Concrete Mixtures (BDE):

“Reporting of above documents shall be done using the Department's electronic reporting system, QC/QA Excel Package.”

AGGREGATE SURFACE COURSE, TYPE B

(Effective January 1, 2007)

Add the following to Article 402.07 of the Standard Specifications:

The top layer shall be given a final rolling with a roller meeting the requirements of Article 1101.01.

DUST CONTROL--HAULING EARTH, GRANULAR MATERIALS OR WASTE MATERIAL
(Effective November 16, 1993)

In addition to the general requirements of Section 107 of the Standard Specifications, the Contractor shall be required to prepare a plan for pavement cleaning and dust control for this project. A detailed plan outlining specific wetting, tarping, and/or cleaning procedures, or similar dust control methods is to be submitted for approval at the preconstruction meeting.

As required by Chapter 95 1/2, paragraphs 15-109 and 15-109.1 of the Illinois Vehicle Code, no blowing or spillage of material will be allowed during the hauling operations. The specific preventative measures proposed by the Contractor are to be included in the dust control plan.

If, in the opinion of the Engineer, excessive dust is produced during the hauling operations, the hauling shall stop until corrective action is taken.

Approval of the dust control and pavement cleaning procedures will not relieve the Contractor of his responsibility to provide a safe work zone for the traveling public.

No additional compensation will be allowed for dust alleviation.

BORROW AND FURNISHED EXCAVATION
(Revised January 1, 2010)

In addition to the requirements of Section 204 of the Standard Specifications for suitable materials, the following restrictions shall apply:

1. The moisture content of the material as it is incorporated into the embankment shall be between 80% to 110% of AASHTO T99 optimum.
2. A 3 ft. (1 m) minimum cover of other suitable material shall be maintained outside of and on top of the embankment.
3. If the liquid limit of the material is greater than or equal to 50, the material shall not be used for capping, shall not be placed within 20 feet of any structure, and shall not be placed in locations where it may come into contact with water.
4. Embankment capping material (as outlined in #2) shall meet non-frost susceptibility criteria as outlined in the statewide Geotechnical Manual. Materials are considered frost susceptible when the soil contains at least 65% silt and sand content, according to AASHTO T88 and the Plasticity Index is less than 12.

EMBANKMENT

(Effective July 1, 1990; Revised January 1, 2007)

This work shall be performed in accordance with Section 205 of the Standard Specifications except that the embankment material shall not be placed and compacted at moisture contents in excess of 110 percent of optimum moisture unless authorized, in writing, by the Engineer.

Topsoil material shall not be placed in the embankment within 12 in. (300 mm) of high type base and surface courses.

SUBGRADE REPLACEMENT (UNDERCUT)

Soil borings indicate the presence of top soil under the existing roadway pavements of US 45/52, IL 50 and 6000N. This material shall be removed and replaced, to an assumed depth of 2 feet, within the limits of the existing pavement where the proposed embankment of US 45/52, IL 50 and 6000N will be constructed.

FURNISHED EXCAVATION shall be used as the replacement material.

This work will not be paid for separately and the cost shall be included in the cost of the FURNISH EXCAVATION.

AGGREGATE SUBGRADE IMPROVEMENT (DISTRICT 3)

(Effective April 1, 2012; Revised January 1, 2013)

Add the following Section to the Standard Specifications:

“SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

303.02 Materials. Materials shall be according to the following.

| Item | Article/Section |
|--|-----------------|
| (a) Coarse Aggregate | 1004.06 |
| (b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2, and 3) | 1031 |

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01 or CS 02 but shall not exceed 40 percent of the total product. The top size of the 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. The RAP shall not be gap graded, single sized, or have a maximum size of less than 3/4 in. (19 mm).

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 and 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 inches (75 mm) of aggregate gradations CA 06 or CA 10.

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 square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.”

Add the following to Section 1004 of the Standard Specifications:

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

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.
- (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 thickness less than or equal to 12 inches (300 mm) shall be CS 02.

The coarse aggregate gradation for total subgrade thickness more than 12 inches (300 mm) shall be CS 01 or CS 02.

| COARSE AGGREGATE SUBGRADE | | | | | |
|---------------------------|--------------------------------|--------|---------|---------|---------|
| 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 | | | | | |
|--------------------------------------|--------------------------------|--------|---------|---------|---------|
| Grad No. | Sieve Size and Percent Passing | | | | |
| | 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 inch (75 mm) capping aggregate shall be gradation CA 6 or CA 10.”

PIPE UNDERDRAINS 4” (MODIFIED)

(Effective January 1, 2010)

Description. This work consists of constructing pipe underdrains according to the applicable portions of Section 601 of the Standard Specifications and Highway Standard 601001.

Materials. The pipe underdrain material used shall meet the requirements of AASHTO M 252-96 except the pipe shall have a slot width of 0.07 in. ± 0.01 in. (1.75 mm ± 0.25 mm). The number of slots and the slot length may be modified to maintain the inlet flow specified in AASHTO M 252-96. Fabric around the pipe is not allowed.

The backfill material shall meet the requirements of Section 1003 of the Standard Specifications for a FA-4 Natural Sand or Gravel and meet the following gradation requirements:

| Sieve Size | Percent Passing |
|------------------|-----------------|
| 3/8” (9.5 mm) | 100 |
| No. 10 (2 mm) | 10±10 |
| No. 16 (1.18 mm) | 5±5 |
| No. 200 (75 um) | 1±1 |

Method of Measurement. Backfill material will not be paid for separately, but shall be included in the unit cost of the underdrain.

Basis of Payment. This work will be paid at the contract unit price per foot (meter) for PIPE UNDERDRAINS 4” (MODIFIED) (PIPE UNDERDRAINS 100MM, MODIFIED).

HOT-MIX ASPHALT – PRIME COAT

(Effective: January 1, 2012, Revised: August 1, 2013)

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 more than one type is shown for a particular application, the Engineer reserves the right to specify the type which shall be used.

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, CSS-1, CSS-1h, CSS-1hP, HFE-90, RC-70 |
| Prime Coat on Aggregate Bases | MC-30, PEP” |

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 and vacuuming or sweeping and air blasting methods, as approved by the Engineer. 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 |
| Fog Coat between HMA Lifts, IL-4.75 & Brick | 0.025 |

The bituminous material for the prime coat shall be placed one lane at a time. 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 pick up under traffic.

The asphalt binder rate will be verified a minimum of once per application type consisting of at least 2000 tons of HMA 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.

Prime coat shall be placed no more than five days in advance of the placement of HMA. 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 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:

“Prime Coat will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT), POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) or NON-TRACKING BITUMINOUS MATERIALS (PRIME COAT).”

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 emulsion is used, the proportions of emulsion and any water added to the emulsion shall 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” |
|---------|-----------|----------|

Add the following to Article 1032.06 of the Standard Specifications:

“(g) Non Tracking Emulsified Asphalt SS-1vh:

| 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 of Article 1032.06 to read:

| “Grade | Use |
|---|------------------------------------|
| SS-1, SS-1h, CSS-1, 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” |

MATERIAL TRANSFER DEVICE (BDE)

(Effective Date: June 15, 1999; Revised Date: January 1, 2009)

Description. This work shall consist of placing Polymerized HMA Surface Course, Mix E, N90, except that these materials shall be placed using a material transfer device.

Materials and Equipment. The material transfer device shall have a minimum surge capacity of 15 tons (13.5 metric tons), shall be self-propelled and capable of moving independent of the paver, and shall be equipped with the following:

- (a) Front-Dump Hopper and Conveyor. The conveyor shall provide a positive restraint along the sides of the conveyor to prevent material spillage. Material Transfer devices having paver style hoppers shall have a horizontal bar restraint placed across the foldable wings which prevents the wings from being folded.
- (b) Paver Hopper Insert. The paver hopper insert shall have a minimum capacity of 14 tons (12.7 metric tons).
- (c) Mixer/Agitator Mechanism. This re-mixing mechanism shall consist of a segmented, anti-segregation, re-mixing auger or two full-length longitudinal paddle mixers designed for the purpose of re-mixing the hot-mix asphalt (HMA). The longitudinal paddle mixers shall be located in the paver hopper insert.

CONSTRUCTION REQUIREMENTS

General. The material transfer device shall be used for the placement of Polymerized HMA Surface Course, Mix E, N90. The material transfer device speed shall be adjusted to the speed of the paver to maintain a continuous, non-stop paving operation. Use of a material transfer device with a roadway contact pressure exceeding 20 psi (138 kPa) will be limited to partially completed segments of full-depth HMA pavement where the thickness of binder in place is 10 in. (250 mm) or greater.

Structures. The material transfer device may be allowed to travel over structures under the following conditions:

- (a) Approval will be given by the Engineer.
- (b) The vehicle shall be emptied of HMA material prior to crossing the structure and shall travel at crawl speed across the structure.
- (c) The tires of the vehicle shall travel on or in close proximity and parallel to the beam and/or girder lines of the structure.

Method of Measurement. This work will be measured for payment in tons (metric tons) for Polymerized HMA Surface Course, Mix E, N90 materials placed with a material transfer device.

Basis of Payment. This work will be paid for at the contract unit price per ton (metric ton) for MATERIAL TRANSFER DEVICE.

The various HMA mixtures placed with the material transfer device will be paid for as specified in their respective specifications. The Contractor may choose to use the material transfer device for other applications on this project; however, no additional compensation will be allowed.

STRINGLESS CONSTRUCTION OPTION

(Effective March 15, 2012)

If the Contractor desires to perform construction using stringless operations, (s)he shall request authorization from the Engineer according to the last paragraph of Article 108.06 of the Standard Specifications. The Contractor shall submit the written request one week prior to beginning stringless operations.

Construction Requirements. Use of a stringless machine shall not relieve the Contractor of any responsibilities stated in the Recurring Special Provision Construction Layout Stakes Except for Bridges or Construction Layout Stakes.

Any Department or Contractor layout destroyed by the Contractor's operations shall be reestablished by the Contractor as directed by the Engineer.

The Contractor shall mark the projected path of the stringless paver with paint two days prior to the beginning of the paving operations.

When a system failure occurs during paving operations the following shall apply:

HMA – For HMA pavement, the Contractor will be allowed to lay material as described for a sudden rain event in Article 406.06(c) of the Standard Specifications after which operations shall stop until the system is proven to be in working order.

PCC – For PCC pavement, the Contractor shall immediately stop operations until the system is proven to be in working order.

CONCRETE STORM SEWER PIPE JOINTS

From Station 7529+00 to Station 7538+00 6000 N, all concrete storm sewer circular sewers 48 inches in diameter or larger shall have pipe joints conforming to ASTM C361. Note that joints conforming to ASTM C361 do exceed to the requirements of IDOT Concrete storm sewer pipe joint specifications.

UNPUBLISHED TELEPHONE NUMBERS FOR ENGINEER'S FIELD OFFICE

(Effective March 21, 2002; Revised January 1, 2012)

Add the following sentence to the end of Paragraphs 670.02(i)(2) and 670.04(f)(2):

All of the telephone lines provided shall have unpublished numbers.

CELLULAR PHONES

(Effective March 1, 2007; Revised January 1, 2012)

Add the following to Article 670.02 of the Standard Specifications:

- (s) Six (6) cellular phones for the exclusive use of the Engineer.

Each cellular phone shall be compatible with the current Department cellular phone network and shall have the following:

- A minimum of 500 anytime minutes per month,
- Free unlimited mobile to mobile minutes,
- Free incoming calls,
- Free Nationwide long distance,
- No roaming charges for calls within the continental United States,
- Voice Mail, and
- Speaker Phone

MASTER CONTROLLER

This work shall include the furnishing and installing a Mater Controller at the following locations:

- US 45/52 at 6000N

In addition to the controller requirements as specified above, the following shall apply:

- The controller shall be ASC3-2100 Econolite controller with EDI-MMU and LS-200 load switch, and ASC 2M-1000 master controller with GPS Time Sync (RTC-TR-3). No other controllers shall be accepted. The controller and cabinet shall be purchased no more than four months prior to installation to ensure the latest technology is used.
- A new laptop computer shall be provided
- A fiber optic tester unit shall be provided
- The minimum computer specifications shall be as follows:
 - Most current technology tough book with largest available screen
 - Tripp Lite Isotel 6 Ultra Surge Protector
 - Documentation
 - The required cables compatible with proposed controllers and master software shall be installed and tested before acceptance of the computer
 - Water-Resistant/Waterproof Case
 - Battery Charger
 - Most Current Synchro Software
 - CD/DVD Burner
 - Built in 9-Pin Serial Port

The Contractor shall supply three (3) copies of the most current Aries software, as well as two (2) manuals. Three (3) days of training by a factory representative on the software will be provided for up to fifteen (15) people. A five (5) year software maintenance and update agreement shall also be included. The Contractor shall provide two (2) licenses for the most current Synchro Software.

Telephone service shall be installed at the Mater Controller location in accordance with Article 860.03 of the Standard Specifications.

The Master Controller shall also be provided with Time Synchronization (GPS) Devices and Malfunction Management Units (MMU).

This work will be paid for at the contract unit price each for MASTER CONTROLLER IN TYPE V CABINET, which shall include all labor, and materials to provide the items as specified herein, and which shall also include the fiber optic and signal controller.

FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL
(Effective January 1, 2002; Revised January 1, 2007)

Full Actuated Controller and Type IV Cabinet shall meet the requirements of Sections 857, 1073 and 1074 of the Standard Specifications with the following modifications.

This item requires that a factory representative capable of ensuring that the controller and cabinet are operating to the satisfaction of the Engineer shall be present at the turn on of the controller and shall remain until the intersection is operating to the satisfaction of the Engineer. Should a defect appear in the controller or cabinet operation, the representative shall return as often as necessary until all defects are repaired.

At the preconstruction meeting, the Contractor shall provide the names and phone numbers of two technicians who would be able to respond to controller malfunctions that occur within the 30 day acceptance period after the controller is turned on. If neither person can be reached at the time of the malfunction nor be at the location within 2 hours of receiving the call, any available electrician capable of evaluating and correcting the malfunction may be called at the State's discretion. Any and all bills resulting from defective operation of the controller or cabinet shall be the responsibility of the Contractor.

CONTROLLER:

The controller shall be capable of uploading and downloading its database to a laptop computer that has been installed with the proper software. All uploaded data shall be able to be changed within the laptop and then downloaded to the controller. The necessary cables for upload/download shall be provided and upload/download software shall be provided and installed onto the District Three laptop computer if the software and cables have not already been supplied to District Three or the software presently being used by District Three requires updating.

The controller data entry fields shall have a clear distinction between data fields and information. Data fields shall be in matrix format with a minimum of eight phases wide and four data lines deep.

The active status screen shall display the following information for all operating phases in an alpha-numeric display.

A clear distinction between the following detection's for each phase: vehicle recall, vehicle detection, pedestrian recall, and pedestrian detection.

A clear distinction among the phases receiving detection.

Status displayed simultaneously whenever one or more of the following is operating: vehicle passage timer, maximum phase timer, added initial timer, time before reduction timer, time to reduce timer, existing gap timer, walk timer, don't walk timer.

When a phase ends, the controller shall report whether the exit was a max out, gap out or force out condition. The controller shall show the yellow and red timers timing and any trailing overlap timers timing.

The color of all operating overlaps.

The phase of the controller shall be as shown in the plans.

CONTROLLER CABINET

The police door compartment shall contain a manual control cord from which the signals may be operated manually. The inside door toggle switches shall be protected from accidental contact by vertical metal slats. The slats shall extend beyond the switches, in a manner similar to the terminals on the back panel. A plastic plans holder shall be installed on the cabinet door. The holder shall be at least 11 inches high and 17 inches wide, shall open from the side, and shall not interfere with the filter. The holder shall have a means of closing the side opening to prevent water from entering.

A Plexiglas cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power panel. The cover shall completely shield the service wires, and circuit breaker wires from accidental contact.

A Plexiglas cover, or other high strength nonconductive cover, shall be installed over, and completely cover, the power terminals for the thermostatically controlled exhaust fan. The thermostat shall be of the knob type capable of adjustment by hand and without tools. The thermostat and terminals shall be mounted on the left or right side of the controller cabinet.

All harness wiring of connectors A, B, C and D shall be factory installed so that an additional phase may be added to the existing phasing by the addition of a load switch and the proper conflict monitor card pinning.

A self-adhering phasing diagram shall be placed on the inside of the cabinet door.

Three 0.4 meter (15 inch) Velcro straps shall be fastened to the front of each cabinet shelf to secure the detector amplifier cables.

Traffic signal controller and the cabinet assembly shall be fully tested by the equipment supplier. Five (5) copies of the complete cabinet wiring showing all connections shall be furnished to the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL.

LOOP DETECTOR TESTING

(Effective December 1, 1999; Revised January 1, 2007)

The Contractor is advised of the presence of existing detector loops which shall be retained in the completed signal installation. The condition of each existing loop detector which will be retained shall be documented.

The required loop detector testing shall consist of measuring the following electrical characteristics of each loop within the intersection to determine if the loop meets the indicated criteria:

1. Loop Inductance. Stable frequency (frequency varies by less than +/-3 hertz) and minimum 50 microhenries when driven by amplifier.

For any loop that does not show a stable frequency, the Contractor shall determine if the unstable frequency is due to equipment malfunctions in the cabinet or outside the cabinet. The Contractor shall notify the Engineer of the source of the unstable frequency. Any problem due to existing equipment problems in the cabinet shall be repaired by city maintenance. Any problem caused by the required construction work shall be repaired and paid for separately on this contract.

Any loop that does not exceed 50 microhenries inductance shall be replaced.

2. Loop Resistance to Ground. Minimum 50 megohms.

For any loop circuit with less than 50 megohms resistance to ground or any loop that is being replaced, the Contractor shall break the loop to lead-in splice and measure the resistance to ground of the detector loop alone and each leg of the detector loop lead-in cable. If a single leg of the lead-in cable has a low resistance to ground, the Contractor shall replace the lead-in cable. If the detector loop, separated from the lead-in cable, passes the required tests, the loop shall not be replaced.

3. Loop Circuit Resistance. Maximum 3 ohms for lead-in less than 200 feet. Maximum 5 ohms for lead-in greater than 200 feet.

For any loop circuit with resistance greater than stated above, the splice shall be opened and the loop and each leg of the lead-in cable shall be tested. If the detector loop cable is the cause of the high resistance reading, the detector loop shall be replaced. If the lead-in cable is the cause of the high resistance reading, the lead-in cable shall be replaced.

The Contractor shall furnish a Decatur Electronics Loop Tester, Model DLT-150, or superior, to measure the loop resistance above ground, and quality factor of each loop. This unit shall remain the property of the Contractor.

The measurements shall be recorded for each loop circuit, including lead-in cable, following completion of the work, in the presence of the Engineer. The measurements shall be taken at the controller cabinet.

Any damaged detector loop or lead-in cable shall be replaced.

If an existing detector loop is damaged due to construction operations, the Contractor shall notify the Department at 815-434-8505 to modify the signal program until the detector loop can be replaced. The Contractor shall replace the loop as soon as possible.

Loop detector testing will be performed at each loop detector circuit following completion of work likely to damage the existing loops. The lead-in cable must be disconnected from the detector loop panel in the cabinet to prevent damage to the inductive loop detector. When the Contractor has made all necessary repairs, the Department's Traffic Signal Section shall be contacted to meet with the Contractor at the intersection to confirm the satisfactory readings.

Method of Measurement. This work will be measured for payment per intersection, regardless of the number of tests required. Any work required to replace any splices broken for testing of the lead-in cable and detector loop shall be included in the cost of this pay item.

Basis Of Payment. This work will be paid for at the contract unit price per each intersection as LOOP DETECTOR TESTING.

SERVICE INSTALLATION, TYPE A

(Effective July 1, 1990; Revised January 1, 2007)

In addition to the requirements of Section 805 of the Standard Specifications, this item shall require the Contractor to contact the utility company, prior to beginning work, to determine the utility company regulations relating to electrical service. The Contractor shall provide the utility company an estimated date that the service connection will be required, the agency which will be responsible for monthly service charges, and the connected load for flat rate billing if required. The responsible agency and connected load information is included in the plans. The customer service agreement with the utility company shall be executed by the agency responsible for monthly service charges.

All information furnished to the utility company shall be in writing with a copy provided to the Engineer.

During the interim between the service activation date and signal turn on day, all energy charges for the intersection shall be paid by the Contractor according to Article 109.05 of the Standard Specifications. Beginning the day of the traffic signal turn on, all energy charges for the intersection will be paid by the responsible agency listed in the plans. The Contractor is responsible for making arrangements with the responsible agency to transfer billing to the responsible agency.

This work shall be included in the cost of the SERVICE INSTALLATION, TYPE A.

UNDERGROUND CONDUIT

(Effective April 1, 2003; Revised January 1, 2012)

Add the following requirements to Section 810 of the Standard Specifications:

Materials: Conduit placed under pavement, stabilized shoulder, paved median, paved driveway, curb, gutter, curb and gutter, or sidewalk shall meet the requirements of Article 810.02(a) or Article 810.02(b). In addition, rigid nonmetallic conduit shall be Schedule 80.

Construction Requirements: The tunnel created by the auger shall not be significantly larger than the conduit to prevent undue settling. No tunnel shall be left for more than two hours without conduit filling it.

INDUCTIVE LOOP DETECTOR

(Effective January 1, 2002; Revised January 1, 2012)

Inductive loop detectors shall meet the requirements of Sections 885 and 1079 of the Standard Specifications with the following modifications:

Each inductive loop detector amplifier shall be rack mounted. Each inductive loop detector amplifier channel shall have a minimum of:

- 8 sensitivity settings
- LCD program menu
- Detector logs and displays number of loop failure incidents since last reset
- Internal function to determine the ideal sensitivity setting for every loop system
- 8 frequency settings
- 32 second call extend timer
- 32 second delay timer
- Call extend and delay timers able to operate cooperatively
- LED indication for detection

The detector supplied shall be the latest Reno model or equivalent.

The Contractor shall label each amplifier for the loop and movement where they provide input according to the chart in the plans.

Basis of Payment. This item will be paid for according to Article 885.04 of the Standard Specifications.

CONCRETE HANDHOLE OR CONCRETE DOUBLE HANDHOLE

(Effective December 1, 1999; Revised January 1, 2007)

Concrete Handhole and Concrete Double Handhole shall meet the requirements of Sections 814 and 1088 of the Standard Specifications with the following modifications:

The lift ring for the cover shall consist of a solid closed ring of stainless steel at least 0.375 inch (10 mm) in diameter. The lift ring shall be attached to the cover by a loop of stainless steel at least 0.375 inch (10 mm) in diameter. The lift ring and loop shall be recessed in the cover.

SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE

This work shall be in accordance with Sections 880 and 1078 of the Standard Specifications except as modified herein.

The traffic signal heads shall consist of 300mm (12") polycarbonate sections and shall be equipped with LED assemblies for all red bulb, yellow bulb, green bulb, red arrow, yellow arrow, and green arrow indications. LED assembly shall be GELcore, Dialight or equivalent.

The traffic signal heads shall have a black finish with black doors and tunnel visors.

All traffic signal brackets shall be aluminum construction, Schedule 80, with a natural finish.

The LED signal faces shall be equipped with spade connectors and connected to the traffic signal head terminal block.

The LED assemblies for the red, yellow, and green solid and arrow indications shall meet or exceed the following minimum specifications:

RED LED ASSEMBLY

Currently, only the following models are approved by the Department for use provided that they meet the minimum specifications listed below:

| | |
|-----------------|-------------------------------------|
| <u>GELcore</u> | <u>Model DR6-RTFB-17A</u> |
| <u>Dialight</u> | <u>Model DURALED 433-1210-003XL</u> |

The LED assembly must conform to the following minimum specifications:

Lens : 300mm (12") Diameter, Red, Hard Coated for Abrasion Resistance, UV Stabilized Dome, Designed to Evenly Distribute Light Across the Entire Face of the Lens to Provide a Uniform Illuminance Across the Face of The LED, Provide a Wide Angle For Viewing, And Eliminate any "Dotty" or Grainy Appearance.

LEDs: Interconnected to minimize the effect of single LED failures, Nominal Wattage: 6-10 W or less, Nominal Wavelength: 625-626nm

Minimum Luminous Intensity (cd): 365

Product Warranty: 5 Year Replacement (Materials, Workmanship, and Intensity)

The assembly shall be capable of operating from 80 to 135 VAC with less than 10% variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Circular Signal Supplement June 2005 specifications for LED traffic signals, including intensity requirements at -40° to 74°C.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 and ITE VTCSH - STD PART 2.

YELLOW LED ASSEMBLY

Currently, only the following models are approved by the Department for use provided that they meet the minimum specifications listed below:

| | |
|----------|-------------------------------------|
| GELcore | <u>Model DR6-YTFB-17A</u> |
| Dialight | <u>Model DURALED 433-3230-001XL</u> |

The LED assembly must conform to the following minimum specifications:

Lens : 300mm (12") Diameter, Clear or Yellow, Hard Coated for Abrasion Resistance, UV Stabilized Dome, Designed to Evenly Distribute Light Across the Entire Face of the Lens to Provide a Uniform Illuminance Across the Face of The LED, Provide a Wide Angle For Viewing, And Eliminate any "Dotty" or Grainy Appearance

LEDs: Interconnected to minimize the effect of single LED failures, Nominal Wattage: 19 W or less, Nominal Wavelength: 589-590nm

Minimum Luminous Intensity (cd): 910

Product Warranty: 5 Year Replacement (Materials, Workmanship, and Intensity)

The assembly shall be capable of operating from 80 to 135 VAC with less than 10% variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Circular Signal Supplement June 2005 specifications for LED traffic signals, including intensity requirements at -40° to 74°C, except for when its terms are in conflict with the terms contained in this special provision. In such cases, this special provision shall supersede the contrary ITE specification.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 and ITE VTCSH - STD PART 2.

GREEN LED ASSEMBLY

Currently, only the following models are approved by the Department for use provided that they meet the minimum specifications listed below:

| | |
|-----------------|---|
| <u>GELcore</u> | <u>Model DR6-GCFB-17A (Clear)</u> |
| <u>Dialight</u> | <u>Model 433-2220-001XL (Tinted Lens)</u> |

The LED assembly must conform to the following minimum specifications:

Lens: 300mm (12") Diameter, Hard Coated for Abrasion Resistance, UV Stabilized Dome, Designed to Evenly Distribute Light Across the Entire Face of the Lens to Provide a Uniform Illuminance Across the Face of The LED, Provide a Wide Angle For Viewing, And Eliminate any "Dotty" or Grainy Appearance

LEDs: Interconnected to minimize the effect of single LED failures, Nominal Wattage: 9-13 W or less, Nominal Wavelength: 500nm Minimum Luminous Intensity (cd): 475

Product Warranty: 5 Year Replacement (Materials, Workmanship, and Intensity)

The assembly shall be capable of operating from 80 to 135 VAC with less than 10% variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Circular Signal Supplement June 2005 specifications for LED traffic signals, including intensity requirements at -40° to 74°C.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 and ITE VTCSH - STD Part 2

GREEN ARROW LED ASSEMBLY

Currently, only the following models are approved by the Department for use provided that they meet the minimum specifications listed below:

| | |
|-----------------|------------------------------|
| <u>GELcore</u> | <u>Model DR6-GCAAN-17A</u> |
| <u>Dialight</u> | <u>Model 432-2374-001XOD</u> |

The LED assembly must conform to the following minimum specifications:

Lens: 300mm (12") Diameter, Hard Coated for Abrasion Resistance, UV Stabilized Dome, Designed to Evenly Distribute Light Across the Entire Face of the Lens to Provide a Uniform Illuminance Across the Face of The LED, Provide a Wide Angle For Viewing, And Eliminate any "Dotty" or Grainy Appearance.

LEDS: Interconnected to minimize the effect of single LED failures, Nominal Wattage: 5-6 W or less, Nominal Wavelength: 500nm, Shall Have a Full Profile Arrow Indication (No Outlined or 2 Row Indications)

Minimum Luminous Intensity (cd): 176

Product Warranty: 5 Year Replacement (Materials, Workmanship, and Intensity)

The assembly shall be capable of operating from 80 to 135 VAC with less than 10% variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Vehicle Arrow Traffic Signal Supplement July 1, 2007 specifications for LED traffic signals, including intensity requirements at -40° to 74°C.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 per ITE VTCSH - STD Part 3.

YELLOW ARROW LED ASSEMBLY

Currently, only the following models are approved by the Department for use provided that they meet the minimum specifications listed below:

| | |
|-----------------|------------------------------|
| <u>GELcore</u> | <u>Model DR6-YTAAN-17A</u> |
| <u>Dialight</u> | <u>Model 431-3334-001XOD</u> |

The LED assembly must conform to the following minimum specifications:

Lens : 300mm (12") Diameter, Clear or Yellow, Hard Coated for Abrasion Resistance, UV Stabilized Dome, Designed to Evenly Distribute Light Across the Entire Face of the Lens to Provide a Uniform Illuminance Across the Face of The LED, Provide a Wide Angle For Viewing, And Eliminate any "Dotty" or Grainy Appearance

LEDS: Interconnected to minimize the effect of single LED failures, Nominal Wattage: 12 W or less, Nominal Wavelength: 590-592nm, Shall Have a Full Profile Arrow Indication (No Outlined or 2 Row Indications)

Minimum Luminous Intensity (cd): 141.6-146

Product Warranty: 5 Year Replacement (Materials, Workmanship, and Intensity)

The assembly shall be capable of operating from 80 to 135 VAC with less than 10% variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

The assembly shall conform to the latest applicable (Part II) ITE color requirements and meet ITE VTCSH LED Vehicle Arrow Traffic Signal Supplement July 1, 2007 specifications for LED traffic signals, including intensity requirements at -40° to 74°C, except for when its terms are in conflict with the terms contained in this special provision. In such cases, this special provision shall supersede the contrary ITE specification.

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 per ITE VTCSH - STS Part 3.

ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C

This work shall be in accordance with the applicable Articles of Sections 807, 817, 873 and 1066 of the Standard Specifications with the following modifications:

This work shall consist of furnishing and installing wire for traffic signal controller service and combination mast arm luminaire service.

When used as a grounding wire, it shall connect all existing traffic signal posts, existing and proposed mast arm assemblies, existing and proposed light poles, handholes (lids, rings, frames – except advanced loop handholes), traffic signal cabinets, lighting controllers, and exposed metallic conduits.

The proposed ground wire shall be an insulated #6 XLP green copper conductor.

This wire shall be bonded to all items and their associated ground rods utilizing mechanical lugs and bolts. This wire may be made continuous by splicing in the adjacent handholes with compression lugs. Split bolts shall not be allowed.

The grounding wire shall be bonded to the grounded conductor at the service disconnect per the NEC.

The Contractor shall provide a sufficient length of cable to ground each existing handhole lid and frame. The length of wire required to ground each handhole will not be measured for payment, but shall be included in the unit bid price for this pay item.

The Contractor shall provide grounding bushings on all metallic service conduits in the controller bases.

All clamps, hardware, and other materials required shall be included in the bid price.

Basis of Payment: This work will be paid for at the contract unit price per foot ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C which price shall be payment in full for all labor, materials, and equipment required to provide the grounding system described above.

TRAFFIC SIGNAL POST, GALVANIZED

This work shall be in accordance with Sections 878 and 1077 of the Standard Specifications except as modified herein.

The traffic signal post shall be attached to the foundation with four 3/4" x 18" galvanized anchor bolts. The post base shall be secured to the foundation using galvanized nuts and galvanized steel flat washers that have a minimum thickness of 1/4" and are trapezoidal in shape. The washers shall be sized so as to completely capture the mounting flanges of the traffic signal base. Round washers will not be acceptable.

Basis of Payment: This work will be paid for at the contract unit price each for TRAFFIC SIGNAL POST, GALVANIZED, of the length specified which price shall be payment in full for all labor, material, and equipment required to furnish and install the traffic signal post and base described above.

PEDESTRIAN PUSH BUTTON

This work shall be in accordance with Sections 888 and 1074 of the Standard Specifications except as modified herein.

All pedestrian push buttons shall have a round case and be equipped with a 2" diameter mushroom head for easy access.

The pedestrian push buttons shall be of polycarbonate construction and shall have a yellow housing. The push button shall utilize a piezo driven solid state switch.

The pedestrian push button installation shall include all crossing signs and hardware required to mount the pedestrian push button. All hardware shall be of stainless steel construction. All bolts shall be 1/4" Hex Head and no self tapping/drilling screws will be allowed.

The push buttons shall be within 10 inches of reach from sidewalk, otherwise adapter will be required at cost incidental to the pedestrian push button. Push buttons shall be a Bulldog or 4VER or equivalent.

The following pedestrian push button signs currently meet Department Specifications: Pelco, Models SF-1013-08, SF-1014-08 or approved equivalent

Basis of Payment: This work will be paid for at the contract unit price each for PEDESTRIAN PUSH BUTTON and shall be payment in full for all labor, equipment, and materials required to supply and install the pedestrian push buttons described above, complete.

PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER

This work shall be in accordance with Section 881 and 1078 of the Standard Specifications except as modified herein.

The pedestrian signal head shall consist of a single 16" polycarbonate section and shall be equipped with an overlaid LED indication with countdown timer (Walking Person/Upraised Hand).

The traffic signal head shall have a yellow finish with black doors and tunnel visors.

The LED signal faces shall be equipped with spade connectors and connected to the traffic signal head terminal block.

The LED signal face shall have international symbols (Upraised Hand - Color: Portland Orange, Walking Person - Color: Lunar White). Only filled indications will be allowed.

The LED assembly shall meet or exceed the following minimum specifications:

Currently, only the following models are approved by the Department for use provided that they meet the minimum specifications list below:

GELcore Model PS7-CFF1-26A (Filled Walking Person/Upraised Hand Overlay, with Countdown Timer)

Dialight Model 430-6479-001X (Filled Walking Person/Upraised Hand Overlay, with Countdown Timer)

The LED assembly must conform to the following minimum specifications:

Lens : 16" x 18", Hard Coated for Abrasion Resistance, UV Stabilized Dome

LEDs: Interconnected to minimize the effect of single LED failures, Nominal Wattage White: 8W or less, Nominal Wattage Orange: 11W or less, Nominal Wattage Countdown: 6W

Luminous Intensity (min): Countdown = 1,400 cd/m², Hand = 1,400 cd/m², Person = 2,200 cd/m²

Product Warranty: 5 Year Replacement

Combination hand/person pedestrian signal modules shall incorporate separate power supplies for the hand and the person displays.

The assembly shall be capable of operating from 80 to 135 VAC with less than 10% variation in intensity, shall have an operating temperature range of -40° to 74°C, and shall be sealed and highly resistant to water intrusion.

All LED Pedestrian Signal Modules shall be fully compliant to the ITE PTCSI Part-2: LED Pedestrian Traffic Signal Modules specifications adopted March 19, 2004 or the latest adopted version as listed on the ITE website at time of bid

The assembly shall be compatible with signal control equipment per NEMA TS-2, NEMA TS-1 standards, and include transient voltage protection and fusing to withstand high-repetition noise transients and low repetition high energy transients per NEMA standard 1992 per ITE VTCSH - STD Part 2.

Basis of Payment: This work will be paid for at the contract unit prices each for pedestrian signal head, led, 1-face, bracket mounted WITH COUNTDOWN TIMER and will be payment in full for all labor, equipment, and materials required to provide and install the pedestrian traffic signal heads equipped with LED indications described above, complete.

UNINTERRUPTIBLE POWER SUPPLY, STANDARD

The following models of Uninterruptible Power Supply are approved for use:

Alpha Novus XFM 1100
Techpower Development M-E XL 1000

The Contractor shall be responsible for providing Uninterruptible Power Supply that are sized appropriately for the intersection load. The total system load shall not exceed the manufacturer's specifications.

The Uninterruptible Power Supply for the proposed traffic signal cabinet shall be installed as follows:

- The UPS shall be fully integrated into the proposed traffic signal cabinet by the cabinet supplier at their facility prior to shipping the system to the Contractor
- The cabinet light, ventilation fans, heater strips, and service receptacle shall be wired to a separate circuit that will not be powered by the Uninterruptible Power Supply
- A hole of sufficient size for the cables will be drilled into the side of the cabinet to accommodate the Uninterruptible Power Supply cables and harnesses from the UPS cabinet. The hole shall be free of sharp edges and equipped with a plastic or rubber grommet.
- The manual by-pass switch shall be installed in the controller cabinet.

GENERAL REQUIREMENTS: The Uninterruptible Power Supply (UPS) shall include, but not be limited to the following: inverter/charger, power transfer relay, batteries, battery cabinet, a separate manually operated non-electronic bypass switch and all necessary hardware and interconnect wiring. The UPS shall provide reliable emergency power to a traffic signal in the event of a power failure or interruption. The transfer from utility power to battery power and vice versa shall not interfere with the normal operation of traffic controller, conflict monitor/malfunction management unit or any other peripheral devices within the traffic controller assembly.

The UPS shall provide power for full run-time operation for an "LED-only" intersection (all colors red, yellow, and green) or flashing mode operation for an intersection using Red LED's. As the battery reserve capacity reaches 50%, the intersection shall automatically be placed in all-red flash. The UPS shall allow the controller to automatically resume normal operation after the power has been restored. The UPS shall log an alarm in the controller for each time it is activated.

All Uninterruptible Power Supply shall include four batteries.

The UPS shall be designed for outdoor applications, and shall meet the environmental requirements of, "NEMA Standards Publication No. TS 2 – Traffic Controller Assemblies," or applicable successor NEMA specifications, except as modified herein.

The UPS shall conform to the following specifications:

1.1 **OPERATION**

- 1.1 The UPS shall be on line and provide voltage regulation and power conditioning when utilizing utility power.
 - 1.1.1 The UPS shall provide a minimum two (2) hours of full run-time operation and four (4) hours all-red flash operation for an "LED-only" intersection (minimum 700W/1000VA active output capacity, with 80% minimum inverter efficiency).
- 1.19 The UPS shall be equipped with an integrated safety switch that will interrupt inverter output power in the event of a cabinet knockdown. The safety switch may be either internal to the inverter/charger or externally mounted inside of the UPS cabinet. The safety switch shall be designed to interrupt output power in the event that the charger/inverter is tilted more than twenty degrees on any axis. The switch shall be mechanically latching to ensure that power is not automatically restored to the UPS until the charger/inverter has been "reset". The switch shall also be resettable and reusable unless it has been physically damaged.
- 1.2 The maximum transfer time from loss of utility power to switchover to battery backed inverter power shall be 150 milliseconds.

- 1.3 The UPS shall provide the user with 4-sets of normally open (NO) and normally closed (NC) single-pole double-throw (SPDT) relay contact closures, available on a panel-mounted terminal block, rated at a minimum 120V/1A, and labeled so as to identify each contact. For typical configuration, see the plan detail sheet.
 - 1.3.1 A first set of NO and NC contact closures shall be energized whenever the unit switches to battery power. Contact shall be labeled or marked "On Batt."
 - 1.3.2 The second set of NO and NC contact closures shall be energized whenever the battery approaches approximately 40% of remaining useful capacity. Contact shall be labeled or marked "Low Batt."
 - 1.3.3 The third set of NO and NC contact closures shall be energized two hours after the unit switches to battery power. Contact shall be labeled or marked "Timer."
 - 1.3.4 The fourth set of NO and NC contact closures shall be energized in the event of inverter/charger failure, battery failure or complete battery discharge. Contact shall be labeled or marked "UPS Fail or Status."
 - 1.3.5 A surge suppression unit shall be provided for the output power if available as an option by the UPS manufacturer.
- 1.4 Operating temperature for both the inverter/power transfer relay and manual bypass switch shall be -37 °C to +74 °C.
- 1.5 The Power Transfer Relay shall be rated at 240VAC/30AMPS minimum and Manual Bypass Switch shall be rated at 240VAC/20 amps, minimum.
- 1.55 The manual bypass switch shall be wired to provide power to the UPS when the switch is set to manual bypass.
- 1.6 The UPS shall use a temperature-compensated battery charging system. The charging system shall compensate over a range of 2.5 – 4.0 mV/°C per cell.
 - 1.6.1 The temperature sensor shall be external to the inverter/charger unit. The temperature sensor shall come with 2 meters (6'6") of wire.
- 1.7 Batteries shall not be recharged when battery temperature exceeds 50°C ± 3°C.
- 1.8 UPS shall bypass the utility line power whenever the utility line voltage is outside of the following voltage range: 100VAC to 130VAC (± 2VAC).
- 1.9 When utilizing battery power, the UPS output voltage shall be between 110 VAC and 125 VAC, pure sine wave output, ± 3% THD, 60Hz ± 3Hz.
- 1.10 UPS shall be compatible with Illinois DOT's traffic controller assemblies utilizing NEMA TS 1 or NEMA TS 2 controllers and cabinet components for full time operation.

- 1.11 When the utility line power has been restored at above 105 VAC \pm 2 VAC for more than 30 seconds, the UPS shall dropout of battery backup mode and return to utility line mode.
- 1.12 When the utility line power has been restored at below 125VAC \pm 2 VAC for more than 30 seconds, the UPS shall dropout of battery backup mode and return to utility line mode.
- 1.13 UPS shall be equipped to prevent a malfunction feedback to the cabinet or from feeding back to the utility service.
- 1.14 In the event of inverter/charger failure, battery failure or complete battery discharge, the power transfer relay shall revert to the NC state, where utility line power is reconnected to the cabinet. The UPS shall always revert back to utility line power and shall be designed to revert back to utility line power in the event of a UPS fault condition.
- 1.15 Recharge time for the battery, from "protective low-cutoff" to 80% or more of full battery charge capacity, shall not exceed twenty (20) hours.
- 1.16 When the intersection is in battery operation, the UPS shall bypass all internal cabinet lights, ventilation fans, heater strips, and service receptacles.
- 1.17 The manual bypass switch shall be wired to provide power to the UPS when the switch is set to manual bypass.
- 1.18 A blue LED indicator light shall be mounted on the front of the traffic signal cabinet or on the side of the UPS cabinet facing traffic and shall turn on to indicate when the cabinet power has been disrupted and the UPS is in operation. The light shall be a minimum 1" diameter, be viewable from the driving lanes, and shall be large enough and visible enough to be seen from 200 ft. away.
- 1.19 All 36 volt and 48 volt systems shall include an external component that monitors battery charging to ensure that every battery in the string is fully charged. The device shall compensate for the effects of adding a new battery to an existing battery system by ensuring that the charge voltage is spread equally across all batteries. All cables, harnesses, cards, and other components that are required to provide the functionality described above shall be included in the unit bid price for the Uninterruptible Power Supply. The following products are currently approved for use within District 4: Alpha Technologies: AlphaGuard with Charge Management Technology Module and Approved Equivalent
- 1.20 The UPS shall be equipped with an integrated safety switch that will interrupt inverter output power in the event of a cabinet knockdown. The safety switch may be either internal to the inverter/charger or externally mounted inside of the UPS cabinet. The safety switch shall be designed to interrupt output power in the event that the charger/inverter is tilted more than twenty degrees on any axis. The switch shall be mechanically latching to ensure that power is not automatically restored to the UPS until the charger/inverter has been "reset". The switch shall also be resettable and reusable unless it has been physically damaged.

2.0 MOUNTING AND CONFIGURATION

2.1 GENERAL

- 2.1.1 Inverter/Charger Unit shall be rack or shelf-mounted.
- 2.1.2 (Reserved).
- 2.1.3 All interconnect wiring provided between Power Transfer Relay, Bypass Switch and Cabinet Terminal Service Block shall be no greater than two (2) meters (6'6") of #10 AWG wire.
- 2.1.4 Relay contact wiring provided for each set of NO/NC relay contact closure terminals shall be #18 AWG wire.
- 2.1.5 All necessary hardware for mounting (shelf angles, rack, etc) shall be included in the bid price of the UPS. The swing-trays shall be screwed to the Type IV or Type V NEMA cabinets using continuous stainless steel or aluminum piano hinge. All bolts/fasteners and washers shall meet the following requirements:

2.3 EXTERNAL BATTERY CABINET

- 2.3.1 The external cabinet shall be a rated NEMA Type 3R Cabinet.
- 2.3.2 Inverter/Charger and Power Transfer Relay shall be installed inside the external battery cabinet and the manually operated Bypass Switch shall be installed inside the existing Traffic Signal Cabinet.
- 2.3.3 Batteries shall be housed in the external cabinet which shall be NEMA Standard rated cabinet mounted to the side of the Type IV or Type V Cabinet (see plan sheets for details). This external battery cabinet shall conform to the IDOT Standard Specifications for traffic signal cabinets for the construction and finish of the cabinet.
- 2.3.4 The external battery cabinet shall mount to the Type IV or Type V NEMA Cabinet with a minimum of four (4) bolts to the satisfaction of the Engineer.
- 2.3.5 The dimensions of the external battery cabinet shall be 25" (L) x 16" (W) x 41" (H) and installed in accordance with the plan sheet cabinet detail and this specification.
- 2.3.6 The cabinet shall include heater mats for each battery shelf and/or battery. If the UPS charger/inverter does not have facilities to accommodate heater mat connections, thermostatically controlled heater mats shall be provided with the system. The heater mat thermostat shall be a separate thermostat (from the ventilation fan thermostat) and be adjustable from 0°F to 32°F for heater mat turn-on.
- 2.3.6 A warning sticker shall be placed on the outside of the cabinet indicating that there is an Uninterruptible Power Supply inside the cabinet.

- 2.3.7 The external battery cabinet shall be ventilated through the use of louvered vents (2), filters, and one thermostatically controlled fan as per NEMA TS 2 Specifications. The cabinet shall include a cleanable or replaceable cabinet filter.
- 2.3.8 External battery cabinet fan shall be AC operated from the same line output of the Manual Bypass Switch that supplies power to the Type IV or Type V Cabinet.
- 2.3.9 The UPS with external battery cabinet shall come with all bolts, conduits and bushings, gaskets, shelves, and hardware needed for mounting. The external battery cabinet shall have a hinged door opening to the entire cabinet. The cabinet shall include a bottom constructed from the same material as the cabinet.
- 2.3.10 The external cabinet shall be equipped with a power receptacle to accommodate the inverter/charger. The receptacle shall be wired to the line output of the manual bypass switch.

3.1 MAINTENANCE, DISPLAYS, CONTROLS AND DIAGNOSTICS

- 3.2 The UPS shall include a display and /or meter to indicate current battery charge status and conditions.
- 3.3 The UPS shall have lightning surge protection compliant with IEEE/ANSI C.62.41.
- 3.4 The UPS shall be equipped with an integral system to prevent battery from destructive discharge and overcharge.
- 3.5 The UPS and batteries shall be easily replaced with all needed hardware and shall not require any special tools for installation.
- 3.6 The UPS shall be equipped with an RS-232 port.
- 3.7 The UPS shall include a resettable front-panel event counter display to indicate the number of times the UPS was activated and a front-panel hour meter to display the total number of hours the unit has operated on battery power.
- 3.8 Manufacturer shall include two (2) sets of equipment lists, operation and maintenance manuals, and board-level schematic and wiring diagrams of the UPS, and the battery data sheets. Manufacturer shall include any software needed to monitor, diagnose, and operate the UPS. The manufacturer shall include any required cables to connect to a laptop computer.
- 3.8 The UPS shall include a data cable for the serial connection to the RS232 port and diagnostic software if it is available as an option with the unit.
- 3.9 Two copies of the owner/maintenance manuals shall be provided with the UPS.

4.1 BATTERY SYSTEM

- 4.2 Individual batteries shall be 12V type and shall be easily replaced and commercially available off the shelf.
- 4.3 The batteries shall be premium gel type with a 5 year full replacement warranty.
- 4.4 Batteries used for UPS shall consist of a minimum of four (4) to eight (8) batteries with a cumulative minimum rated capacity of 240 amp-hours.
- 4.5 Batteries shall be deep cycle, completely sealed, silver alloy VRLA (Valve Regulated Lead Acid) requiring no maintenance with maximum run time.
- 4.6 Batteries shall be certified by the manufacturer to operate over a temperature range of – 40°C to +71°C.
- 4.7 The batteries shall be provided with appropriate interconnect wiring and corrosion-resistant mounting trays and/or brackets appropriate for the cabinet into which they will be installed.
- 4.8 Batteries shall indicate maximum recharge data and recharging cycles.
- 4.9 Battery interconnect wiring shall be via modular harness. Batteries shall be shipped with positive and negative terminals pre-wired with red and black cabling that terminates into a typical power-pole style connector. Harness shall be equipped with mating power-pole style connectors for batteries and a single, insulated plug-in style connection to inverter/charger unit. Harness shall allow batteries to be quickly and easily connected in any order and shall be keyed and wired to ensure proper polarity and circuit configuration.
- 4.9 Battery terminals shall be covered and insulated so as to prevent accidental shorting.

5.0 QUALITY ASSURANCE

- 5.1 UPS shall be manufactured in accordance with a manufacturer quality assurance (QA) program. The QA program shall include two types of quality assurance: (1) Design quality assurance and (2) Production quality assurance. The production quality assurance shall include statistically controlled routine tests to ensure minimum performance levels of UPS units built to meet this specification and a documented process of how problems are to be resolved.
- 5.2 QA process and test results documentation shall be kept on file for a minimum period of seven years.
- 5.3.1 Uninterruptible Power Supply designs not satisfying design qualification testing and the production quality assurance testing performance requirements described below shall not be labeled, advertised, or sold as conforming to this specification.

5.4 DESIGN QUALIFICATION TESTING

The manufacturer, or an independent testing lab hired by the manufacturer, shall perform design Qualification Testing on new UPS designs, and when a major design change has been implemented on an existing design. A major design change is defined as a design change (electrical or physical) which changes any of the performance characteristics of the system, or results in a different circuit configuration.

5.4.1 Burn In. The sample systems shall be energized for a minimum of 5 hours, with full load of 700 watts, at temperatures of +74°C and -37°C., excluding batteries, before performing any design qualification testing.

5.4.2 Any failure of the UPS, which renders the unit non-compliant with the specification after burn-in, shall be cause for rejection.

5.4.3 For Operational Testing, all specifications may be measured including, but not limited to:

5.4.3.1 Run time while in battery backup mode, at full load.

5.4.3.2 Proper operation of all relay contact closures (“On-Batt”, “Low-Batt”, “Timer” and “UPS-Fail”).

5.4.3.3 Inverter output voltage, frequency, harmonic distortion, and efficiency, when in battery backup mode.

5.4.3.4 All utility mode – battery backup mode transfer voltage levels. See UPS Spec 1.8, 1.11 and 1.12.

5.4.3.5 Power transfer time from loss of utility power to switchover to battery backed inverter power.

5.4.3.6 Backfeed voltage to utility when in battery backup mode.

5.4.3.7 IEEE/ANSI C.62.41 compliance.

5.4.3.8 Battery charging time.

5.4.5.9 Event counter and runtime meter accuracy.

5.5 PRODUCTION QUALITY CONTROL TESTING

5.5.1 Production Quality Control tests shall consist of all of the above listed tests and shall be performed on each new system prior to shipment. Failure to meet requirements of any of these tests shall be cause for rejection. The manufacturer shall retain test results for seven years.

5.5.2 Each UPS shall be given a minimum 100-hour burn-in period to catch any premature failures.

5.5.3 Each system shall be visually inspected for any exterior physical damage or assembly anomalies. Any defects shall be cause for rejection.

6.0 WARRANTY

Manufacturers shall provide a minimum two (2) year factory-repair warranty for parts and labor on the UPS from date of acceptance by the State. Batteries shall be warranted for full replacement for five (5) years from date of purchase. The warranty shall be included in the total bid price of the UPS.

The Contractor shall furnish a warranty certificate for each Uninterruptible Power Supply that includes the equipment description and details, serial numbers, effective dates, and the details of the warranty regarding materials and labor. The warranty period shall begin on the date of installation and the warranty certificate shall reflect this date.

Basis of Payment: The above work will be paid for at the contract unit price each for UNINTERRUPTIBLE POWER SUPPLY, STANDARD ,shall be payment in full for all labor, materials, and equipment required to provide, install, and test the battery backup system described above, complete.

CONCRETE FOUNDATION, TYPE E

This work shall consist installing a Concrete Foundation, Type E, of the diameter specified in accordance with Section 878 of the Standard Specifications for Road and Bridge Construction and State Standard 878001 with no exceptions.

The proposed location of the Concrete Foundation, Type E may be moved in the field to avoid conflicts at the approval of the Engineer. If foundation is moved to an area not within the removal limits shown on the plans, removal of the existing sidewalk or earth disturbance shall be completed in accordance with Section 895 of the Standard Specifications for Road and Bridge Construction and any applicable notes or Special Provisions provided in these construction documents.

Basis of Payment: This work will be paid for at the contract unit price per foot for Concrete Foundation, Type E, of the diameter specified which price shall be payment in full for all labor, material, and equipment necessary to perform the work described above.

FIBER OPTIC CABLE IN CONDUIT

(Revised January 1, 2007)

Add the following paragraph to the end of Article 871.04 of the Standard Specifications:

“The trench carrying the fiber optic cable conduit between intersections shall be marked with a one-polymer warning stake placed equidistant between handholes. The warning stake shall be a solid orange color with a warning sign at the top of the stake. The stake shall have a sign at the top stating BURIED FIBER OPTIC CABLE ↔ CALL J.U.L.I.E. 1-800-892-0123 BEFORE DIGGING. The sign shall have a nominal dimension of 14 inches (350 mm) by 3 inches (75 mm). The stake shall have a nominal dimension of 3 inches (75 mm) wide by 0.25 inch (6 mm) thick by 5.5 feet (1.67 m) long. Fifty percent of the stake length shall be buried leaving approximately 30 inches (760 mm) exposed above ground displaying the sign. The stake shall be of such design as to deflect upon impact by a vehicle and flex back to original position. The stake shall have a factory-attached anchor. The anchor shall catch soil around the stake and prevent unauthorized removal.”

This work will not be paid for separately, but shall be included in the cost of the fiber optic cable in conduit.

CONDUIT, FLEXIBLE, WEATHERPROOF

(Effective January 1, 2002; Revised January 1, 2012)

Description: This work shall consist of installing flexible conduit at bridge expansion joints. These expansion joints are at locations on the bridge where movement would damage rigid conduit and are shown on the plans.

Materials: The conduit and fittings shall meet the requirements of Articles 811.03(c) and 1088.01(a)(4) of the Standard Specifications.

Installation: The flexible conduit shall be installed according to Section 811 of the Standard Specifications. In addition to installing the flexible conduit, this work shall include gland nuts, fitting, hardware, and all miscellaneous items necessary to make the connections to the rigid conduit system and/or junction box attached to the structure.

When electrical continuity of the conduit system is required, the connections shall include bonding of the metallic core and/or bonding strap of the flexible conduit to the rigid conduit or box. Connections shall be made and coated in a manner approved by the Engineer.

The length of conduit shall be based on the maximum amount of movement at each location and shall be determined by the Engineer.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for CONDUIT FLEXIBLE, WEATHERPROOF of the diameter specified.

OPTIMIZE TRAFFIC SIGNAL SYSTEM

(Effective April 1, 2003; Revised January 1, 2007)

This work shall consist of providing a Signal Coordination and Timing (SCAT) Report and implementing optimized timings to a closed loop traffic signal system. This work is required due to the addition of signalization. MAINTENANCE OF THE SUBJECT INTERSECTION SHALL NOT BE ACCEPTED BY THE DEPARTMENT UNTIL THE OPTIMIZED TIMINGS ARE IMPLEMENTED AND THE SIGNALS ARE FUNCTIONING TO THE SATISFACTION OF THE ENGINEER.

All four (4) traffic signals in this project will be included in the system.

After all of the signalized intersections are constructed, the traffic signal system shall be optimized by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District 3 of the Illinois Department of Transportation. The Contractor shall contact the Area Traffic Signal Operations Engineer at 815-434-8505 for a listing of approved Consultants.

A listing of signal equipment, interconnect information and phasing/timing patterns may be obtained from the Department if available and as appropriate. The Consultant shall consult with the Area Traffic Signal Operations Engineer prior to optimizing the system to determine if any extraordinary conditions exist that would affect traffic flows in the vicinity of the system.

Traffic counts shall be taken at the subject intersections. Seven day/twenty-four hour automatic traffic recorder counts will be required and manual turning movement counts shall be conducted from 6:30 a.m. to 9:30 a.m., 11:00 a.m. to 1:00 p.m., and 3:30 p.m. to 6:30 p.m. on a typical weekday from midday Monday to midday Friday, and if necessary, on the weekend. Additional manual turning movement counts may be necessary if heavy traffic flows exist during off peak hours. The turning movement counts shall identify cars, heavy vehicles, buses, and pedestrian movements.

As necessary, the intersections shall be re-addressed and all system detectors reassigned in the master controller according to the current standard of District Three.

Traffic responsive program operation shall be evaluated to verify proper pattern selection and lack of oscillation and a report of the operation shall be provided to IDOT.

A Capacity Analysis shall be conducted at the subject intersection to determine its level of service and degree of saturation. Appropriate signal timings shall be developed for the subject intersections. Changes to the cycle lengths and offsets for the entire system may be required due to the addition/modification of the subject intersection. Both volume and occupancy shall be considered when developing the re-optimized timing program. Signal system optimization analyses shall be conducted utilizing PASSER II, TRANSYT 7F, SIGNAL 85, SYNCHRO 6.0 or other appropriate approved computer software.

The following traffic signal timings are required:

- a. Confirm that all signals have a minimum 4 second yellow and 2 second red and check that the formula meets latest MUTCD edition.
- b. "Zero out" all density times.
- c. Confirm pedestrian times meet MUTCD latest edition (3.5 seconds).
- d. Confirm minimum green times are 6 seconds on left turn, 8 seconds on side streets, and 10 seconds on main street.
- e. Confirm all detection is "non-locking"
- f. The following minimum warning times shall be coordinate with the railroad at the Illinois 50 at 6000 North intersection:
 - 1.0 second Delay
 - 1.0 second All Green
 - 4.5 seconds Yellow Clearance
 - 3.0 seconds All Red Clearance
 - 27.0 seconds Track Clear Green
 - 37.0 seconds TOTAL

All the intersections shall be addressed according to the current standard of District Three. The proposed signal timing plan shall be forwarded to IDOT for review and approval seven days prior to the traffic signal turn on at the intersection. The timing plan shall be implemented at least two working days prior to the turn on of the traffic signal. The timing plan shall include a traffic responsive program and a time-of-day program, which may be used as a back-up system. After downloading the system timings, the Consultant shall make fine turning adjustments to the timing in the field to alleviate observed operating conditions and to enhance operations. The timing plans shall be re-evaluated after the signal has been turned on and traffic has had an opportunity to adjust to the new signals. Any necessary timing changes shall be made at that time with the approval of the Area Signal Engineer.

The following deliverables shall be required:

- Consultant shall furnish to IDOT a cover letter describing the extent of the optimization work performed.
- Consultant shall furnish an updated intersection graphic display for the subject intersection to IDOT and to IDOT's Traffic Signal Maintenance Contractor.
- Consultant shall furnish to IDOT one (1) copy of the technical memorandum for the optimized system. The technical memorandum shall include the following elements:
 1. Brief description of the project
 2. Printed copies of the analysis output from Synchro (or other appropriate, approve optimization software file)
 3. Turning movement and automatic traffic recorder counts, capacity analyses for each count period, computer optimization analyses for each count period, proposed implementation plans and summaries including comparison results and special recommendation and /or observations. Copies of the entire database including intersection displays and any other displays which the system software allows shall be furnished to the Department and to the Department's Traffic Signal Maintenance Contractor.

- Consultants shall furnish to IDOT two (2) CD's for the optimized system. The CDs shall include the following elements:
 1. Electronic copy of the technical memorandum in PDF format
 2. Revised Synchro files (or other appropriate, approved optimization software file) including all signals in the closed loop system
 3. Traffic counts conducted at the subject intersections
 4. New or updated intersection graphic display file for the subject intersections
 5. The CD shall be labeled with the IDOT system number and master locations, as well as the submittal date and the consultant logo. The CD case shall include a clearly readable label displaying the same information securely affixed to the side

Basis of Payment: This work will be paid for at the contract unit price per lump sum for OPTIMIZE TRAFFIC SIGNAL SYSTEM.

DRILLED SHAFT FOUNDATIONS

(Effective April 1, 2008)

For light pole (Section 836) and traffic signal (Section 878) drilled shaft foundations, Class SI concrete may be used in lieu of the Class DS concrete specified in Article 1020.04 of the Standard Specifications. If Class SI concrete is used, the entire length of the drilled shaft shall be vibrated.

SETTLEMENT PLATFORMS

This work shall consist of furnishing and erecting settlement platforms in accordance with applicable portions of Section 204 of the Standard Specifications and as specified herein. The locations are as follow:

1. 6000N Road Sta. 7473+00
2. 6000N Road Sta. 7477+00

The exact location shall be discussed with the District Geotechnical Engineer prior to installation.

This work will be paid for at the contract unit price per sq. yd. as FURNISHED EXCAVATION.

WHITEWASHING FOR CONCRETE PAVEMENT

Description. This work shall consist of whitewashing the bituminous concrete or bituminous stabilized subbase for concrete pavement.

Materials. Materials shall meet the requirements of the following Articles of the Standard Specifications:

| Item | Article/Section |
|-------------------------------------|-----------------|
| (a) Water ----- | 1002 |
| (b) Hydrated Lime----- | 1012.01 |
| (c) Calcium Carbonate Pigments----- | (Note 1) |

Note 1: ASTM D-1199, Type GC or PC, Grade II or finer. Other materials or grades may be used with the approval of the Engineer provided the resulting coating is bright white and uniform in nature. By-product lime will not be allowed.

Equipment. Equipment shall be capable of mixing, continuously agitating, and applying the prepared solution in a uniform manner.

Construction Requirements. When the pavement will be placed between May 15 and October 15, the surface of the bituminous concrete base or bituminous stabilized subbase shall be whitewashed. Whitewashing shall be completed prior to placing the reinforcing steel or load transfer devices. Whitewashing shall not be applied when rain is imminent.

The whitewash shall be prepared by combining two parts water to one part pigment by weight. The ingredients shall be mixed until smooth in consistency and free of lumps. If sufficient coating can be demonstrated, the ratio may be increased up to three parts water to one part pigment by weight with the approval of the Engineer. After mixing, the whitewash shall be continually agitated until applied.

The whitewash shall be uniformly applied to the entire bituminous concrete base or bituminous stabilized subbase at a rate of 0.35 L/sq m (0.075 gal/sq yd). The method of application shall be approved by the Engineer. Thick films from splits or over application shall be removed by means that does not damage the base or subbase.

Method of Measurement. White washing for concrete pavement will be measured for payment in square yards (square meters).

Basis of Payment. White washing for concrete pavement will be paid for at the contract unit price per square yard (square meter) for WHITEWASHING FOR CONCRETE PAVEMENT.

CONNECTION OF PIPE DRAINS AND UNDERDRAINS TO DRAINAGE STRUCTURES

When required, pipe drains and underdrains shall be connected to existing and proposed drainage structures. The Contractor shall exercise proper care so as not to damage drainage structures when cutting holes for pipe drains or underdrains. Pipe drains and underdrains shall be grouted in place. The method and materials used to cut holes in drainage structures and grout pipes shall be approved by the Engineer.

Pipe drains shall be placed a minimum of 8 inches above the tip of the highest pipe in a drainage structure.

This work will not be paid for separately, but shall be considered as included in the contract unit price bid for the associated pipe drain or pipe underdrain items.

PIPE UNDERDRAIN REMOVAL

This work shall consist of removing and disposing of existing pipe underdrains located beneath the I-57 mainline pavement. This work shall include the removal and disposal of pipe underdrain, underdrain outlets and concrete headwalls for pipe underdrains. Any excavation made by the Contractor for the removal shall be replaced. The excavated space shall be filled with material satisfactory to the Engineer and placed according to Section 205 of the Standard Specifications by and at the expense of the Contractor. Materials resulting from the removal of the existing underdrain and headwalls shall be disposed of in accordance with Article 202.03 of the Standard Specifications. The upstream end of existing pipe underdrains that are to remain shall be plugged. This work will not be paid for separately, but shall be considered as included in the contract unit price bid for Earth Excavation.

WETLAND AREAS

(Effective April 3, 1997; Revised April 22, 2010)

Description: According to Federal Executive Order 11990, dated May 24, 1977, and Articles 107.01 and 107.23 of the Standard Specifications, the Contractor shall protect the wetland areas on or adjacent to this project.

This work shall consist of constructing, maintaining, removing, and disposing of a temporary fence, perimeter erosion barrier, and signs as shown on the plans and as described herein.

Materials: Temporary fence shall be a minimum of 4 ft. (1.2 m) in height and shall be a high visibility orange snow fence. Fence stakes shall meet the requirements of Article 1081.15(b) of the Standard Specifications.

Perimeter erosion barrier shall meet the requirements of Section 280 of the Standard Specifications.

Signs shall meet the requirements of Article 720.02 of the Standard Specifications and shall be 9" x 12" (225 mm x 300 mm) and shall read "Federally Protected Wetlands: KEEP OUT." Sign supports shall meet the requirements of Section 1093 of the Standard Specifications.

Construction Requirements: The Contractor shall install fence at all wetland areas as shown on the plans. The Contractor shall also install a minimum of two signs at each wetland location. Signs shall not be spaced greater than 300' (100 m) apart.

The Contractor shall remove the temporary fence at the completion of the project.

Method of Measurement: The temporary fence will be measured for payment in place in feet (meters) along the top of the fence. The signs, sign supports, and fence stakes will not be measured for payment.

Perimeter erosion barrier will be measured for payment according to Article 280.07 of the Standard Specifications.

Basis of Payment: The temporary fence will be paid for at the contract unit price per foot (meter) for TEMPORARY FENCE, which price shall include the cost of the snow fence, fence stakes, signs, and sign supports.

Perimeter erosion barrier will be paid for according to Article 280.08 of the Standard Specifications.

TEMPORARY CONSTRUCTION/WATERWAY PERMITS (CORPS OF ENGINEERS)

(Effective January 1, 2001; Revised January 1, 2002)

Temporary in-stream work for proposed construction activities has been authorized from the Army Corps of Engineers using the following guidelines:

All requests made by the Contractor shall refer to Permit No. **CEMVR-OD-P-2013-679** for: **6000 N Rd Unnumbered Structure over Tributary to Rock Creek.**

Temporary causeway / work pads:

- The permit application was submitted without proposing the use of temporary work pads/causeways. It was assumed that the structure will be removed and replaced without requiring any work in the stream.

Should the Contractor desire to deviate from the guidelines currently imposed under the permit as listed above, then full design details including location, material specifications, and hydraulic analysis should be included in a request to the Army Corps of Engineers. Requests shall be made to United States Army Corps of Engineers, Rock Island District, Clock Tower Building, Rock Island, IL 61204.

Any additional request is at the discretion of the Contractor; therefore, any delays in receiving approval for various methods outside of the given parameters will **not** be cause for additional compensation.

CONCRETE MEDIAN, TYPE SB (SPECIAL)

This work shall consist of constructing solid medians in accordance with Section 606 of the Standard Specifications, as shown in the plans, and as directed by the Engineer. Curb and gutter will be a different Type B curb on either side of the median and is to be formed according to the type shown in the plans.

This item will be paid for at the contract unit price per square foot for CONCRETE MEDIAN, TYPE SB (SPECIAL) and will be measured for payment from edge of pavement to edge of pavement.

AGGREGATE SHOULDERS TYPE B

(Effective July 1, 1990; Revised January 1, 2007)

The aggregate shoulder shall be constructed according to Section 481 of the Standard Specifications. The shoulder shall be constructed in two lifts. The first lift shall be placed and compacted flush with the top of the adjacent HMA shoulder or leveling binder. Placement of the HMA surface course will not be allowed until the first lift of aggregate shoulder is constructed.

AGGREGATE SHOULDER REMOVAL

(Effective June 22, 2012)

This item shall consist of the removal of temporary aggregate shoulders that are placed adjacent to temporary pavements as part of the Maintenance of Traffic and Construction Staging for the project.

The work shall be performed in accordance with Section 440 of the Standard Specifications. Disposal of the aggregate shoulder materials shall be according to Section 202.03 of the Standard Specification.

This work will be measured on the basis of the length, width and depth of aggregate shoulder as measured in place for pay item Aggregate Shoulders, Type B 6" and as converted to units of Cubic Yards.

Existing aggregate shoulders that may be in place or aggregate shoulders that may be placed along existing pavements, shoulders, or in conjunction with existing guardrails shall not be measured separately for payment. Such aggregate materials shall be removed only when necessary as earth excavation according to Section 202 of the Standard Specifications.

This work will be paid for at the contract unit price per Cubic Yard for AGGREGATE SHOULDER REMOVAL.

CONTRACTOR ACCESS

(Revised August 15, 2005; Revised January 1, 2008)

At road closure locations where Type III barricades are installed in a manner that will not allow contractor access to the project without relocation of one or more of the barricades, the arrangement of the barricades at the beginning of each work day may be altered, when approved by the Engineer, in the manner shown on Highway Standard 701901 for Road Closed to Through Traffic. "Road Closed" signs (R11-2), supplemented by "Except Authorized Vehicles" signs (R3-I101), shall be mounted on both the near right and the far left barricade(s). At the end of each work day, the barricades shall be returned to their in-line positions. This work will not be paid for separately, but shall be included in the associated traffic control pay items.

Additional barricades, drums or cones, required by the Engineer to control traffic when relocation for contractor access is used, will not be paid for separately, but shall be included in the associated traffic control pay items.

VEHICLE PARKING

(Revised January 1, 2007)

Parking of personal vehicles within the interstate right of way will be strictly prohibited. Parking of construction equipment within the right of way will be permitted only at locations approved by the Engineer and never within median area or overnight on any roadway area.

EQUIPMENT ILLUMINATION

(Revised January 26, 1998; Revised January 1, 2007)

The Contractor shall equip all machinery and vehicles with a flashing amber dome light, installed so the illumination is visible from all directions.

KEEPING ROADS OPEN TO TRAFFIC

(Effective December 1, 1999; Revised December 14, 2009)

All lanes of I-57, US Route 45/52 and IL Route 50 shall be open to traffic during the legal holiday periods according to Article 107.09 of the Standard Specifications, during weekends defined as 3:00 p.m. Friday to 12:00 midnight Sunday, and at the end of each work day, with the following exceptions:

IL Route 50

- Full time lane and shoulder closures shall be permitted during reconstruction of IL Route 50 provided that a minimum of one lane of traffic is provided in each direction during the above time periods.
- A minimum of one lane of traffic in each direction shall be provided during adjacent construction activities.

I-57

- Lane closures for pavement resurfacing on I-57 will be allowed overnight between 6:00 p.m. and 10:00 a.m. except on weekends and legal holiday periods as defined above, or as directed by the Engineer.
- During demolition of the existing structure carrying 6000 North over I-57 and during the placement of steel beams for the replacement structure 046-0148, the closure of both lanes of I-57 traffic beneath the structure in either one or both directions shall be allowed overnight between 7:00 p.m. and 7:00 a.m. During such closures, approaching southbound I-57 traffic shall be reduced to a single southbound lane that is detoured along the newly constructed southbound ramps and approaching northbound I-57 traffic shall be reduced to a single northbound lane that is detoured along the newly constructed northbound ramps.
- As a contingency plan in the event of an emergency within the I-57 work zone, one direction of I-57 traffic may be detoured to follow the alternate signed route. The Contractor shall provide flaggers at four Division Street intersections in the Village of Manteno for the duration of the detour.

In order to minimize the length of lane closures during work operations, the following are required:

Lane closures shall be limited to one half mile ahead of the work operation.
Priming is also limited to one half mile in advance of the paving machine.

This work will not be paid for separately, but will be included in the cost of the applicable traffic control items.

CHANGEABLE MESSAGE SIGN

(Effective December 1, 1999; Revised August 7, 2008)

In addition to any changeable message signs shown in the traffic control standards, the Contractor shall furnish 10 Changeable Message Signs for this project at the following locations as directed by the Engineer:

- The north & south legs of IL 50 – 2 signs total
- The north & south legs of US 45/52 – 2 signs total
- EB & WB on the west leg of 6000N – two week public notification of 30 day closure for the construction of culvert - 2 signs total
- NB & SB on I-57 – Additional signs for public information – 2 signs total
- NB & SB on I-57 – Additional signs for detouring traffic up and down ramps for I-57 closures – 2 signs total

The signs shall be operational two weeks prior to any lane closure and shall be located as directed by the Engineer. Any relocation of the signs directed by the Engineer during construction will not be paid for separately, but shall be included in the cost of the CHANGEABLE MESSAGE SIGN. Note that two changeable message signs shall be provided by the Contractor for use on I-57 as part of Standard 701400 (Special) and these signs will not be paid for separately.

UNEVEN LANES

(Effective July 24, 2000, Revised December 14, 2009)

Two “UNEVEN LANES” signs (W8-11(FO)) shall be installed at intervals not greater than 2 miles and on all entrance ramps when work creates a difference in elevation between lanes that will be open to traffic. These signs shall be removed or covered when the lanes are returned to the same elevation. These signs will not be paid for separately, but shall be included in the cost of the applicable traffic control items.

PORTABLE, VEHICLE MOUNTED, CHANGEABLE MESSAGE SIGN

(Effective August 7, 2008; Revised August 16, 2013)

Description. This item shall consist of heavy duty vehicles fitted with a truck mounted attenuator and with a permanently mounted changeable message sign. The vehicle mounted message sign shall be required when Traffic Control and Protection, Standard 701401 (Special) and Traffic Control and Protection, Standard 701402 (Special) is in place and the Contractor is

working on the adjacent closed lane or shoulder area. Vehicle mounted message signs may also be required when high volumes of traffic occur such as on weekends and holidays. Specific times will be determined by the Engineer.

The vehicle location shall be in advance of the lane closure taper and in advance of any stopped traffic on the interstate.

Construction Requirements. The Contractor shall provide a person who shall remain with the vehicle at all times it is use. The person shall have in his/her possession a current driver's license. The person shall be capable of operating the vehicle and capable of promptly programming and/or reprogramming the message sign to provide the messages as directed by the Engineer.

When the vehicle is not in use, it shall be stored at a location approved by the Engineer. The stored vehicle shall be capable of being on the jobsite within five minutes.

The sign shall meet the applicable requirements of Article 701.15 of the Standard Specifications.

Equipment. The vehicle shall be fitted with a truck mounted attenuator and should have an actual weight of no less than 11,000 pounds and no greater than 26,000 pounds. Higher weights may be used when approved by the Engineer and the attenuator manufacturer.

The message sign shall meet the applicable requirements of Article 1106.02(i) of the Standard Specifications. Character height shall be 10 in. (250 mm) minimum.

Method of Measurement. The vehicle with the mounted changeable message sign will be measured on a calendar month basis.

The person provided by the Contractor to operate the truck and message sign will be paid for separately on a per hour basis.

Basis of Payment. The vehicle and portable changeable message signs will be paid for at the contract unit price per calendar month for PORTABLE VEHICLE MOUNTED CHANGEABLE MESSAGE SIGN. The person provided by the Contractor to operate the truck and message sign will be paid for at the contract unit price per hour for MESSAGE BOARD VEHICLE DRIVER.

ALTERNATE ROUTE SIGNING

(Effective August 1, 2008; Revised September 28, 2012)

Description. This work shall consist of the furnishing, installation, maintenance, and removal of signing for an alternate route for Interstate Route 57 as shown on the plans.

Materials. Materials shall be according to the applicable portions of Section 701 of the Standard Specifications and as shown on the plans.

Construction Requirements. The alternate route signing shall be in place prior to beginning construction on Interstate Route 57 and shall remain in place until the completion of the project. If all lanes of the Interstate are to remain open for an extended period of time during the project, such as a winter shutdown, the Contractor shall cover the signs until lane closures resume.

Method of Measurement. Alternate route signing will be measured for payment on a lump sum basis.

Basis of Payment. This work will be paid for at the contract lump sum price for ALTERNATE ROUTE SIGNING.

MAXIMUM DROP-OFFS FOR TWO-LANE, TWO-WAY TRAFFIC

(Effective December 14, 2009, Revised January 12, 2010)

When the Contractor's operations cause a differential in elevation greater than 1.5 in. (38 mm) between adjacent lanes, the lane shall remain closed. The Contractor shall adjust his milling and paving operations so that all traffic lanes are open at the end of each work day.

To meet the above requirement, the Contractor shall:

Place the leveling binder lift immediately following the milling operation before opening the lane to traffic or

Place a temporary wedge after the milling operations (minimum 1V:3H slope) or

Mill a sloped wedge between lanes (minimum 1V:3H slope).

When the differential in elevation between adjacent open traffic lanes is greater than 1 in. (25 mm) and less than or equal to 1.5 in. (38 mm), "UNEVEN LANES" signs (W8-11(FO)) shall be erected at 1 mile (1.6 km) intervals.

This work will not be paid for separately, but shall be included in the cost of the applicable traffic control items.

PAVEMENT MARKING REMOVAL/WORK ZONE PAVEMENT MARKING REMOVAL

(Effective August 15, 2005; Revised January 1, 2009)

All permanent and work zone pavement markings shall be removed according to Article 1101.12 Water Blaster with Vacuum Recovery and the applicable portions of Sections 703 and 783 of the Standard Specifications and as described herein. Pavement marking tape type III may be peeled or burned off, however, all remnants or burn marks shall be hydro-blasted.

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

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

REMOVE IMPACT ATTENUATOR SAND MODULE

This work shall be completed in accordance with the applicable portions of Section 440 of the Standard Specifications. The Contractor shall remove the existing sand module impact attenuators at the locations shown on the removal plans near the existing cross over bridges. This work and the necessary removals shall be coordinated with the traffic control plan for this project.

All empty sand modules shall remain the property of IDOT and delivered to the IDOT maintenance facility as directed by the Engineer.

This work will be measured and paid for at the contract unit price per each for REMOVE IMPACT ATTENUATOR SAND MODULE which price shall include removal of the sand module impact attenuators and the satisfactory disposal of all materials, and delivery of the sand modules as specified above.

REMOVE ATTENUATOR BASE

This work shall be completed in accordance with the applicable portions of Section 440 of the Standard Specifications. The Contractor shall remove the existing attenuator base upon the removal of the sand module impact attenuators at the locations shown on the removal plans near the existing cross over bridge. This work and the necessary removals shall be coordinated with the traffic control plan for this project.

This work will be measured and paid for at the contract unit each for REMOVE ATTENUATOR BASE which price shall include removal of the concrete bases for the attenuator barrels and the satisfactory disposal of all materials.

MANHOLES WITH RESTRICTOR PLATE

Description: This item consists of the furnishing and installation of the manhole with restrictor plate as shown in the plans and details. The work shall include furnishing, transporting material and installation for all associated work to fully construct the manhole with restrictor plate.

Materials: All materials for the manhole shall be in accordance with Article 602.02 of the Standard Specifications. All steel fasteners and anchors shall be in accordance with Articles 1006.08 and 1006.09 of the Standard Specifications.

Construction Requirements: All construction requirements shall be in accordance with Section 602 of the Standard Specifications.

Method of Measurement: This work will be measured for payment in units of EACH.

Basis of Payment: This work will be paid for at the contract unit price per each for MANHOLES WITH RESTRICTOR PLATE, which price shall include all labor, tools, materials and equipment necessary and all associated work to complete the MANHOLES WITH RESTRICTOR PLATE in accordance with the plans, details and as described herein.

MANHOLE SPECIAL

Description: This work shall consist of furnishing and installing reinforced concrete pipe in the alignments indicated in the details to allow for storm sewers of differing diameters, angles of connection other than 180 degrees, and multiple pipes to be constructed and connected without the use of a proper manhole. The pipe and actual seam between the pipe sections shall contain steel reinforcement as required by ASTM C 76. It is not necessary that the reinforcement between the two pipe sections be woven or interlocked together. The corresponding smaller diameter pipe sections shall, as a minimum, meet the strength requirements of IDOT Type 1 Class A. The large diameter pipe (48-inch, 60-inch, and 72 inch) of the manhole special shall, as a minimum, meet the strength requirements of IDOT Type 2 Class A. The MANHOLE SPECIAL is not subject to D-load testing or concrete strength determined by extracting a core sample from the manufactured section. However, if flaws in the concrete in the pipe sections or at the seam are visible, the MANHOLE SPECIAL may be rejected.

The interior of the MANHOLE SPECIAL shall be smooth, allowing free flow. No catch points or sharp corners are allowed.

The sections shall be fabricated as a single integral unit.

Method of Measurement: MANHOLE SPECIAL will be measured for payment as each for furnished and installed.

Basis of Payment: MANHOLE SPECIAL will be paid for at the contract unit price per Each.

**INLETS, TYPE A, TYPE 3V FRAME AND GRATE
INLETS, TYPE B, TYPE 3V FRAME AND GRATE**

Description: This item consists of the furnishing and installation of INLETS, TYPE (as specified), TYPE 3V FRAME AND GRATE in accordance with Section 602 of the Standard Specifications.

Materials: All materials for the manhole shall be in accordance with Article 602.02 of the Standard Specifications.

Basis of Payment: This work will be paid for at the contract unit price per each for INLETS, TYPE (as specified), TYPE 3V FRAME AND GRATE.

FRAME AND GRATE CURB PLATE

Description: This work shall consist of furnishing and installing a curb plate with perpendicular, diagonal, or no drainage slots (listed in preferential order) at curb locations where there is depressed curb. The curb plate shall be used instead of the curb box. The curb plate shall be rated for highway (HS20) loading. The curb plate shall be adjustable to match the adjacent depressed curb geometry. The curb plate shall be constructed of a material in accordance with Article 602.02 of the Standard Specifications.

The placement of the curb plate shall be such to avoid catch points and sharp corners in gutter flow.

Method of Measurement: Frame and Grate Curb Plate will be included in the cost of frame and grate for the inlet as shown in the plans and will not be paid for separately.

Basis of Payment: Included in the cost of the frame and grate.

LUMINAIRE SHIELD

Description: This work shall consist of furnishing and installing luminaire shields on selected high mast luminaires to control the light trespass to adjacent cultivation fields. This work shall be performed according to the Standard Specifications, contract plans and as stated herein.

Materials: The shield must be manufactured by the same manufacturer as the luminaire.

Installation: The shield must securely and permanently attach to the luminaire so as not to be displaced by wind or require ongoing maintenance to realign. Attachment methods using clamps, belts, straps etc. are not acceptable and shall not be used.

The shield shall not diminish or alter the photometric performance of luminaire except to limit trespass lighting on the house side of the support structure.

The shield shall not limit access to the luminaire for maintenance.

The shields shall be installed on all luminaires on Towers T1, T7, T8 and T17.

Light Trespass: Specific shielding requirements are as follows:

At the distance of 85 ft from the center of tower on the house side, horizontal illuminance point values at a ground level shall not exceed 0.20 fc. The design tower height shall be 110 ft and it shall have 6-400W shielded luminaires.

Shop drawing submittal shall include calculations demonstrating that this requirement is met.

Basis of Payment: This work shall be included in a cost of the high mast luminaire pay item. This shall include supplying and installing the shields as described herein and as indicated on the plans. No separate payment will be made for luminaire shield.

LIGHT TOWER

Description: This work shall consist of furnishing and installing a light tower according to Section 835 the Standard Specifications, according to the plans, and as described herein.

Materials: The assembly & installation of all light towers shall be completed under the supervision of a representative of the Manufacturer. At the time of the final inspection, the Contractor shall provide to the Engineer the Manufacturer's written certification, signed by their supervising representative that all towers have been properly installed.

Shaft. Hinges shall be heavy duty, suitable for the weight of the handhole door with all attached components including the junction box, circuit breakers, and transformer. Hinges found to be bent or otherwise damaged shall be replaced and sufficiently bolted to the handhole frame.

Head Frame. The hood shall be attached to the head frame plate with a stainless steel tether of the same diameter as that of the support or hoist cable. The hood shall be easily removed for maintenance and remain connected to the head frame by the tether.

Luminaire Ring. Removable gasketed doors for a fully enclosed ring shall be permanently and securely attached with locking type, stainless steel hardware.

Holes drilled in the terminal box for conduit fittings shall not be oversized or the box shall be replaced at no cost to the Department. Stainless steel conduit fittings shall be used to connect conduit to the junction box.

The weight of the luminaire ring and all attachments shall be balanced so that the ring remains level when raised and lowered. Ring designs shall allow unrestrained rotation of the luminaires for aiming.

Lowering and Support Mechanism. Each safety chain shall be of sufficient strength as to independently withstand the weight of the entire luminaire ring assembly and seating force.

Power Supply. Operating handles and nameplates for the main and motor circuit breakers shall be securely and permanently attached to the enclosure. Operating handles shall be oriented such that the up position of the handle corresponds to a breaker position of ON.

The transformer secondary circuit breaker shall be according to Article 1068.01(e)(3).

Winch. The winch drum shall have a cable guide to keep the winch cable paying on and off the winch drum in smooth, continuous layers with no gaps or bunching. The cable guide will be designed to protect the winch cable and prevent abrasion to it.

Lightning Protection. All connections to the air terminal conductor and the grounding electrode conductor shall be of the compression type wherever possible. Bolted connections will not be accepted. The grounding electrode conductor installed between the 2-hole NEMA pad and the grounding electrode shall be kept as short as possible. Threads in all grounding lugs shall be protected with plastic inserts during shipment.

Basis of Payment: The basis of payment for LIGHT TOWER shall be according to Article 835.05 of the Standard Specifications.

LUMINAIRE TESTING

Revise Article 1067.01(h) of the Standard Specifications to read:

Inspection and Testing: Each luminaire type, wattage, and distribution with a contract quantity of 30 or more shall be inspected and tested, unless noted otherwise. Testing is not required for temporary lighting luminaires. The Inspection and Testing process consists of random selection, physical inspection, photometric testing, electrical testing, and evaluation. Luminaire testing coordination shall be the Contractor's responsibility. The Contractor shall begin the inspection and testing process within 7 calendar days after shop drawing approval and shall ensure that the testing causes no delays to construction. All costs associated with luminaire testing shall be included in the bid price of the luminaire(s) to be tested. Failure to coordinate luminaire testing shall not be grounds for additional compensation or extension of time.

The Inspection and Testing process shall be performed by an Independent Witness and a laboratory properly accredited for each of the required tests. The qualifications of the Independent Witness and laboratory shall be submitted to the Electrical Unit in Springfield for approval prior to the start of the Luminaire Testing process. A laboratory independent of the luminaire manufacturer, distributor, and contractor shall self-certify the test results, and the Independent Witness does not need to be present during the testing. Otherwise, the Independent Witness must be present during the testing and shall certify the test results.

Random Selection: The Independent Witness shall randomly select a quantity of sample luminaires from the entire completed lot of luminaires for each type, wattage, and distribution at the manufacturer's facility or the Contractor's storage facility. Selections from partial lots are not permitted. For each luminaire type requiring testing, one luminaire sample plus one additional sample for each additional luminaire quantity of 50 shall be tested. The Independent Witness shall mark each sample luminaire's shipping carton(s) with the IDOT Contract Number and a unique sample identifier.

Physical Inspection: At the time of random selection, the Independent Witness shall inspect the luminaire for compliance with this Special Provision. The physical inspection shall include, but is not limited to, the items in the Luminaire Physical Inspection Checklist. If deficiencies are found during the physical inspection, the Contractor shall have all luminaires of that type inspected for the identified deficiencies and shall correct the problem(s) where found. Random luminaire selection and physical inspection must then be repeated. When the physical inspection is successfully completed, the Independent Witness shall mark the project number and sample identifier on the interior housing and ballast of the luminaire.

Photometric Testing: All testing shall cover the full spherical light output at a maximum of 5 degree intervals on both the vertical planes and the cones. Tests that "mirror" results from one hemisphere or quadrant to another are not acceptable. The Independent Witness or the Independent Test Laboratory's authorized representative shall observe and verify the installation of the luminaire on the photometer and lamp stabilization prior to initiating measurements. The laboratory shall mark its test identification number on the interior of each sample luminaire.

The results for each photometric test performed shall be presented in a report that includes the IDOT contract number, sample identifier, and the outputs listed in Article 1067.01(g) of the Standard Specifications. The report shall also include complete photometric calculations based on specified requirements and test results. The calculated results for each sample luminaire shall meet or exceed the Contract Specified Levels in the Luminaire Performance Table.

Electrical Testing: The results of each electrical test performed shall be presented in a report that includes the IDOT contract number, sample identifier, and the following outputs: confirmation of correct wiring, ballast dielectric test, starter test, and lamp current crest factor test results, ballast losses in watts as a percent of input power, minimum power factor over the design range of nominal input voltage at nominal lamp voltage, lamp volt-watt traces at 90%, 100%, and 110% of nominal input voltage with ANSI Trapezoid shown, and a table of ballast characteristics showing input voltage, watts and power factor, output volts, amperes, watts and crest factor, as well as ballast losses over the range of values required to produce the lamp volts-watt traces.

Summary Test Report: The Summary Test Report shall consist of a narrative documenting the test process, highlight any deficiencies and corrective actions, and clearly state which luminaires have met or exceeded all test requirements and may be released for delivery to the job site. The Summary Test Report shall include appendices containing all Physical Inspection Checklists, Photometric and Electrical Test Reports, and Photometric Test Evaluations sorted by luminaire type, wattage, and distribution. All test reports shall be certified by the Independent Witness or the Independent Test Laboratory's authorized representative by a dated signature on the first page of each report. The Summary Test Report shall be delivered to the Electrical Unit in Springfield and the Contractor as a PDF file attached to an e-mail. Hard copy reports shall be delivered to the Engineer as an information-only submittal.

Should any of the tested luminaires fail to satisfy the specifications and perform according to approved submittal information, all luminaires of that type, wattage, or distribution are unacceptable and shall be replaced. Replacement luminaires must meet the specifications, and therefore the submittal and testing process for the unacceptable luminaire type(s), wattage(s) and distribution(s) must be repeated in its entirety.

The Contractor may request in writing permission from the Electrical Unit in Springfield that unacceptable luminaires be corrected in lieu of replacement. The request shall identify the corrections to be made. The request shall identify which re-tests, if any, the Contractor requests to be waived because of prior acceptable results. Upon approval of the request, the Contractor shall apply the correction to the entire lot of unacceptable luminaires. Once corrections are completed, the luminaire testing process shall be repeated, including selection of a new set of sample luminaires, less any re-tests the Electrical Unit agreed to waive. The same quantity of sample luminaires shall be retested as in the original testing. Luminaires which are not corrected shall not be re-tested.

The process of retesting corrected or replacement luminaires shall be repeated until luminaires for each type, wattage, and distribution are approved for the project. Corrections and re-testing shall not be grounds for additional compensation or extension of time.

Illinois Department of Transportation
 Luminaire Physical Inspection Checklist

DOT Contract No: _____ Date: _____ Inspector: _____

Luminaire Type: _____ Wattage: _____ Distribution: _____

Packaging:

| Inspection Item | Sample: | Sample: | Sample: | Sample: |
|---|---------|---------|---------|---------|
| Shipping carton undamaged | | | | |
| Shipping carton properly labeled | | | | |
| Packaging adequately secures and protects luminaire | | | | |

Luminaire Housing

| Inspection Item | Sample: | Sample: | Sample: | Sample: |
|--|---------|---------|---------|---------|
| Paint and coatings even and unblemished | | | | |
| Lens not cracked or scratched | | | | |
| No dents, cracks, or other malformations present | | | | |
| Correct breather vent and filter present | | | | |
| Wattage and distribution labels correct | | | | |
| Pole or bracket mounting hardware correct | | | | |

Lamp Compartment

| Inspection Item | Sample: | Sample: | Sample: | Sample: |
|--|---------|---------|---------|---------|
| Reflector secure, clean, and unblemished | | | | |
| Lens properly secured to door or housing | | | | |
| Lamp socket undamaged and secure | | | | |
| Lamp socket in correct position (if multi-position) | | | | |
| Lamp door gaskets correctly installed | | | | |
| Lamp door latch operates correctly | | | | |
| All fasteners are stainless steel | | | | |
| Hardware used to access lamp compartment and remove lamp door and lamp is captive. | | | | |

Ballast Compartment

| Inspection Item | Sample: | Sample: | Sample: | Sample: |
|---|---------|---------|---------|---------|
| Ballast is held securely in place | | | | |
| Wiring is undamaged, protected from sharp edges, and neatly routed | | | | |
| Terminations for incoming power wiring are clearly marked and correct for 10 AWG cables | | | | |
| Ballast has quick-disconnect plugs for power and lamp connections which cannot be mis-connected | | | | |
| Photocell socket is securely mounted and gasketed | | | | |
| Barrier present between lamp and ballast compartments | | | | |
| Ballast door gaskets are correctly installed | | | | |
| Ballast door latch operates correctly | | | | |
| All fasteners are stainless steel | | | | |
| Hardware used to access ballast compartment and remove ballast door and ballast is captive. | | | | |

Describe any deficiencies found:

REQUIREMENTS WHEN WORKING NEAR EXISTING PIPELINES

Description: This project involves work above and in close proximity to several existing underground pipelines. The following conditions shall apply to this contract:

1. Illinois one-call (JULIE) and pipeline representatives must be contacted a minimum of 72 hours in advance of any construction activities within 100 feet of their respective facility so that pipeline companies may be present to ensure that there are no conflicts with their pipeline.
2. The contractor is responsible for taking all necessary safety precautions and will be held responsible for any damages caused to the pipeline or property as a result of their work. Exposing the existing pipelines may be required prior to working near pipelines to determine the exact alignment and depth.
3. There shall be no excavation or backfilling within 25 feet of pipelines for any reason without permission from an on-site representative of the pipeline company.
4. All excavation within 10 feet of the pipeline will be performed by hand until the pipeline has been located. Then, if approved by the company on-site representative, mechanical excavation equipment may be used within 5 feet of the pipeline. All excavation or construction activities within 5 feet of the pipeline shall be performed by hand, or as directed by the on-site pipeline company representative.
5. Heavy equipment will not be allowed to operate directly over pipeline except at areas with protective concrete slabs in place or at discretion of pipeline representative. See schedule for Utility Protection Pad. At locations where Utility Protection Pad is not required, the contractor shall place approved crane mats over the pipeline during construction for temporary crossing protection. The contractor may also be required to place crane mats in addition to Utility Protection Pad. A complete listing of anticipated construction vehicular traffic with anticipated maximum loads shall be provided to the pipeline representative at the pre-construction meeting.
6. Heavy equipment shall only be allowed to cross pipelines at locations designated by the pipeline company. Crossing of pipelines shall be made as close as possible to 90 degrees. The contractor shall not be permitted to transport construction materials or equipment longitudinally over the pipelines. No track type construction equipment shall be permitted to pivot or turn directly over the top of the pipeline. When inclement weather exists, provisions must be made to compensate for soil displacement due to subsidence of tires.
7. Vibratory rollers for compacting shall be turned off at pipeline crossings.
8. Unimpeded access to pipelines will be required at all times. Natural drainage will not be impaired. All rock, debris, tree trimmings and unused excavated material will be promptly removed from the site and the site will be left in clean and orderly condition to the satisfaction of the pipeline company on-site representative. Erosion due to excavating or grading activities shall be immediately restored to provide protection to the pipeline facility.

9. No blasting shall occur on or within 100 feet of pipeline facilities unless approved in writing by the pipeline company. If blasting of bedrock is to occur near the pipeline, the pipeline company may require a review of the soil and site conditions. Seismometers may be required to be installed for purposes of measuring peak particle velocities during blasting. Allowance would need to be made in the schedule for time to review the results and make any necessary adjustments.
10. For Pipeline Company contacts, see the Special Provision for "Status of Utilities to be Adjusted".

UTILITY PROTECTION PAD

Description: This work shall consist of the construction of a reinforced concrete protective slab over existing gas pipelines at the locations and details shown on the Plans and as directed by the Engineer. The work shall conform to the applicable portion of Sections 208, 503, 508, and 550 of the Standard Specifications.

Method of Measurement: This work will be measured for payment in square yards, calculated to the exact dimensions of placement of the reinforced concrete slab.

Basis of Payment: This work will be paid for at the contract unit price per square yard for UTILITY PROTECTION PAD, which price shall be payment in full for all labor, equipment and materials required to complete the work as specified herein, including but not limited to the cost of earth and rock excavation, Portland cement concrete, reinforcement bars, protective board, cardboard grade beam forms, underground warning tape and trench backfill.

STEEL CASING 10"

Description: This work shall consist of the installation of a steel casing of the specified diameter at the locations and details shown on the plans and per the Canadian National Railway Wireline Crossing and Encroachment Specifications. The casing shall be installed a minimum of 5' 6" below the bottom of rail if installed by jacking methods, and a minimum of 10 feet below the bottom of rail if installed by boring methods. The method and depth of installation shall be approved by the CN Railroad prior to installation.

Method of Measurement: This work will be measured for payment in feet in place. Measurements will be made along the top centerline of the casing between ends.

Basis of Payment: This work will be paid for at the contract unit price per foot for STEEL CASING, of the size specified.

TEMPORARY LIGHTING SYSTEM

This work shall consist of providing a temporary lighting system at the project locations specified in the plans. The Contractor shall provide all labor, material, and equipment necessary to furnish, install, maintain, and remove the temporary lighting system, and pay all utility charges associated with it. This work shall also include the relocation of temporary lighting facilities as necessary to accommodate the various stages of construction and removal of all temporary lighting facilities at the completion of the project. All work shall be performed in accordance with the plans, Standard Specifications, as directed by the Engineer, and as described herein.

The Contractor shall submit for the District's approval, any modifications to the lighting design plan showing the proposed locations of all temporary poles for each stage of construction associated with each phase of the project. Any modifications by the Contractor to the lighting design shall meet the requirements of Department's BDE Design Manual Chapter 56 and no poles shall be installed until the Contractor's revised detailed lighting design plan is approved by the Engineer.

The Contractor shall not purchase temporary lighting facilities until the Contractor has submitted shop drawings and received the Engineer's approval to proceed. All temporary lighting facilities shall become property of the Contractor and shall be removed from the site at no additional cost. Any temporary lighting materials used by the Contractor which come from stock rather than being purchased new for this project shall require written approval by the Engineer.

The Contractor shall be responsible to maintain the temporary lighting system throughout the project and no additional compensation will be allowed for this work, no matter how many times temporary and/or permanent lighting facilities are relocated. The Contractor shall furnish to the Engineer the names and phone numbers of two persons responsible for call-out work on the lighting system on a 24/7 basis.

Cable splicing, luminaire fusing, and lighting protection shall be submitted for the District's approval. All work required to keep the temporary and/or permanent lighting systems operational shall be at the Contractor's expense. No lighting circuit or portion thereof shall be removed from nighttime operation without the approval of the Engineer.

An inspection and approval by the Engineer shall take place before the temporary lighting system or modified system is approved for operation. Any damage to the existing lighting units and their circuitry as a result of the Contractor's poor workmanship shall be repaired or replaced to the satisfaction of the Engineer at no cost to the Department. All burnouts shall be replaced on a next day basis and temporary wiring shall be installed as necessary to keep all lights functioning every night.

The Contractor shall be responsible for all costs associated with providing service to the lighting system as the project progresses through the various stages of construction and circuit orientation changes. This shall include all costs of coordinating with the local utility for new and/or relocated electric service and metering.

The Contractor shall pay all energy charges associated with the lighting. Any energy charges which the Contractor would like to present to the Department for reimbursement shall be properly metered, billed, and prorated by the Contractor at no cost to the Department. The only energy charges which will be considered by the Department for reimbursement are those associated with existing or permanent lighting facilities that are identified and agreed to by the Engineer in writing at the time the Contractor's detailed lighting design plan is approved.

The Contractor shall be reimbursed for repair of accident damage according to Articles 105.13 and 107.30 of the Standard Specifications.

This work shall be paid for at the lump sum contract unit price for TEMPORARY LIGHTING SYSTEM.

BUILDING REMOVAL - CASE II (NON-FRIABLE ASBESTOS ABATEMENT) (BDE)

Effective: September 1, 1990

Revised: April 1, 2010

BUILDING REMOVAL: This work shall consist of the removal and disposal of three buildings, together with all foundations, retaining walls, and piers, down to a plane 1 ft (300 mm) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the buildings in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable granular material. The buildings are identified as follows:

| <u>Bldg. No.</u> | <u>Parcel No.</u> | <u>Location</u> | <u>Description</u> |
|------------------|-------------------|---|--|
| 4 | 3VB0017 | 1349 E. 6000N Road Bourbonnais, IL 60914 | 1 ½ story masonry & wood structure on a concrete slab w/ a wood & shingled roof |
| 6 | 3VB0023 | 5978 N. State Route 50 Bourbonnais, IL 60914 | Single family home (2 story/crawl space) & 1 storage shed |
| 7 | 3VB0030 | 5957 N. State Route 50 Bourbonnais, IL 60914 | Single family home (1 story/crawl space) & 2 storage sheds Approx. 1374 sq ft |

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services and the removal of the metering devices that serve the buildings according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any building(s) he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR
HIGHWAY CONSTRUCTION
TO BE DEMOLISHED BY THE
ILLINOIS DEPARTMENT
OF TRANSPORTATION
VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any buildings prior to the time that the State becomes the owner of the respective buildings.

The Contractor has the option of removing the non-friable asbestos prior to demolition or demolishing the building(s) with the non-friable asbestos in place. Refer to the Special Provisions titled "Asbestos Abatement (General Conditions)" and "Removal and Disposal of Non-Friable Asbestos Building No. 4, 6, & 7" contained herein.

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein. The lump sum unit prices for this work shall represent the cost of demolition and disposal assuming all non-friable asbestos is removed prior to demolition. Any salvage value shall be reflected in the contract unit price for this item.

EXPLANATION OF BIDDING TERMS: Two separate contract unit price items have been established for the removal of each building. They are:

1. BUILDING REMOVAL NO. 4
2. BUILDING REMOVAL NO. 6
3. BUILDING REMOVAL NO. 7
4. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 4
5. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 6
6. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 7

The Contractor shall have two options available for the removal and disposal of the non-friable asbestos.

The pay item for removal and disposal of non-friable asbestos will not be deleted regardless of the option chosen by the Contractor.

ASBESTOS ABATEMENT (GENERAL CONDITIONS): This work consists of the removal and disposal of non-friable asbestos from the building(s) to be demolished. All work shall be done according to the requirements of the U.S. Environmental Protection Agency (USEPA), the Illinois Environmental Protection Agency (IEPA), the Occupational Safety and Health Administration (OSHA), the Special Provision for "Removal and Disposal of Non-Friable Asbestos, Building No. 4, 6, & 7," and as outlined herein.

Refer to the Materials Description Table in Appendix A for a brief description and location of the various materials. Also included is a Materials Quantities Table in Appendix B. This table states the ACM is non-friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid

The work involved in the removal and disposal of non-friable asbestos if done prior to demolition, shall be performed by a Contractor or Sub-Contractor prequalified with the Illinois Capital Development Board.

The Contractor shall provide a shipping manifest, similar to the one shown in Appendix C, to the Engineer for the disposal of all ACM wastes.

Permits: The Contractor shall apply for permit(s) in compliance with applicable regulations of the Illinois Environmental Protection Agency. Any and all other permits required by other federal, state, or local agencies for carrying on the work shall be the responsibility of the Contractor. Copies of the permit(s) shall be sent to the district office and the Engineer.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least ten days prior to commencement of any asbestos removal or demolition activity. Separate notices shall be sent for the asbestos removal work and the building demolition if they are done as separate operations.

Asbestos Demolition/Renovation Coordinator
Illinois Environmental Protection Agency
Division of Air Pollution Control
P. O. Box 19276
Springfield, Illinois 62794-9276
(217) 785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

Submittals:

- A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.
- B. Submittals that shall be made prior to start of work:
 1. Submittals required under Asbestos Abatement Experience.
 2. Submit documentation indicating that all employees have had medical examinations and instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures as specified in Worker Protection Procedures.
 3. Submit manufacturer's certification stating that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI 29.2.
 4. Submit to the Engineer the brand name, manufacturer, and specification of all sealants or surfactants to be used. Testing under existing conditions will be required at the direction of the Engineer.
 5. Submit proof that all required permits, site locations, and arrangements for transport and disposal of asbestos-containing or asbestos-contaminated materials, supplies, and the like have been obtained (i.e., a letter of authorization to utilize designated landfill).
 6. Submit a list of penalties, including liquidated damages, incurred through non-compliance with asbestos abatement project specifications.

7. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination units, the sequencing of work, the respiratory protection plan to be used during this work, a site safety plan, a disposal plan including the location of an approved disposal site, and a detailed description of the methods to be used to control pollution. The plan shall be submitted to the Engineer prior to the start of work.
 8. Submit proof of written notification and compliance with the "Notifications" paragraph.
- C. Submittals that shall be made upon completion of abatement work:
1. Submit copies of all waste chain-of-custodies, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area;
 2. Submit daily copies of work site entry logbooks with information on worker and visitor access;
 3. Submit logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls; and
 4. Submit results of any bulk material analysis and air sampling data collected during the course of the abatement including results of any on-site testing by any federal, state, or local agency.

Certificate of Insurance:

- A. The Contractor shall document general liability insurance for personal injury, occupational disease and sickness or death, and property damage.
- B. The Contractor shall document current Workmen's Compensation Insurance coverage.
- C. The Contractor shall supply insurance certificates as specified by the Department.

Asbestos Abatement Experience:

- A. Company Experience. Prior to starting work, the Contractor shall supply evidence that he/she has been prequalified with the Illinois Capital Development Board and that he/she has been included on the Illinois Department of Public Health's list of approved Contractors.

B. Personnel Experience:

1. For Superintendent, the Contractor shall supply:
 - a. Evidence of knowledge of applicable regulations in safety and environmental protection is required as well as training in asbestos abatement as evidenced by the successful completion of a training course in supervision of asbestos abatement as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to the Engineer prior to the start of work.
 - b. Documentation of experience with abatement work in a supervisory position as evidenced through supervising at least two asbestos abatement projects; provide names, contact, phone number, and locations of two projects in which the individual(s) has worked in a supervisory capacity.
2. For workers involved in the removal of asbestos, the Contractor shall provide training as evidenced by the participation and successful completion of an accredited training course for asbestos abatement workers as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to all employees who will be working on this project.

ABATEMENT AIR MONITORING: The Contractor shall comply with the following:

- A. Personal Monitoring. All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits shall be monitored daily. Personal monitoring is the responsibility of the Contractor. Additional personal samples may be required by the Engineer at any time during the project.
- B. Interior Non-Friable Asbestos-Containing Materials. The Contractor shall perform personal air monitoring during removal of all non-friable Transite and floor tile removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.
- C. Exterior Non-Friable Asbestos-Containing Materials. The Contractor shall perform personal air monitoring during removal of all non-friable cementitious panels, piping, roofing felts, and built up roofing materials that contain asbestos.

The Contractor shall conduct down wind area sampling to monitor airborne fiber levels at a frequency of no less than three per day.

D. Air Monitoring Professional

1. All air sampling shall be conducted by a qualified Air Sampling Professional supplied by the Contractor. The Air Sampling Professional shall submit documentation of successful completion of the National Institute for Occupational Safety and Health (NIOSH) course #582 - "Sampling and Evaluating Airborne Asbestos Dust".
2. Air sampling shall be conducted according to NIOSH Method 7400. The results of these tests shall be provided to the Engineer within 24 hours of the collection of air samples.

REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 4, 6 & 7:

The Contractor has the option of removing and disposing of the non-friable asbestos prior to demolition of the building(s) or demolishing the building(s) with the non-friable asbestos in place.

Option #1 - If the Contractor chooses to remove all non-friable asbestos prior to demolition, the work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)".

Option #2 - If the Contractor chooses to demolish the building(s) with the non-friable asbestos in place, the following provisions shall apply:

1. Continuously wet all non-friable ACM and other building debris with water during demolition.
2. Dispose of all demolition debris as asbestos containing material by placing it in lined, covered transport haulers and placing it in an approved landfill.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 4, 6, & 7, as shown.

The cost for this work shall be determined as follows:

Option #1 - Actual cost of removal and disposal of non-friable asbestos.

Option #2 - The difference in cost between removing and disposing of the building if all non-friable asbestos is left in place and removing and disposing of the building assuming all non-friable asbestos is removed prior to demolition.

The cost of removing and disposing of the building(s), assuming all non-friable asbestos is removed first, shall be represented by the pay items BUILDING REMOVAL NO. 4, BUILDING REMOVAL NO. 6, and BUILDING REMOVAL NO. 7.

Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay items BUILDING REMOVAL NO. 4, 6 & 7 be deleted.

APPENDIX A
 MATERIAL DESCRIPTION TABLE

| Material Description | % And Type Of Asbestos | Location, Description, Sample Number (If Applicable) |
|---|--|--|
| Building 4 – Commercial Building at 1349 E. 6000N Road | | |
| Window glazing | 3% chrysotile | Main building windows Non-Friable. Good condition. Sample 031A |
| Building 6 - House at 5978 N. State Route 50 | | |
| Built-up roof | 2% chrysotile | Addition roof below rubber membrane Non-Friable. Good condition. Sample 010A, 011A, 012A |
| Old chimney flashing | 7% chrysotile | Below rubber membrane improvements. Non-Friable. Good condition. Sample 013A |
| 9"x9" brown w/white & red streaks vinyl floor tile /black mastic | 4% chrysotile - tile ND- mastic | Addition 2 nd floor storage, addition utility, addition living room. Non-Friable. Good condition Non-Friable. Sample 037A, 038A, 039A |
| 9"x9" black vinyl floor tile /black mastic | 4% chrysotile - tile ND- mastic | Addition 2 nd floor storage closet Non-Friable. Good condition Sample 040A, 041A, 042A |
| Beige w/tan streaks vinyl floor tile /black mastic | 3% chrysotile - tile 5% chrysotile - mastic | Addition 2 nd floor storage misc. Non-Friable. Good condition Sample 046A. |
| 9"x9" salmon vinyl floor tile /black mastic | 4% chrysotile ND- mastic | Addition family room Non-Friable. Good condition Sample 058A, 059A, 060A |
| 9"x9" burnt orange w/white & black streaks vinyl floor tile /black mastic | 4% chrysotile - tile ND- mastic | Addition family room Non-Friable. Good condition Sample 061A, 062A, 063A |
| 9"x9" black w/white & red streaks vinyl floor tile /black mastic | 4% chrysotile - tile ND- mastic | Addition family room Non-Friable. Good condition Sample 064A, 065A, 066A |

| | | |
|---|------------------------------------|---|
| 9"x9" tan w/black & red streaks vinyl floor tile /black mastic | 4% chrysotile - tile ND- mastic | House stairs to 2 nd floor Non-Friable. Good condition Sample 067A, 068A, 069A |
|---|------------------------------------|---|

| | | |
|--|-----------------------------|---|
| 9"x9" solid brown vinyl floor tile /black mastic | 5% chrysotile ND- mastic | House stairs to 2 nd floor Non-Friable. Good condition Sample 070A, 071A, 072A |
|--|-----------------------------|---|

Building 7 - House at 5957 N. State Route 50

| | | |
|--------------------------|---------------|--|
| Chimney/vent flashing | 5% chrysotile | House roof Non-Friable. Good condition. Sample 004A. |
|--------------------------|---------------|--|

| | | |
|--|----------------|--|
| Yellow, octagon Pattern vinyl sheet flooring | 10% chrysotile | Mud room. Non-Friable. Good condition. Sample 016A. |
|--|----------------|--|

APPENDIX B

MATERIAL QUANTITIES TABLE

The following are approximate quantities of ACM to be removed from the building indicated. These material quantities do not indicate the cleaning required to remove asbestos debris and resulting contamination from the work areas.

Building 4 – Commercial Building at 1349 E. 6000N Road

| <u>Material</u> | <u>Location</u> | <u>Quantity Present</u> | <u>Friable</u> |
|-----------------|-----------------------|-------------------------|----------------|
| Window glazing | Main building windows | 295 SF | No |

Building 6 - House at 5978 N. State Route 50

| <u>Material</u> | <u>Location</u> | <u>Quantity Present</u> | <u>Friable</u> |
|---|--|-------------------------|----------------|
| Built-up roof | Addition roof below rubber membrane | 975 SF | No |
| Old chimney flashing | Below rubber membrane improvements | 8 FT | No |
| 9"x9" brown w/white & red streaks vinyl floor tile | Addition 2 nd floor storage, addition utility, addition living room | 435 SF | No |
| 9"x9" black vinyl floor tile | Addition 2 nd floor storage closet | 12 SF | No |
| Beige w/tan streaks vinyl floor tile | Addition 2 nd floor miscellaneous | 2 SF | No |
| 9"x9" salmon vinyl floor tile | Addition family room | 30 SF | No |
| 9"x9" burnt orange w/white & black streaks vinyl floor tile | Addition family room | 80 SF | No |
| 9"x9" black w/white & red streaks vinyl floor tile | Addition family room | 50 SF | No |
| 9"x9" tan w/black & red streaks vinyl floor tile | House stairs to 2 nd floor | 35 SF | No |
| 9"x9" solid brown vinyl floor tile | House stairs to 2 nd floor | 35 SF | No |

Building 7 - House at 5957 N. State Route 50

| <u>Material</u> | <u>Location</u> | <u>Quantity Present</u> | <u>Friable</u> |
|-----------------------------|-----------------|-------------------------|----------------|
| Chimney/vent flashing | Roof | 21 FT | No |
| Yellow vinyl sheet flooring | Mud room | 65 SQ FT | No |

APPENDIX C

SHIPPING MANIFEST
 Generator

| | | | |
|--|----------------|-------------------------|----------------|
| 1. Work Site Name and Mailing Address | Owner's Name | Owner's Telephone No. | |
| 2. Operator's Name and Address | | Operator's Telephone No | |
| 3. Waste Disposal Site (WDS) Name Mailing Address, and Physical Site Location | | WDS Telephone No. | |
| 4. Name and Address of Responsible Agency | | | |
| 5. Description of Materials | | | |
| 6. Containers | No. | Type | |
| 7. Total Quantity | M ³ | (Yd ³) | |
| 8. Special Handling Instructions and Additional Information | | | |
| 9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations. | | | |
| Printed/Typed Name & Title | | Signature | Month Day Year |

Transporter

| | | |
|---|-----------|----------------|
| 10. Transporter 1 (Acknowledgement of Receipt of Materials) | | |
| Printed/Typed Name & Title | Signature | Month Day Year |
| Address and Telephone No. | | |
| 11. Transporter 2 (Acknowledgement of Receipt of Materials) | | |
| Printed/Typed Name & Title | Signature | Month Day Year |
| Address and Telephone No. | | |

Disposal Site

| | | |
|---|-----------|----------------|
| 12. Discrepancy Indication Space | | |
| 13. Waste Disposal Site Owner or Operator: Certification of Receipt of Asbestos Materials Covered By This Manifest Except As Noted in Item 12 | | |
| Printed/Typed Name & Title | Signature | Month Day Year |

APPENDIX D

INSTRUCTIONS

Waste Generator Section (Items 1-9)

1. Enter the name of the facility at which asbestos waste is generated and the address where the facility is located. In the appropriate spaces, also enter the name of the owner of the facility and the owner's phone number.
2. If a demolition or renovation, enter the name and address of the Company and authorized agent responsible for performing the asbestos removal. In the appropriate spaces, also enter the phone number of the operator.
3. Enter the name, address, and physical site location of the waste disposal site (WDS) that will be receiving the asbestos materials. In the appropriate spaces, also enter the phone number of the WDS. Enter "on-site" if the waste will be disposed of on the generator's property.
4. Provide the name and address of the local, State, or EPA Regional Office responsible for administering the asbestos NESHAP program.
5. Indicate the types of asbestos waste materials generated. If from a demolition or renovation, indicate the amount of asbestos that is
 - Friable asbestos material
 - Nonfriable asbestos material
6. Enter the number of containers used to transport the asbestos materials listed in Item 5. Also enter one of the following container codes used in transporting each type of asbestos material (specify any other type of container used if not listed below):
 - DM - Metal drums, barrels
 - DP - Plastic drums, barrels
 - BA - 6 mil plastic bags or wrapping
7. Enter the quantities of each type of asbestos material removed in units of cubic meters (cubic yards).
8. Use this space to indicate special transportation, treatment, storage or disposal or Bill of Lading information. If an alternate waste disposal site is designated, note it here. Emergency response telephone numbers or similar information may be included here.
9. The authorized agent of the waste generator shall read and then sign and date this certification. The date is the date of receipt by transporter.

NOTE: The waste generator shall retain a copy of this form.

BUILDING REMOVAL - CASE IV (NO ASBESTOS) (BDE)

Effective: September 1, 1990

Revised: April 1, 2010

BUILDING REMOVAL: This work shall consist of the removal and disposal of five buildings, together with all foundations, retaining walls, and piers, down to a plane 1 ft (300 mm) below the ultimate or existing grade in the area and also all incidental and collateral work necessary to complete the removal of the buildings in a manner approved by the Engineer. Any holes, such as basements, shall be filled with a suitable granular material. The buildings are identified as follows:

| <u>Bldg. No.</u> | <u>Parcel No.</u> | <u>Location</u> | <u>Description</u> |
|------------------|-------------------|--|---|
| 1 | 3VB0003 | 304 E. 6000N Road Bourbonnais, IL 60914 | Concrete slab |
| 2 | 3VB0019 | 1269 E. 6000N Road Bourbonnais, IL 60914 | 1 story wood frame str. on conc. slab With metal roof |
| 3 | 3VB0017 | 1349 E. 6000N Road Bourbonnais, IL 60914 | 2 mobile structures, wood and metal With vinyl flooring |
| 8 | 3VB0023 | 1349 E. 6000N Road Bourbonnais, IL 60914 | Murphy building, wood and metal |
| 10 | 3VB0006 | NW Quadrant of I-57 & 6000N Rd Bourbonnais, IL 60914 | Metal pole barn 2250 SF |

Discontinuance of Utilities: The Contractor shall arrange for the discontinuance of all utility services and the removal of the metering devices that serve the buildings according to the respective requirements and regulations of the City, County, or utility companies involved. The Contractor shall disconnect and seal, in an approved manner, all service outlets that serve any buildings he/she is to remove.

Signs: Immediately upon execution of the contract and prior to the wrecking of any structures, the Contractor shall be required to paint or stencil, in contrasting colors of an oil base paint, on all four sides of each residence and two opposite sides of other structures, the following sign:

PROPERTY ACQUIRED FOR
HIGHWAY CONSTRUCTION
TO BE DEMOLISHED BY THE
ILLINOIS DEPARTMENT
OF TRANSPORTATION
VANDALS WILL BE PROSECUTED

The signs shall be positioned in a prominent location on the structure so that they can be easily seen and read and at a sufficient height to prevent defacing. The Contractor shall not paint signs nor start demolition of any building(s) prior to the time that the State becomes the owner of the respective building(s).

Basis of Payment: This work will be paid for at the contract lump sum unit price for BUILDING REMOVAL, numbers as listed above, which price shall be payment in full for complete removal of the buildings and structures, including any necessary backfilling material as specified herein. The lump sum unit price(s) for this work shall represent the cost of demolition. Any salvage value shall be reflected in the contract unit price for this item.

Notifications: The "Demolition/Renovation Notice" form, which can be obtained from the IEPA office, shall be completed and submitted to the address listed below at least ten days prior to commencement of any demolition activity.

Asbestos Demolition/Renovation Coordinator
Illinois Environmental Protection Agency
Division of Air Pollution Control
P. O. Box 19276
Springfield, Illinois 62794-9276
(217)785-1743

Notices shall be updated if there is a change in the starting date or the amount of asbestos changes by more than 20 percent.

Submittals:

- A. All submittals and notices shall be made to the Engineer except where otherwise specified herein.
- B. Prior to starting work, the Contractor shall submit proof of written notification and compliance with the "Notifications" paragraph.

WORK ADJACENT TO RAILROAD

An agreement is pending between the State of Illinois and the Illinois Central Railroad for work at and near the railroad tracks which cross 6000Nth Road just west of IL 50. No work shall be performed within railroad right of way prior to May 1, 2016 or until the agreement between the State of Illinois and the Illinois Central Railroad is executed by both parties. No additional compensation or time extensions requests related to this restriction will be considered for an agreement executed prior to May 1, 2016. Adjustments required to staging as a result of this restriction shall be coordinated and approved by the Engineer, and no additional compensation will be allowed.

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

Effective: January 1, 2006

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

| NAMED INSURED & ADDRESS | NUMBER & SPEED OF PASSENGER TRAINS | NUMBER & SPEED OF FREIGHT TRAINS |
|---|---|--|
| "Illinois Central Railroad Company" and Its Parents 1625 Depot Street Stevens Point, WI 54481 | 6 Amtrak per day at 79 MPH | 14 Freights per day at 60 MPH 2 Intermodals per day at 60 MPH |
| DOT/AAR No.: 288 931 M RR Division: Northern | RR Mile Post: 49.75 RR Sub-Division: Chicago | |
| For Freight/Passenger Information Contact: Paul Chojenski For Insurance Information Contact: Rob Glass | | Phone: 708-332-3557 Phone: 708-332-6673 |

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

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

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

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

GRANULAR MATERIALS

(Effective: November 26, 2013)

Revise the title of Article 1003.04 of the Standard Specifications to read:

“ 1003.04 Fine Aggregate for Bedding, Trench Backfill, Embankment, Porous Granular Backfill, Sand Backfill for Underdrains, and French Drains.”

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

“(c) Gradation. The fine aggregate gradations for granular embankment, granular backfill, bedding, and trench backfill for pipe culverts and storm sewers shall be FA 1, FA 2, or FA 6 through FA 21.

The fine aggregate gradation for porous granular embankment, porous granular backfill, french drains, and sand backfill for underdrains shall be FA 1, FA 2, or FA 20, except the percent passing the No. 200 (75 µm) sieve shall be 2±2.”

Revise Article 1004.05(c) of the Standard Specifications to read:

“(c) Gradation. The coarse aggregate gradations shall be as follows.

| Application | Gradation |
|---|--|
| Blotter | CA 15 |
| Granular Embankment, Granular Backfill, and Bedding | CA 6, CA 9, CA 10, CA 12, CA17, CA18, and CA 19 |
| Porous Granular Embankment, Porous Granular Backfill, and French Drains | CA 7, CA 8, CA 11, CA 15, CA 16 and CA 18 |
| Trench Backfill and Bedding for Pipe Culverts and Storm Sewers | CA 6, CA 7 ^{1/} , CA 9, CA 10, CA 11 ^{1/} , CA 12, CA17, CA18, and CA 19 |

1/ For gradations CA 7 or CA 11, lifts may exceed 8 in. (200mm) in depth provided the material is seated to the satisfaction of the Engineer.

TREATMENT OF EXISTING FIELD TILE SYSTEMS

Description. This work shall be in accordance with Section 611 of the Standard Specifications.

The following items have been included in the plans in order to establish unit bid prices. The Engineer shall be the sole judge as to the quantity and location for the use of:

PIPE DRAINS, 6", 8", 10", 12", & 18"
STORM SEWER PROTECTED, CLASS A, , 6", 8", 10", 12", & 18"
STORM SEWER (SPECIAL), 6", 8", 10", 12", & 18"
MISCELLANEOUS CONCRETE
FIELD TILE JUNCTION VAULT, 2' DIA.
FIELD TILE JUNCTION VAULT, 3' DIA.

SHOULDER RUMBLE STRIP REMOVAL

Description:

This work shall consist of the scarification of existing shoulder rumble strips constructed in hot-mix asphalt shoulders. The scarified material shall be replaced with HMA Surface Course, Mix "D", N70 or N90. This work shall take place per the limits shown on the Plans and/or as directed by the Engineer.

The nominal depth of scarification of the hot-mix asphalt shoulders shall be 2 inches. Unless otherwise shown in the Plans, the width of scarification shall be two (2) feet.

Method of Measurement:

This work will be measured for payment in square yards. Any portion of this work constructed outside the dimensions shown on the Plans or as directed by the Engineer will not be measured for payment.

Basis of Payment:

This work will be paid at the contract unit price per square yard for SHOULDER RUMBLE STRIP REMOVAL, which payment shall constitute full compensation for scarifying the designated portion of hot-mix asphalt shoulder; cleaning the scarified area and removing all debris; replacing the HMA material, and for all labor, equipment, tools and incidentals necessary to complete the work as specified.

Lane/shoulder closures required for this item will not be paid for separately, but will be included in the Contract unit price for TRAFFIC CONTROL AND PROTECTION STANDARD 701401 (SPECIAL).

FILLING EXISTING WELLS

This work shall consist of properly filling and abandoning the existing drilled well, the approximate location of which has been shown in the plans. The well shall be sealed in accordance with the Illinois Water Well Construction Code of the Illinois Department of Public Health.

The existing well shall be filled by a licensed well contractor under the supervision of a well inspector of the Department of Health or approved local health department. The well inspector shall be advised at least 72 hours in advance of the filling to avoid delays. Before filling, the existing well shall be checked for obstructions. Anything that would interfere with the effective sealing of the well shall be removed. The well shall then be disinfected in accordance with Section 920.100(b) of the Illinois Water Well Code. The hole shall be filled to within 3 feet of the final grade ** as follows:

From the bottom of the well to 12" above the maximum static water level, clean disinfected pea gravel or sand.

From above the previous level to within 3 feet of final grade * - neat cement or pure bentonite. This later plug shall be a minimum of 10 feet thick.

If the water level is too high to allow a 10 foot plug, the balance can be placed below the water surface.

* The well casing shall be removed or bent over at 3 feet below final grade.

Any concrete, brickwork, masonry, pipe or other unsuitable material within 3 feet of the final grade shall be removed and the hole is to be filled to final grade with sand, soil or earth approved by the Engineer and placed and compacted to the satisfaction of the Engineer.

** If the existing ground is lower, then use it instead of final grade.

Once the well is filled, two properly executed Water Well Sealing Forms of the Department of Public Health are required. The Engineer will supply these forms to the Contractor. One is to be filed with the Division of Environmental Health, Illinois Department of Public Health, in Springfield. The remaining copy is to be submitted to the District 3 Office of the Department of Transportation in Ottawa.

This work shall be paid for at the contract unit price each for FILLING EXISTING WELLS, which price shall include the cost of all labor, equipment and material required to fill, seal and abandon the well as specified herein.

PERMANENT SURVEY MARKERS, TYPE I

(Effective July 1, 1990; Revised January 1, 2007)

Survey markers shall be installed according to Highway Standard 667101, except that the tablet shall be bronze instead of aluminum.

When a survey marker is used to reference a land survey point, the lettering referring to the State of Illinois and the Division of Highways shall be omitted and the marker shall be marked as directed by the Engineer.

RAILROAD INTERCONNECT CABLE

The cable shall meet the requirements of Section 873 of the Standard Specifications, except for the following:

Add to Article 873.02 of the Standard Specifications:

The railroad interconnect cable shall be three conductor stranded #14 copper cable in a clear polyester binder, shielded with #36 AWG tinned copper braid with 85% coverage, and insulated with .016" polyethylene (black, blue, red). The jacket shall be black 0.045 PVC or polyethylene.

Add the following to Article 873.05 of the Standard Specifications:

Basis of Payment.

This work shall be paid for at the contract unit price per foot (meter) for ELECTRIC CABLE IN CONDUIT, RAILROAD, NO. 14 3C, which price shall be payment in full for furnishing, installing, and making all electrical connections in the traffic signal controller cabinet. Connections in the railroad controller cabinet shall be performed by railroad personnel.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

This work shall be according to Article 669 of the Standard Specifications and the following:

Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

General. This Special Provision will likely require the Contractor to subcontract for the execution of certain activities.

All contaminated materials shall be managed as either “uncontaminated soil” or non-special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. **Phase I Preliminary Engineering information is available through the District’s Environmental Studies Unit.** Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit whichever is less.

The Contractor shall manage any excavated soils and sediment within the following areas:

- Station 272+50 to Station 274+20 (US 45/52) 0 to 100 feet LT (Agricultural Land, Site 1700V/C-4, 300 and 400 blocks of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 7448+00 to Station 7460+50 (E 6000N Road) 0 to 100 feet RT (Agricultural Land, Site 1700V/C-4, 300 and 400 blocks of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 7457+00 to Station 7464+00 (E 6000N Road) 0 to 100 feet LT (Agricultural Land, Site 1700V/C-7, 300 block of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 7460+00 to Station 7466+00 (E 6000N Road) 0 to 100 feet RT (Vacant Land, Site 1700V/C-6, 306 E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 4435+00 to Station 4437+50 (Ramp A) 0 to 100 feet LT (Agricultural Land, Site 1700V/C-7, 300 block of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 7470+50 to Station 7474+00 (E 6000N Road) 0 to 200 feet LT (Agricultural Land, Site 1700V/C-7, 300 block of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 7511+00 to Station 7513+00 (E 6000N Road) 0 to 100 feet RT (Industrial Building, Site 1700V/C-21, 1166 E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 7519+00 to Station 7520+50 (E 6000N Road) 0 to 140 feet LT (Kankakee Valley Construction Company, Site 1700V/C-24, 1349 E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese, Iron, and Aluminum.

- Station 7524+50 to Station 7525+30 (E 6000N Road) 0 to 120 feet LT (CN and Amtrack, Site 1700V/C-26, 1166 E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 555+50 to Station 557+00 (IL 50) 0 to 150 feet RT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 7535+00 to Station 7537+00 (E 6000N Road) 0 to 120 feet LT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 7539+00 to Station 7541+00 (E 6000N Road) 0 to 120 feet LT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 7535+00 to Station 7536+20 (E 6000N Road) 0 to 100 feet RT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 7540+50 to Station 7536+50 (E 6000N Road) 0 to 100 feet RT (Residence, Site 1700V/C-30, 1778 E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 4413+00 to Station 4417+00 (Ramp A) 0 to 50 feet RT (State ROW I-57, Site 1700V/C-9, I-57 at E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 4427+00 to Station 4429+00 (Ramp A) 0 to 80 feet RT (Agricultural Land, Site 1700V/C-7, 300 block of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 4431+00 to Station 4435+50 (Ramp A) 0 to 120 feet RT (Agricultural Land, Site 1700V/C-7, 300 block of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 4426+00 to Station 4428+00 (Ramp A) 0 to 200 feet LT (Agricultural Land, Site 1700V/C-7, 300 block of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 4430+00 to Station 4432+00 (Ramp A) 0 to 100 feet LT (Agricultural Land, Site 1700V/C-7, 300 block of E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 1614+50 to Station 1615+50 (Ramp B) 0 to 50 feet RT (Tenco Excavating, Site 1700V/C-11, 6200 block of N 1000E Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.

- Station 1619+80 to Station 1623+00 (Ramp B) 0 to 50 feet RT (State ROW I-57, Site 1700V/C-9, I-57 at E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 1625+00 to Station 1625+50 (Ramp B) 0 to 50 feet RT (State ROW I-57, Site 1700V/C-9, I-57 at E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 569+00 to Station 571+00 (IL 50) 0 to 100 feet LT (CN and Amtrack, Site 1700V/C-26, 1166 E 6000N Road). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic and Aluminum.
- Station 571+50 to Station 574+00 (IL 50) 0 to 60 feet LT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic, Lead, and Manganese.
- Station 573+50 to Station 579+50 (IL 50) 0 to 100 feet RT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead and Manganese.
- Station 7522+80 to Station 7524+50 (E 6000N Road) 0 to 100 feet RT (CN and Amtrack, Site 1700V/C-26, 1166 E 6000N Road). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Arsenic.
- Station 7443+00 to Station 7447+50 (E 6000N Road) 0 to 100 feet RT (Agricultural Land, Site 1700V/C-4, 300 and 400 blocks of E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 265+00 to Station 278+50 (US 45/52) 0 to 150 feet LT (Agricultural Land, Site 1700V/C-4, 300 and 400 blocks of E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 265+00 to Station 272+50 (US 45/52) 0 to 100 feet RT (Agricultural Land, Site 1700V/C-4, 300 and 400 blocks of E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 274+20 to Station 278+50 (E 6000N Road) 0 to 150 feet RT (Agricultural Land, Site 1700V/C-4, 300 and 400 blocks of E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 7447+50 to Station 7448+00 (E 6000N Road) 0 to 130 feet RT (Agricultural Land, Site 1700V/C-4, 300 and 400 blocks of E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 7460+50 to Station 7463+00 (E 6000N Road) 0 to 100 feet RT (Vacant Land, Site 1700V/C-6, 306 E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 7513+00 to Station 7514+30 (E 6000N Road) 0 to 100 feet RT (Industrial Building, Site 1700V/C-21, 1166 E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.

- Station 7512+00 to Station 7518+00 (E 6000N Road) 0 to 100 feet LT (Farmstead, Site 1700V/C-20, 1269 E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 7518+00 to Station 7519+00 (E 6000N Road) 0 to 100 feet LT (Kankakee Valley Construction Company, Site 1700V/C-24, 1349 E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 7520+50 to Station 7522+30 (E 6000N Road) 0 to 140 feet LT (Kankakee Valley Construction Company, Site 1700V/C-24, 1349 E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 7522+30 to Station 7524+50 (E 6000N Road) 0 to 100 feet RT (CN and Amtrack, Site 1700V/C-26, 1166 E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 555+50 to Station 559+00 (IL 50) 0 to 200 feet LT (CN and Amtrack, Site 1700V/C-26, 1166 E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 4417+00 to Station 4423+00 (Ramp A) 0 to 80 feet RT (Agricultural Land, Site 1700V/C-7, 300 block of E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 1615+50 to Station 1619+80 (Ramp B) 0 to 50 feet RT (State ROW I-57, Site 1700V/C-9, I-57 at E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 1623+00 to Station 1625+00 (Ramp B) 0 to 50 feet RT (State ROW I-57, Site 1700V/C-9, I-57 at E 6000N Road). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 557+00 to Station 559+00 (IL 50) 0 to 130 feet RT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 565+00 to Station 567+00 (IL 50) 0 to 130 feet RT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.
- Station 565+00 to Station 567+00 (IL 50) 0 to 50 feet LT (Vulcan Construction Material/Ozinga Ready-Mix Concrete, Site 1700V/C-28, 6141 North IL 50). This material meets the criteria of Article 669.09(c) and shall be managed in accordance to Article 669.09.

FOUNDATION REMOVAL

This work shall be performed according to the applicable portions of Sections 201 and 501 of the Standard Specifications and as directed by the Engineer.

Included in this work shall be the removal two existing foundations as shown on the plans. Removal shall be to a depth of 2'-0" below the proposed grade. Portions of the foundations that fall within 2' of any proposed pavement or driveways shall be removed to a depth of 2'-0" below the bottom of the proposed subgrade. Any portion of the structures which interfere with the proposed construction or proposed utility relocates shall be removed as necessary regardless of the depth required.

On IL 50 at approximately Station 559+20 75' RT, this work consists of the removal of an existing concrete truck wash out station. The existing concrete truck wash out station to be removed (approximately 45' x 45') is estimated to consist of 12"-14" thick reinforced concrete walls and 8"-12" thick concrete slabs for the ramps and floor. The walls are estimated to extend up to 4' above and below the existing ground elevation. The contractor shall remove any water, and concrete materials remaining from the washout operations from any portion of the structure to remain in place.

On IL 50 at approximately Station 544+30 35' RT, this work consists of removal of a former building foundation and shall also include the removal or filling an existing abandoned vault (estimated at 5' x 5' x 4') located approximately 85' east of the building foundation.

Any voids created by the removal of the foundations shall be backfilled with a suitable backfill approved by the Engineer.

The Contractor shall be responsible for determining the size and thickness of the existing foundations and the extent to which they may be reinforced.

Method of Measurement and Basis of Payment:

Concrete foundation removal will not be measured separately, but will be paid for at the contract unit price per EACH for FOUNDATION REMOVAL. Payment shall be for all labor, materials, equipment and tools necessary to complete the work as herein specified, at locations shown on the plans, and as directed by the Engineer.

AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)

Effective: January 1, 2008

Description. This work shall consist of furnishing and operating automated flagger assistance devices (AFADs) as part of the work zone traffic control and protection for two-lane highways where two-way traffic is maintained over one lane of pavement. Use of these devices shall be at the option of the Contractor.

Equipment. AFADs shall be according to the FHWA memorandum, "MUTCD - Revised Interim Approval for the use of Automated Flagger Assistance Devices in Temporary Traffic Control Zones (IA-4R)", dated January 28, 2005. The devices shall be mounted on a trailer or a moveable cart and shall meet the requirements of NCHRP 350, Category 4.

The AFAD shall be the Stop/Slow type. This device uses remotely controlled "STOP" and "SLOW" signs to alternately control right-of-way.

Signs for the AFAD shall be according to Article 701.03 of the Standard Specifications and the MUTCD. The signs shall be 24 x 24 in. (600 x 600 mm) having an octagon shaped "STOP" sign on one side and a diamond shaped "SLOW" sign on the opposite side. The letters on the signs shall be 8 in. (200 mm) high. If the "STOP" sign has louvers, the full sign face shall be visible at a distance of 50 ft (15 m) and greater.

The signs shall be supplemented with one of the following types of lights.

- (a) Flashing Lights. When flashing lights are used, white or red flashing lights shall be mounted within the "STOP" sign face and white or yellow flashing lights within the "SLOW" sign face.
- (b) Stop and Warning Beacons. When beacons are used, a stop beacon shall be mounted 24 in. (600 mm) or less above the "STOP" sign face and a warning beacon mounted 24 in. (600 mm) or less above, below, or to the side of the "SLOW" sign face. As an option, a Type B warning light may be used in lieu of the warning beacon.

A "WAIT ON STOP" sign shall be placed on the right hand side of the roadway at a point where drivers are expected to stop. The sign shall be 24 x 30 in. (600 x 750 mm) with a black legend and border on a white background. The letters shall be at least 6 in. (150 mm) high.

This device may include a gate arm or mast arm that descends to a horizontal position when the "STOP" sign is displayed and rises to a vertical position when the "SLOW" sign is displayed. When included, the end of the arm shall reach at least to the center of the lane being controlled. The arm shall have alternating red and white retroreflective stripes, on both sides, sloping downward at 45 degrees toward the side on which traffic will pass. The stripes shall be 6 in. (150 mm) in width and at least 2 in. (50 mm) in height.

Flagging Requirements. Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

AFADs shall be placed at each end of the traffic control, where a flagger is shown on the plans. The flaggers shall be able to view the face of the AFAD and approaching traffic during operation.

To stop traffic, the "STOP" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall descend to a horizontal position. To permit traffic to move, the "SLOW" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall rise to a vertical position.

If used at night, the AFAD location shall be illuminated according to Section 701 of the Standard Specifications.

When not in use, AFADs will be considered nonoperating equipment and shall be stored according to Article 701.11 of the Standard Specifications.

Basis of Payment. This work will not be paid for separately but shall be considered as included in the cost of the various traffic control items included in the contract.

COILABLE NONMETALLIC CONDUIT (BDE)

Effective: August 1, 2014

Revised: January 1, 2015

Revise Article 1088.01(c) of the Standard Specifications to read:

“(c) Coilable Nonmetallic Conduit. The conduit shall be a high density polyethylene duct which is intended for underground use can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties or performance. The conduit and its manufacture shall be according to UL 651A for Schedule 40 conduit, except Schedule 80 shall be used under pavement, stabilized shoulder, paved median, paved driveway, curb and/or gutter and sidewalk.

Performance Tests. Testing procedures and test results shall meet the requirements of UL 651A. Certified copies of the test report shall be submitted to the Engineer prior to the installation of the conduit.”

CONCRETE BOX CULVERTS WITH SKEWS > 30 DEGREES AND DESIGN FILLS ≤ 5 FEET (BDE)

Effective: April 1, 2012

Revised: April 1, 2014

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

“Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-in-place concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577.”

Add the following after the seventh paragraph of Article 540.06 of the Standard Specifications:

“Precast concrete box culverts with skews greater than 30 degrees and having design covers less than or equal to 5 feet are not covered by the standard design table shown in ASTM C 1577. The design table provided herein is provided to address this design range. The same notes, reinforcement configurations, clearances, and requirements of ASTM C 1577 apply to this special design table. A box designated 7 x 6 x 8 indicates a span of 7 ft, a rise of 6 ft, and top slab, bottom slab, walls and haunches of 8 in. unless otherwise noted on the tables.

| 3 ft by 2 ft by 4 in. | | | | | | | | | |
|-------------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.168 | 0.900 | 0.295 | 0.096 | 0.269 | 0.168 | 0.853 | 0.144 | |
| 2<3 | 0.134 | 0.180 | 0.182 | 0.096 | | | | | 31 |
| 3-5 | 0.096 | 0.115 | 0.117 | 0.096 | | | | | 29 |

*top slab 7 in., bottom slab 6.0 in.

| 3 ft by 3 ft by 4 in. | | | | | | | | | |
|-------------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.168 | 0.956 | 0.326 | 0.096 | 0.290 | 0.168 | 0.849 | 0.144 | |
| 2<3 | 0.101 | 0.214 | 0.218 | 0.096 | | | | | 31 |
| 3-5 | 0.096 | 0.136 | 0.140 | 0.096 | | | | | 31 |

*top slab 7.0 in., bottom slab 6.0 in.

| 4 ft by 2 ft by 5 in. | | | | | | | | | |
|-------------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.204 | 0.790 | 0.262 | 0.120 | 0.268 | 0.180 | 0.846 | 0.144 | |
| 2<3 | 0.201 | 0.203 | 0.196 | 0.120 | | | | | 32 |
| 3-5 | 0.129 | 0.134 | 0.136 | 0.120 | | | | | 32 |

*top slab 7.5 in., bottom slab 6.0 in.

4 ft by 3 ft by 5 in.

| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.180 | 0.876 | 0.303 | 0.120 | 0.305 | 0.180 | 0.831 | 0.144 | |
| 2<3 | 0.160 | 0.245 | 0.238 | 0.120 | | | | | 38 |
| 3-5 | 0.120 | 0.161 | 0.165 | 0.120 | | | | | 35 |

*top slab 7.5 in., bottom slab 6.0 in.

4 ft by 4 ft by 5 in.

| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.180 | 0.927 | 0.334 | 0.120 | 0.327 | 0.180 | 0.822 | 0.144 | |
| 2<3 | 0.130 | 0.277 | 0.270 | 0.120 | | | | | 38 |
| 3-5 | 0.120 | 0.181 | 0.188 | 0.120 | | | | | 38 |

*top slab 7.5 in., bottom slab 6.0 in.

5 ft by 3 ft by 6 in.

| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.197 | 0.682 | 0.269 | 0.144 | 0.280 | 0.192 | 0.705 | 0.168 | |
| 2<3 | 0.206 | 0.259 | 0.246 | 0.144 | | | | | 37 |
| 3-5 | 0.144 | 0.180 | 0.179 | 0.144 | | | | | 35 |

*top slab 8.0 in., bottom slab 7.0 in.

| 5 ft by 4 ft by 6 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.192 | 0.735 | 0.299 | 0.144 | 0.307 | 0.192 | 0.693 | 0.168 | |
| 2<3 | 0.180 | 0.294 | 0.282 | 0.144 | | | | | 46 |
| 3-5 | 0.144 | 0.204 | 0.205 | 0.144 | | | | | 40 |

*top slab 8.0 in., bottom slab 7.0 in.

| 5 ft by 5 ft by 6 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.192 | 0.774 | 0.324 | 0.144 | 0.327 | 0.192 | 0.685 | 0.168 | |
| 2<3 | 0.155 | 0.322 | 0.312 | 0.144 | | | | | 45 |
| 3-5 | 0.144 | 0.224 | 0.228 | 0.144 | | | | | 45 |

*top slab 8.0 in., bottom slab 7.0 in.

| 6 ft by 3 ft by 7 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.270 | 0.566 | 0.257 | 0.168 | 0.263 | 0.192 | 0.575 | 0.168 | |
| 2<3 | 0.260 | 0.269 | 0.273 | 0.168 | | | | | 41 |
| 3-5 | 0.186 | 0.192 | 0.197 | 0.168 | | | | | 39 |

*top slab 8.0 in.

| 6 ft by 4 ft by 7 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.245 | 0.617 | 0.297 | 0.168 | 0.293 | 0.192 | 0.565 | 0.168 | |
| 2<3 | 0.225 | 0.305 | 0.313 | 0.168 | | | | | 42 |
| 3-5 | 0.168 | 0.220 | 0.227 | 0.168 | | | | | 41 |

*top slab 8.0 in.

| 6 ft by 5 ft by 7 in. | | | | | | | | | |
|-------------------------|---|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in. / ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.226 | 0.657 | 0.331 | 0.168 | 0.317 | 0.192 | 0.551 | 0.168 | |
| 2<3 | 0.198 | 0.338 | 0.348 | 0.168 | | | | | 59 |
| 3-5 | 0.168 | 0.242 | 0.252 | 0.168 | | | | | 48 |

*top slab 8.0 in.

| 6 ft by 6 ft by 7 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2* | 0.208 | 0.692 | 0.363 | 0.168 | 0.337 | 0.192 | 0.540 | 0.168 | |
| 2<3 | 0.176 | 0.364 | 0.379 | 0.168 | | | | | 52 |
| 3-5 | 0.168 | 0.261 | 0.275 | 0.168 | | | | | 52 |

*top slab 8.0 in.

| 7 ft by 4 ft by 8 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.339 | 0.599 | 0.372 | 0.192 | 0.271 | 0.192 | 0.697 | 0.192 | |
| 2<3 | 0.287 | 0.335 | 0.342 | 0.192 | | | | | 44 |
| 3-5 | 0.206 | 0.241 | 0.248 | 0.192 | | | | | 42 |

| 7 ft by 5 ft by 8 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.317 | 0.637 | 0.417 | 0.192 | 0.293 | 0.192 | 0.684 | 0.192 | |
| 2<3 | 0.256 | 0.370 | 0.381 | 0.192 | | | | | 49 |
| 3-5 | 0.192 | 0.266 | 0.276 | 0.192 | | | | | 46 |

| 7 ft by 6 ft by 8 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.296 | 0.672 | 0.458 | 0.192 | 0.312 | 0.192 | 0.658 | 0.192 | |
| 2<3 | 0.230 | 0.401 | 0.416 | 0.192 | | | | | 59 |
| 3-5 | 0.192 | 0.288 | 0.302 | 0.192 | | | | | 55 |

| 7 ft by 7 ft by 8 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.276 | 0.703 | 0.496 | 0.192 | 0.330 | 0.192 | 0.653 | 0.192 | |
| 2<3 | 0.210 | 0.428 | 0.447 | 0.192 | | | | | 59 |
| 3-5 | 0.192 | 0.307 | 0.326 | 0.192 | | | | | 59 |

| 8 ft by 4 ft by 8 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.397 | 0.510 | 0.400 | 0.192 | 0.283 | 0.192 | 0.568 | 0.192 | |
| 2<3 | 0.399 | 0.415 | 0.423 | 0.192 | | | | | 45 |
| 3-5 | 0.285 | 0.298 | 0.306 | 0.192 | | | | | 45 |

| 8 ft by 5 ft by 8 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.368 | 0.555 | 0.446 | 0.192 | 0.305 | 0.192 | 0.559 | 0.192 | |
| 2<3 | 0.360 | 0.458 | 0.470 | 0.192 | | | | | 48 |
| 3-5 | 0.259 | 0.328 | 0.340 | 0.192 | | | | | 45 |

| 8 ft by 6 ft by 8 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.342 | 0.596 | 0.488 | 0.192 | 0.325 | 0.192 | 0.556 | 0.192 | |
| 2<3 | 0.328 | 0.496 | 0.512 | 0.192 | | | | | 56 |
| 3-5 | 0.237 | 0.355 | 0.371 | 0.192 | | | | | 50 |

| 8 ft by 7 ft by 8 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.319 | 0.633 | 0.527 | 0.192 | 0.343 | 0.192 | 0.555 | 0.192 | |
| 2<3 | 0.301 | 0.529 | 0.551 | 0.192 | | | | | 65 |
| 3-5 | 0.219 | 0.379 | 0.399 | 0.192 | | | | | 61 |

| 8 ft by 8 ft by 8 in. | | | | | | | | | |
|-------------------------------|---|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in. / ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.297 | 0.668 | 0.565 | 0.192 | 0.360 | 0.192 | 0.531 | 0.192 | |
| 2<3 | 0.280 | 0.560 | 0.587 | 0.192 | | | | | 65 |
| 3-5 | 0.204 | 0.400 | 0.427 | 0.192 | | | | | 65 |

| 9 ft by 5 ft by 9 in. | | | | | | | | | |
|-------------------------------|---|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in. / ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.361 | 0.411 | 0.416 | 0.216 | 0.275 | 0.216 | 0.465 | 0.216 | |
| 2<3 | 0.425 | 0.484 | 0.496 | 0.216 | | | | | 49 |
| 3-5 | 0.306 | 0.348 | 0.360 | 0.216 | | | | | 49 |

| 9 ft by 6 ft by 9 in. | | | | | | | | | |
|-------------------------------|---|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in. / ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.335 | 0.439 | 0.455 | 0.216 | 0.294 | 0.216 | 0.467 | 0.216 | |
| 2<3 | 0.390 | 0.524 | 0.541 | 0.216 | | | | | 55 |
| 3-5 | 0.282 | 0.376 | 0.393 | 0.216 | | | | | 52 |

| 9 ft by 7 ft by 9 in. | | | | | | | | | |
|-------------------------------|---|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in. / ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.313 | 0.464 | 0.491 | 0.216 | 0.311 | 0.216 | 0.453 | 0.216 | |
| 2<3 | 0.360 | 0.561 | 0.583 | 0.216 | | | | | 64 |
| 3-5 | 0.262 | 0.402 | 0.423 | 0.216 | | | | | 58 |

| 9 ft by 8 ft by 9 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.286 | 0.488 | 0.514 | 0.216 | 0.327 | 0.216 | 0.454 | 0.216 | |
| 2<3 | 0.336 | 0.594 | 0.621 | 0.216 | | | | | 72 |
| 3-5 | 0.244 | 0.426 | 0.453 | 0.216 | | | | | 73 |

| 9 ft by 9 ft by 9 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.274 | 0.511 | 0.557 | 0.216 | 0.342 | 0.216 | 0.452 | 0.216 | |
| 2<3 | 0.316 | 0.625 | 0.659 | 0.216 | | | | | 72 |
| 3-5 | 0.231 | 0.448 | 0.481 | 0.216 | | | | | 72 |

| 10 ft by 5 ft by 10 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.370 | 0.393 | 0.392 | 0.240 | 0.263 | 0.240 | 0.240 | 0.240 | |
| 2<3 | 0.492 | 0.509 | 0.522 | 0.240 | | | | | 52 |
| 3-5 | 0.354 | 0.366 | 0.379 | 0.240 | | | | | 52 |

| 10 ft by 6 ft by 10 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.348 | 0.420 | 0.432 | 0.240 | 0.282 | 0.240 | 0.418 | 0.240 | |
| 2<3 | 0.455 | 0.552 | 0.570 | 0.240 | | | | | 56 |
| 3-5 | 0.329 | 0.397 | 0.414 | 0.240 | | | | | 52 |

| 10 ft by 7 ft by 10 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.321 | 0.445 | 0.463 | 0.240 | 0.298 | 0.240 | 0.240 | 0.240 | |
| 2<3 | 0.423 | 0.591 | 0.614 | 0.240 | | | | | 59 |
| 3-5 | 0.307 | 0.425 | 0.447 | 0.240 | | | | | 56 |

| 10 ft by 8 ft by 10 in. | | | | | | | | | |
|-------------------------|---|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in. / ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.301 | 0.469 | 0.496 | 0.240 | 0.314 | 0.240 | 0.240 | 0.240 | |
| 2<3 | 0.394 | 0.627 | 0.655 | 0.240 | | | | | 72 |
| 3-5 | 0.288 | 0.451 | 0.478 | 0.240 | | | | | 66 |

| 10 ft by 9 ft by 10 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.284 | 0.492 | 0.527 | 0.240 | 0.329 | 0.240 | 0.240 | 0.240 | |
| 2<3 | 0.371 | 0.660 | 0.694 | 0.240 | | | | | 79 |
| 3-5 | 0.272 | 0.475 | 0.508 | 0.240 | | | | | 85 |

| 10 ft by 10 ft by 10 in. | | | | | | | | | |
|--------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.272 | 0.514 | 0.559 | 0.240 | 0.344 | 0.240 | 0.240 | 0.240 | |
| 2<3 | 0.353 | 0.691 | 0.732 | 0.240 | | | | | 79 |
| 3-5 | 0.259 | 0.497 | 0.537 | 0.240 | | | | | 79 |

| 11 ft by 4 ft by 11 in. | | | | | | | | | |
|-------------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.414 | 0.341 | 0.333 | 0.264 | 0.264 | 0.264 | 0.264 | 0.264 | |
| 2<3 | 0.609 | 0.481 | 0.491 | 0.264 | | | | | 60 |
| 3-5 | 0.436 | 0.348 | 0.357 | 0.264 | | | | | 56 |

| 11 ft by 6 ft by 11 in. | | | | | | | | | |
|-------------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.356 | 0.399 | 0.407 | 0.264 | 0.265 | 0.264 | 0.264 | 0.264 | |
| 2<3 | 0.521 | 0.580 | 0.597 | 0.264 | | | | | 56 |
| 3-5 | 0.377 | 0.418 | 0.435 | 0.264 | | | | | 56 |

| 11 ft by 8 ft by 11 in. | | | | | | | | | |
|-------------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.314 | 0.449 | 0.471 | 0.264 | 0.298 | 0.264 | 0.264 | 0.264 | |
| 2<3 | 0.457 | 0.659 | 0.687 | 0.264 | | | | | 67 |
| 3-5 | 0.333 | 0.475 | 0.502 | 0.264 | | | | | 63 |

| 11 ft by 10 ft by 11 in. | | | | | | | | | |
|-------------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | "M", in. |
| 0<2 | 0.285 | 0.494 | 0.532 | 0.264 | 0.328 | 0.264 | 0.264 | 0.264 | |
| 2<3 | 0.409 | 0.727 | 0.769 | 0.264 | | | | | 86 |
| 3-5 | 0.300 | 0.524 | 0.565 | 0.264 | | | | | 86 |

| 11 ft by 11 ft by 11 in. | | | | | | | | | |
|--------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.276 | 0.516 | 0.562 | 0.264 | 0.342 | 0.264 | 0.264 | 0.264 | |
| 2<3 | 0.391 | 0.758 | 0.808 | 0.264 | | | | | 86 |
| 3-5 | 0.289 | 0.548 | 0.596 | 0.264 | | | | | 86 |

| 12 ft by 4 ft by 12 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.426 | 0.329 | 0.316 | 0.288 | 0.288 | 0.288 | 0.321 | 0.288 | |
| 2<3 | 0.682 | 0.503 | 0.512 | 0.288 | | | | | 64 |
| 3-5 | 0.489 | 0.364 | 0.373 | 0.288 | | | | | 60 |

| 12 ft by 6 ft by 12 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.367 | 0.385 | 0.387 | 0.288 | 0.288 | 0.288 | 0.320 | 0.288 | |
| 2<3 | 0.590 | 0.606 | 0.624 | 0.288 | | | | | 60 |
| 3-5 | 0.427 | 0.438 | 0.456 | 0.288 | | | | | 56 |

| 12 ft by 8 ft by 12 in. | | | | | | | | | |
|-------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.326 | 0.435 | 0.449 | 0.288 | 0.288 | 0.288 | 0.288 | 0.288 | |
| 2<3 | 0.521 | 0.690 | 0.719 | 0.288 | | | | | 67 |
| 3-5 | 0.381 | 0.499 | 0.527 | 0.288 | | | | | 64 |

| 12 ft by 10 ft by 12 in. | | | | | | | | | |
|--------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.298 | 0.481 | 0.507 | 0.288 | 0.305 | 0.288 | 0.288 | 0.288 | |
| 2<3 | 0.467 | 0.762 | 0.804 | 0.288 | | | | | 93 |
| 3-5 | 0.344 | 0.551 | 0.592 | 0.288 | | | | | 79 |

| 12 ft by 12 ft by 12 in. | | | | | | | | | |
|--------------------------|--|-------|-------|-------|-------|-------|-------|-------|----------|
| Design Earth Cover, ft. | Circumferential Reinforcement Areas, sq in./ ft. | | | | | | | | "M", in. |
| | As1 | As2 | As3 | As4 | As5 | As6 | As7 | As8 | |
| 0<2 | 0.288 | 0.525 | 0.566 | 0.288 | 0.333 | 0.288 | 0.288 | 0.288 | |
| 2<3 | 0.431 | 0.827 | 0.886 | 0.288 | | | | | 93 |
| 3-5 | 0.320 | 0.599 | 0.656 | 0.288 | | | | | 93" |

CONCRETE BOX CULVERTS WITH SKEWS ≤ 30 DEGREES REGARDLESS OF DESIGN FILL AND SKEWS > 30 DEGREES WITH DESIGN FILLS > 5 FEET (BDE)

Effective: April 1, 2012

Revised: April 1, 2014

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

“Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-in-place concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577.”

CONCRETE END SECTIONS FOR PIPE CULVERTS (BDE)

Effective: January 1, 2013

Description. This work shall consist of constructing cast-in-place concrete and precast concrete end sections for pipe culverts. These end sections are shown on the plans as Highway Standard 542001, 542006, 542011, or 542016. This work shall be according to Section 542 of the Standard Specifications except as modified herein.

Materials. Materials shall be according to the following Articles of Division 1000 – Materials of the Standard Specifications.

| Item | Article/Section |
|---|-----------------|
| (a) Portland Cement Concrete (Note 1) | 1020 |
| (b) Precast Concrete End Sections (Note 2) | |
| (c) Coarse Aggregate (Note 3) | 1004.05 |
| (d) Structural Steel (Note 4) | 1006.04 |
| (e) Anchor Bolts and Rods (Note 5) | 1006.09 |
| (f) Reinforcement Bars | 1006.10(a) |
| (g) Nonshrink Grout | 1024.02 |
| (h) Chemical Adhesive Resin System | 1027 |
| (i) Mastic Joint Sealer for Pipe | 1055 |
| (j) Hand Hole Plugs | 1042.16 |

Note 1. Cast-in-place concrete end sections shall be Class SI, except the 14 day mix design shall have a compressive strength of 5000 psi (34,500 kPa) or a flexural strength of (800 psi) 5500 kPa and a minimum cement factor of 6.65 cwt/cu yd (395 kg/cu m).

Note 2. Precast concrete end sections shall be according to Articles 1042.02 and 1042.03(b)(c)(d)(e) of the Standard Specifications. The concrete shall be Class PC according to Section 1020, and shall have a minimum compressive strength of 5000 psi (34,000 kPa) at 28 days.

Joints between precast sections shall be produced with reinforced tongue and groove ends according to the requirements of ASTM C 1577.

Note 3. The granular bedding placed below a precast concrete end section shall be gradation CA 6, CA 9, CA 10, CA 12, CA 17, CA 18, or CA 19.

Note 4. All components of the culvert tie detail shall be galvanized according to the requirements of AASHTO M 111 or M 232 as applicable.

Note 5. The anchor rods for the culvert ties shall be according to the requirements of ASTM F 1554, Grade 105 (Grade 725).

CONSTRUCTION REQUIREMENTS

The concrete end sections may be precast or cast-in-place construction. Toe walls shall be either precast or cast-in-place, and shall be in proper position and backfilled according to the applicable paragraphs of Article 502.10 of the Standard Specifications prior to the installation of the concrete end sections. If soil conditions permit, cast-in-place toe walls may be poured directly against the soil. When poured directly against the soil, the clear cover of the sides and bottom of the toe wall shall be increased to 3 in. (75 mm) by increasing the thickness of the toe wall.

- (a) Cast-In-Place Concrete End Sections. Cast-in-place concrete end sections shall be constructed according to the requirements of Section 503 of the Standard Specifications and as shown on the plans.
- (b) Precast Concrete End Sections. When the concrete end sections will be precast, shop drawings detailing the slab thickness and reinforcement layout shall be submitted to the Engineer for review and approval.

The excavation and backfilling for precast concrete end sections shall be according to the requirements of Section 502 of the Standard Specifications, except a layer of granular bedding at least 6 in. (150 mm) in thickness shall be placed below the elevation of the bottom of the end section. The granular bedding shall extend a minimum of 2 ft (600 mm) beyond each side of the end section.

Anchor rods connecting precast sections shall be brought to a snug tight condition followed by an additional 2/3 turn on one of the nuts. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut.

Method of Measurement. This work will be measured for payment as each, with each end of each culvert being one each.

Basis of Payment. This work will be paid for at the contract unit price per each for CONCRETE END SECTION, STANDARD 542001; CONCRETE END SECTION, STANDARD 542006; CONCRETE END SECTION, 542011; or CONCRETE END SECTION, 542016, of the pipe diameter and slope specified.

CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH (BDE)

Effective: April 1, 2014

Revised: August 1, 2014

Add the following to Article 606.02 of the Standard Specifications:

“(i) Polyurethane Joint Sealant 1050.04”

Revise the fifth paragraph of Article 606.07 of the Standard Specifications to read:

“Transverse contraction and longitudinal construction joints shall be sealed according to Article 420.12, except transverse joints in concrete curb and gutter shall be sealed with polysulfide or polyurethane joint sealant.”

Add the following to Section 1050 of the Standard Specifications:

“1050.04 Polyurethane Joint Sealant. The joint sealant shall be a polyurethane sealant, Type S, Grade NS, Class 25 or better, Use T (T₁ or T₂), according to ASTM C 920.”

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

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

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

CONTRACTOR ASSURANCE. 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 **9.00%** of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

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

BIDDING PROCEDURES. 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.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a 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) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, then 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) SUBCONTRACT. 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) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

- (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
- (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
- (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a 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 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) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) RECONSIDERATION. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

FRICITION 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 | <u>Allowed Alone or in Combination ^{5/}:</u> Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete |
| HMA Low ESAL | Stabilized Subbase or Shoulders | <u>Allowed Alone or in Combination ^{5/}:</u> Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete |

| Use | Mixture | Aggregates Allowed | |
|------------------------------|--|--|---|
| HMA High ESAL Low ESAL | Binder IL-19.0 or IL-19.0L SMA Binder | <u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/} | |
| HMA High ESAL Low ESAL | C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface | <u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/} | |
| HMA High ESAL | D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface | <u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/} | |
| | | <u>Other Combinations Allowed:</u> | |
| | | <i>Up to...</i> | <i>With...</i> |
| | | 25% Limestone | Dolomite |
| | | 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 SMA Ndesign 80 Surface | <u>Allowed Alone or in Combination</u> ^{5/} : Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/} No Limestone. | |
| | | <u>Other Combinations Allowed:</u> | |
| | | <i>Up to...</i> | <i>With...</i> |

| Use | Mixture | Aggregates Allowed | |
|------------------|---|--|--|
| | | 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 SMA Ndesign 80 Surface | <u>Allowed Alone or in Combination</u> ^{5/} : | |
| | | Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone. | |
| | | <u>Other Combinations Allowed:</u> | |
| | | <i>Up to...</i> | <i>With...</i> |
| | | 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.”

GROOVING FOR RECESSED PAVEMENT MARKINGS (BDE)

Effective: November 1, 2012

Revised: August 1, 2014

Description. This work shall consist of grooving the pavement surface in preparation for the application of recessed pavement markings.

Equipment. Equipment shall be according to the following.

- (a) Pavement Marking Tape Installations: The grooving equipment shall have a free-floating saw blade cutting head equipped with gang-stacked diamond saw blades. The diamond saw blades shall be of uniform wear and shall produce a smooth textured surface. Any ridges in the groove shall have a maximum height of 15 mils (0.38 mm).
- (b) Liquid and Thermoplastic Pavement Marking Installations: The grooving equipment shall be equipped with either a free-floating saw blade cutting head or a free-floating grinder cutting head configuration with diamond or carbide tipped cutters and shall produce an irregular textured surface.

CONSTRUCTION REQUIREMENTS

General. The Contractor shall supply the Engineer with a copy of the pavement marking material manufacturer's recommendations for constructing a groove.

Pavement Grooving Methods. The grooves for recessed pavement markings shall be constructed using the following methods.

- (a) Wet Cutting Head Operation. When water is required or used to cool the cutting head, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.
- (b) Dry Cutting Head Operation. When used on HMA pavements, the groove shall be vacuumed or cleaned by blasting with high-pressure air to remove loose aggregate, debris, and dust generated during the cutting operation. When used on PCC pavements, the groove shall be flushed with high pressure water or shot blasted to remove any PCC particles that may have become destabilized during the grooving process. If high pressure water is used, the pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

Pavement Grooving. Grooving shall not cause ravels, aggregate fractures, spalling or disturbance of the joints to the underlying surface of the pavement. Grooves shall be cut into the pavement prior to the application of the pavement marking material. Grooves shall be cut such that the width is 1 in. (25 mm) greater than the width of the pavement marking line as specified on the plans. Grooves for letters and symbols shall be cut in a square or rectangular shape so that the entire marking will fit within the limits of the grooved area. The position of the edge of the grooves shall be a minimum of 4 in. (100 mm) from the edge of all longitudinal joints. The depth of the groove shall not be less than the manufacturer's recommendations for the pavement marking material specified, but shall be installed to a minimum depth of 110 mils (2.79 mm) and a maximum depth of 200 mils (5.08 mm) for pavement marking tapes thermoplastic markings and a minimum depth of 40 mils (1.02 mm) and a maximum depth of 80 mils (2.03 mm) for liquid markings. The cutting head shall be operated at the appropriate speed in order to prevent undulation of the cutting head and grooving at an inconsistent depth.

At the start of grooving operations, a 50 ft (16.7 m) test section shall be installed and depth measurements shall be made at 10 ft (3.3 m) intervals within the test section. The individual depth measurements shall be within the allowable ranges according to this Article. If it is determined the test section has not been grooved at the appropriate depth or texture, adjustments shall be made to the cutting head and another 50 ft (16.7 m) test section shall be installed and checked. This process shall continue until the test section meets the requirements of this Article.

For new HMA pavements, grooves shall not be installed within 14 days of the placement of the final course of pavement.

Final Cleaning. Immediately prior to the application of the pavement marking material or primer sealer, the groove shall be cleaned with high-pressure air blast.

Method of Measurement. This work will be measured for payment in place, in feet (meter) for the groove width specified.

Grooving for letter, numbers and symbols will be measured in square feet (square meters).

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified, and per square foot (square meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS.

The following shall only apply when preformed plastic pavement markings are to be recessed:

Add the following paragraph after the first paragraph of Article 780.07 of the Standard Specifications.

“The markings shall be capable of being applied in a grooved slot on new and existing portland cement concrete and HMA surfaces, by means of a pressure-sensitive, precoated adhesive, or liquid contact cement which shall be applied at the time of installation. A primer sealer shall be applied with a roller and shall cover and seal the entire bottom of the groove. The primer sealer shall be recommended by the manufacturer of the pavement marking material and shall be compatible with the material being used. The Contractor shall install the markings in the groove as soon as possible after the primer sealer cures according to the manufacturer’s recommendations. The markings placed in the groove shall be rolled and tamped into the groove with a roller or tamper cart cut to fit the groove and loaded with or weighing at least 200 lb (90kg). Vehicle tires shall not be used for tamping. The Contractor shall roll and tamp the material with a minimum of 6 passes to prevent easy removal or peeling.”

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

Revised: April 1, 2012

Description. 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 – MIXTURE DESIGN COMPOSITION AND VOLUMETRIC REQUIREMENTS (BDE)

Effective: November 1, 2013

Revised: November 1, 2014

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

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

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

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

“The mixture composition used shall be IL-19.0.”

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

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

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

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

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

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

| “MINIMUM COMPACTED LIFT THICKNESS | |
|-----------------------------------|---------------------|
| Mixture Composition | Thickness, in. (mm) |
| IL-4.75 | 3/4 (19) |
| IL-9.5, IL-9.5L | 1 1/4 (32) |
| SMA-12.5 | 2 (51) |
| IL-19.0, IL-19.0L | 2 1/4 (57)” |

Revise the ninth paragraph of Article 406.14 of the Standard Specifications to read:

“Test strip mixture will be evaluated at the contract unit price according to the following.”

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

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

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

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

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

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

Delete Article 406.14(d) of the Standard Specifications.

Delete Article 406.14(e) of the Standard Specifications.

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

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

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

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

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

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

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

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

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

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

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

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

For mixture IL-4.75 and surface mixtures with an $N_{design} = 90$, 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, $N_{design} = 90$ 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, $N_{design} = 50$ 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.”

Remove footnote 3/ from the tables and at the end of the tables in Article 1004.01(c) of the Standard Specifications.

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

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

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

1/ CA 16 or CA 13 may be blended with the gradations listed.”

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

| | |
|------------|--|
| “High ESAL | IL-19.0 binder; IL-9.5 surface |
| Low ESAL | IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA) ^{1/} ; HMA Shoulders ^{2/} |

1/ Uses 19.0L binder mix.

2/ Uses 19.0L for lower lifts and 9.5L for surface lift.”

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

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

| Item | Article/Section |
|--|-----------------|
| (a) Coarse Aggregate | 1004.03 |
| (b) Fine Aggregate | 1003.03 |
| (c) RAP Material | 1031 |
| (d) Mineral Filler | 1011 |
| (e) Hydrated Lime | 1012.01 |
| (f) Slaked Quicklime (Note 1) | |
| (g) Performance Graded Asphalt Binder (Note 2) | 1032 |
| (h) Fibers (Note 3) | |
| (i) Warm Mix Asphalt (WMA) Technologies (Note 4) | |

Note 1. Slaked quicklime shall be according to ASTM C 5.

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay.

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.

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

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

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

| High ESAL, MIXTURE COMPOSITION (% PASSING) ^{1/} | | | | | | | | |
|--|------------|-----|------------------------|--------------------|-----------|------------------|------------|-------------------|
| Sieve Size | IL-19.0 mm | | SMA 12.5 ^{4/} | | IL-9.5 mm | | IL-4.75 mm | |
| | min | max | min | max | min | max | min | max |
| 1 1/2 in. (37.5 mm) | | | | | | | | |
| 1 in. (25 mm) | | 100 | | | | | | |
| 3/4 in. (19 mm) | 90 | 100 | | 100 | | | | |
| 1/2 in. (12.5 mm) | 75 | 89 | 90 | 99 | | 100 | | 100 |
| 3/8 in. (9.5 mm) | | | 50 | 85 | 90 | 100 | | 100 |
| #4 (4.75 mm) | 40 | 60 | 20 | 40 | 32 | 69 | 90 | 100 |
| #8 (2.36 mm) | 26 | 42 | 16 | 24 ^{5/} | 32 | 52 ^{2/} | 70 | 90 |
| #16 (1.18 mm) | 15 | 30 | | | 10 | 32 | 50 | 65 |
| #50 (300 μm) | 6 | 15 | | | 4 | 15 | 15 | 30 |
| #100 (150 μm) | 4 | 9 | | | 3 | 10 | 10 | 18 |
| #200 (75 μm) | 3 | 6 | 8.0 | 11.0 ^{3/} | 4 | 6 | 7 | 9 |
| Ratio Dust/Asphalt Binder | | 1.0 | | | | 1.0 | | 1.0 ^{3/} |

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ The maximum percent passing the #635 (20 μm) sieve shall be ≤ 3 percent.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above 24 percent.”

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

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

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

| "VOLUMETRIC REQUIREMENTS High ESAL | | | | |
|---------------------------------------|---|--------|-----------------------|---|
| Ndesign | Voids in the Mineral Aggregate (VMA), % minimum | | | Voids Filled with Asphalt Binder (VFA), % |
| | IL-19.0 | IL-9.5 | IL-4.75 ^{1/} | |
| 50 | 13.5 | 15.0 | 18.5 | 65 – 78 ^{2/} |
| 70 | | | | |
| 90 | | | | |

1/ Maximum Draindown for IL-4.75 shall be 0.3 percent

2/ VFA for IL-4.75 shall be 76-83 percent"

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

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

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

"(3) SMA Mixtures.

| ESALs (million) | Ndesign | Design Air Voids Target % | Voids in the Mineral Aggregate (VMA), % min. | Voids Filled with Asphalt (VFA), % |
|-----------------|---------|---------------------------|--|------------------------------------|
| ≤ 10 | 50 | 4.0 | 16.0 | 75 – 80 |
| > 10 | 80 | 4.0 | 17.0 | 75 – 80" |

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

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

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

| "Parameter | Frequency of Tests | | Test Method See Manual of Test Procedures for Materials |
|--|---|------------------|--|
| | High ESAL Mixture | Low ESAL Mixture | |
| Aggregate Gradation % 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 | | Illinois-Modified AASHTO R 35 |
| | Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day) | | |
| Air Voids Bulk Specific Gravity of Gyratory Sample Note 4. | Day's production ≥ 1200 tons: 1 per half day of production | | Illinois-Modified AASHTO T 312 |
| | Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day) | | |
| Maximum Specific Gravity of Mixture | Day's production ≥ 1200 tons: 1 per half day of production | | Illinois-Modified AASHTO T 209 |
| | Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day) | | |

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

Note 2. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design.

Note 3. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident.

Note 4. The WMA compaction temperature for mixture volumetric testing shall be 270 ± 5 °F (132 ± 3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270 ± 5 °F (132 ± 3 °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature, it shall be reheated to standard HMA compaction temperatures.”

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

| “Parameter | High ESAL Mixture Low ESAL Mixture |
|------------------------------|---------------------------------------|
| Ratio Dust/Asphalt Binder | 0.6 to 1.2 |
| Moisture | 0.3 %” |

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

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

| CONTROL LIMITS | | | | | | |
|---------------------------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Parameter | High ESAL Low ESAL | | SMA | | IL-4.75 | |
| | Individual Test | Moving Avg. of 4 | Individual Test | Moving Avg. of 4 | Individual Test | Moving Avg. of 4 |
| % Passing: ^{1/} | | | | | | |
| 1/2 in. (12.5 mm) | ± 6 % | ± 4 % | ± 6 % | ± 4 % | | |
| 3/8 in. (9.5mm) | | | ± 4 % | ± 3 % | | |
| No. 4 (4.75 mm) | ± 5 % | ± 4 % | ± 5 % | ± 4 % | | |
| No. 8 (2.36 mm) | ± 5 % | ± 3 % | ± 4 % | ± 2 % | | |
| No. 16 (1.18 mm) | | | ± 4 % | ± 2 % | ± 4 % | ± 3 % |
| No. 30 (600 µm) | ± 4 % | ± 2.5 % | ± 4 % | ± 2.5 % | | |
| Total Dust Content No. 200 (75 µm) | ± 1.5 % | ± 1.0 % | | | ± 1.5 % | ± 1.0 % |
| Asphalt Binder 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 | N _{design} = 50 | 93.0 - 97.4 % ^{1/} |
| IL-9.5 | N _{design} = 90 | 92.0 - 96.0 % |
| IL-9.5,IL-9.5L | N _{design} < 90 | 92.5 - 97.4 % |
| IL-19.0 | N _{design} = 90 | 93.0 - 96.0 % |
| IL-19.0, IL-19.0L | N _{design} < 90 | 93.0 ^{2/} - 97.4 % |
| SMA | N _{design} = 50 & 80 | 93.5 - 97.4 % |

1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.

2/ 92.0 % when placed as first lift on an unimproved subgrade.”

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

| | |
|----------------------------------|---|
| “CONTROL CHART REQUIREMENTS | High ESAL, 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.

HOT-MIX ASPHALT – MIXTURE DESIGN VERIFICATION AND PRODUCTION (BDE)

Effective: November 1, 2013

Revised: November 1, 2014

Description. This special provision provides 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. This special provision also provides the plant requirements for hydrated lime addition systems used in the production of High ESAL, IL-4.75, and SMA mixes.

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 (Illinois Modified AASHTO T 324) and the Tensile Strength Test (Illinois Modified AASHTO T 283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department’s verification test, the Contractor shall make necessary changes to the mix and provide passing Hamburg Wheel and tensile strength test results from a private lab. The Department will verify the passing results.

All new and renewal mix designs shall meet the following requirements for verification testing.

(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/}

| PG Grade | Number of Passes |
|----------------------|------------------|
| PG 58-xx (or lower) | 5,000 |
| PG 64-xx | 7,500 |
| PG 70-xx | 15,000 |
| PG 76-xx (or higher) | 20,000 |

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

(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 550 kPa (80 psi) 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 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 Content | ± 0.3 % |

* 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.”

System for Hydrated Lime Addition. Revise the fourth sentence of the third paragraph of Article 1030.04(c) of the Standard Specifications to read:

“The method of application shall be according to Article 1102.01(a)(10).”

Replace the first three sentences of the second paragraph of Article 1102.01(a)(10) of the Standard Specifications to read:

“When hydrated lime is used as the anti-strip additive, a separate bin or tank and feeder system shall be provided to store and accurately proportion the lime onto the aggregate either as a slurry, as dry lime applied to damp aggregates, or as dry lime injected onto the hot aggregates prior to adding the liquid asphalt cement. If the hydrated lime is added either as a slurry or as dry lime on damp aggregates, the lime and aggregates shall be mixed by a power driven pugmill to provide a uniform coating of the lime prior to entering the dryer. If dry hydrated lime is added to the hot dry aggregates in a dryer-drum plant, the lime shall be added in such a manner that the lime will not become entrained into the air stream of the dryer-drum and that thorough dry mixing shall occur prior to the injection point of the liquid asphalt. When a batch plant is used, the hydrated lime shall be added to the mixture in the weigh hopper or as approved by the Engineer.”

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

“For 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.

If an anti-stripping additive is required for any other HMA mix, the cost of the additive will be paid for according to Article 109.04. The cost incurred in introducing the additive into 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.”

LIGHT TOWER (BDE)

Effective: January 1, 2015

Revise the second paragraph of Article 1069.08(a) of the Standard Specifications to read:

“All tower shaft components shall be fabricated from high strength, low alloy, steel according to AASHTO M 270 (M 270M); ASTM A 595 (A 595M), Grade A or B; ASTM A 1011 (A 1011M); ASTM A 606 (A 606M); ASTM A 588 (A 588M), or ASTM A 871 (A 871M) Grade 65, with a minimum yield strength of 50,000 psi (345,000 kPa).”

Revise the first sentence of the seventh paragraph of Article 1069.08(e) of the Standard Specifications to read:

“The ring shall be equipped with an enclosed wire raceway and a stainless steel terminal box built according to NEMA Type 4X requirements for wiring of the luminaires.”

Revise the eleventh paragraph of Article 1069.08(e) of the Standard Specifications to read:

“Ring designs that incorporate liquidtight flexible nonmetallic conduit to the terminal box shall use stainless steel conduit fittings. Liquidtight flexible nonmetallic conduit shall be according to Article 1088.01(a)(4).”

Revise the third sentence of the seventh paragraph of Article 1069.08(f) of the Standard Specifications to read:

“Chains shall be stainless steel.”

Revise the first sentence of the first paragraph of Article 1069.08(g) of the Standard Specifications to read:

“Cables (wire rope) shall be manufactured from Type 304 or Type 302 stainless steel and shall be stranded assembly coated with a friction-limiting non-corrosive lubricant.”

Revise the second sentence of the second paragraph of Article 1069.08(g) of the Standard Specifications to read:

“Cables shall be manufactured and listed for compliance with military specification MIL-DTL-83420, Type 1, Composition B.”

Revise the third paragraph of Article 1069.08(g) of the Standard Specifications to read:

“Cable terminals shall be stainless steel whenever possible, shall be compatible with the cable, and shall be as recommended by the cable manufacturer. The terminals, swaging, etc., shall meet the requirements of military specification MIL-DTL-781. Stainless steel oval sleeves shall be according to military specification MS51844.”

Revise the second and third sentences of the first paragraph of Article 1069.08(m) of the Standard Specifications to read:

“The tower main breaker and the motor breaker shall be housed in a stainless steel NEMA Type 4 enclosure mounted on the inside of the handhole pocket door. The main and motor breakers shall have an external position indicating, trip free operating handle having padlock provisions and shall be labeled by two color engraved nameplates clearly marking the “RESET”, “ON”, and “OFF” positions.”

Revise the second paragraph of Article 1069.08(m) of the Standard Specifications to read:

“The main and motor circuit breakers shall be molded case, 2-pole, thermal magnetic, bolt-on type having a UL-listed interrupting rating of not less than 14,000 rms symmetrical amps at 480 V. The main breaker shall be sized for the motor but shall be a minimum of 30 A.”

LRFD PIPE CULVERT BURIAL TABLES (BDE)

Effective: November 1, 2013

Revised: November 1, 2014

Revise Article 542.02 of the Standard Specifications to read as follows:

| “Item | Article/Section |
|--|-----------------|
| (a) Galvanized Corrugated Steel Pipe | 1006.01 |
| (b) Galvanized Corrugated Steel Pipe Arch | 1006.01 |
| (c) Bituminous Coated Corrugated Steel Pipe | 1006.01 |
| (d) Bituminous Coated Corrugated Steel Pipe Arch | 1006.01 |
| (e) Reserved | |
| (f) Aluminized Steel Type 2 Corrugated Pipe | 1006.01 |
| (g) Aluminized Steel Type 2 Corrugated Pipe Arch | 1006.01 |
| (h) Precoated Galvanized Corrugated Steel Pipe | 1006.01 |
| (i) Precoated Galvanized Corrugated Steel Pipe Arch | 1006.01 |
| (j) Corrugated Aluminum Alloy Pipe | 1006.03 |
| (k) Corrugated Aluminum Alloy Pipe Arch | 1006.03 |
| (l) Extra Strength Clay Pipe | 1040.02 |
| (m) Concrete Sewer, Storm Drain, and Culvert Pipe | 1042 |
| (n) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe | 1042 |
| (o) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe..... | 1042 |
| (p) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe | 1042 |
| (q) Polyvinyl Chloride (PVC) Pipe | 1040.03 |
| (r) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior | 1040.03 |
| (s) Corrugated Polypropylene (CPP) pipe with smooth Interior | 1040.07 |
| (t) Corrugated Polyethylene (PE) Pipe with a Smooth Interior | 1040.04 |
| (u) Polyethylene (PE) Pipe with a Smooth Interior | 1040.04 |
| (v) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe | 1056 |
| (w) Mastic Joint Sealer for Pipe | 1055 |
| (x) External Sealing Band | 1057 |
| (y) Fine Aggregate (Note 1) | 1003.04 |
| (z) Coarse Aggregate (Note 2) | 1004.05 |
| (aa) Packaged Rapid Hardening Mortar or Concrete | 1018 |
| (bb) Nonshrink Grout | 1024.02 |
| (cc) Reinforcement Bars and Welded Wire Fabric | 1006.10 |
| (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 |
|--------|---|
| A | Rigid Pipes: Extra Strength Clay Pipe Concrete Sewer Storm Drain and Culvert Pipe, Class 3 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe |
| C | Rigid Pipes: Extra Strength Clay Pipe Concrete Sewer Storm Drain and Culvert Pipe, Class 3 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe Flexible Pipes: Aluminized Steel Type 2 Corrugated Pipe Aluminized Steel Type 2 Corrugated Pipe Arch Precoated Galvanized Corrugated Steel Pipe Precoated Galvanized Corrugated Steel Pipe Arch Corrugated Aluminum Alloy Pipe Corrugated Aluminum Alloy Pipe Arch Polyvinyl Chloride (PVC) Pipe Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polypropylene (CPP) Pipe with Smooth Interior |
| D | Rigid Pipes: Extra Strength Clay Pipe Concrete Sewer Storm Drain and Culvert Pipe, Class 3 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe Flexible Pipes: Galvanized Corrugated Steel Pipe 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 Precoated Galvanized Corrugated Steel Pipe Arch 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 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:

“Table IA: Classes of Reinforced Concrete Pipe
 for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe

| Nominal Diameter in. | Type 1 | Type 2 | Type 3 | Type 4 | Type 5 | Type 6 | Type 7 |
|----------------------------|---|---|--|--|--|---|---|
| | Fill Height: 3' and less 1' min cover | Fill Height: Greater than 3' not exceeding 10' | Fill Height: Greater than 10' not exceeding 15' | Fill Height: Greater than 15' not exceeding 20' | Fill Height: Greater than 20' not exceeding 25' | Fill Height: Greater than 25' not exceeding 30' | Fill Height: Greater than 30' not exceeding 35' |
| 12 | IV | II | III | IV | IV | V | V |
| 15 | IV | II | III | IV | IV | V | V |
| 18 | IV | II | III | IV | IV | V | V |
| 21 | III | II | III | IV | IV | V | V |
| 24 | III | II | III | IV | IV | V | V |
| 30 | IV | II | III | IV | IV | V | V |
| 36 | III | II | III | IV | IV | V | V |
| 42 | II | II | III | IV | IV | V | V |
| 48 | II | II | III | IV | IV | V | V |
| 54 | II | II | III | IV | IV | V | V |
| 60 | II | II | III | IV | IV | V | V |
| 66 | II | II | III | IV | IV | V | V |
| 72 | II | II | III | IV | V | V | V |
| 78 | II | II | III | IV | 2020 | 2370 | 2730 |
| 84 | II | II | III | IV | 2020 | 2380 | 2740 |
| 90 | II | II | III | 1680 | 2030 | 2390 | 2750 |
| 96 | II | III | III | 1690 | 2040 | 2400 | 2750 |
| 102 | II | III | III | 1700 | 2050 | 2410 | 2760 |
| 108 | II | III | 1360 | 1710 | 2060 | 2410 | 2770 |

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 IA: Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe (Metric) | | | | | | | |
|---|---|---|---|---|---|---|--|
| Nominal Diameter mm | Type 1 | Type 2 | Type 3 | Type 4 | Type 5 | Type 6 | Type 7 |
| | Fill Height: 1 m and less 0.3 m min cover | Fill Height: Greater than 1 m not exceeding 3 m | Fill Height: Greater than 3 m not exceeding 4.5 m | Fill Height: Greater than 4.5 m not exceeding 6 m | Fill Height: Greater than 6 m not exceeding 7.5 m | Fill Height: Greater than 7.5 m not exceeding 9 m | Fill Height: Greater than 9 m not exceeding 10.5 m |
| 300 | IV | II | III | IV | IV | V | V |
| 375 | IV | II | III | IV | IV | V | V |
| 450 | IV | II | III | IV | IV | V | V |
| 525 | III | II | III | IV | IV | V | V |
| 600 | III | II | III | IV | IV | V | V |
| 750 | IV | II | III | IV | IV | V | V |
| 900 | III | II | III | IV | IV | V | V |
| 1050 | II | II | III | IV | IV | V | V |
| 1200 | II | II | III | IV | IV | V | V |
| 1350 | II | II | III | IV | IV | V | V |
| 1500 | II | II | III | IV | IV | V | V |
| 1650 | II | II | III | IV | IV | V | V |
| 1800 | II | II | III | IV | V | V | V |
| 1950 | II | II | III | IV | 100 | 110 | 130 |
| 2100 | II | II | III | IV | 100 | 110 | 130 |
| 2250 | II | II | III | 80 | 100 | 110 | 130 |
| 2400 | II | III | III | 80 | 100 | 110 | 130 |
| 2550 | II | III | III | 80 | 100 | 120 | 130 |
| 2700 | II | III | 70 | 80 | 100 | 120 | 130 |

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

| Nominal Diameter in.* | Type 1 | | | Type 2 | | | Type 3 | | | Type 4 | | | Type 5 | | | Type 6 | | | Type 7 | | |
|--------------------------|--|---------|----------|--|---------|---------|---|---------|---------|---|---------|---------|---|----------|---------|---|----------|----------|---|----------|----------|
| | Fill Height: 3' and less 1' min. cover | | | Fill Height: Greater than 3' not exceeding 10' | | | Fill Height: Greater than 10' not exceeding 15' | | | Fill Height: Greater than 15' not exceeding 20' | | | Fill Height: Greater than 20' not exceeding 25' | | | Fill Height: Greater than 25' not exceeding 30' | | | Fill Height: Greater than 30' not exceeding 35' | | |
| | 2 2/3" x 1/2" | 3"x1" | 5"x1" | 2 2/3" x 1/2" | 3"x1" | 5"x1" | 2 2/3" x 1/2" | 3"x1" | 5"x1" | 2 2/3" x 1/2" | 3"x1" | 5"x1" | 2 2/3" x 1/2" | 3"x1" | 5"x1" | 2 2/3" x 1/2" | 3"x1" | 5"x1" | 2 2/3" x 1/2" | 3"x1" | 5"x1" |
| 12 | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | |
| 15 | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | |
| 18 | (0.079) | | | 0.064 | | | 0.064 | | | 0.064 | | | 0.064 | | | (0.079) | | | (0.079) | | |
| 21 | (0.079) | | | 0.064 | | | 0.064 | | | 0.064 | | | (0.079) | | | (0.079) | | | (0.079) | | |
| 24 | (0.079) | | | 0.064 | | | 0.064 | | | 0.064 | | | (0.079) | | | (0.079) | | | (0.109) | | |
| 30 | (0.109E) | | | 0.064 | | | 0.064 | | | 0.064 | | | (0.079) | | | (0.109) | | | 0.109 | | |
| 36 | (0.109E) | | | 0.064 | | | (0.079) | | | (0.079) | | | (0.109) | | | 0.109 | | | (0.138E) | | |
| 42 | 0.079 | | | 0.064 | | | (0.079) | | | (0.079) | | | (0.109) | | | (0.109E) | | | (0.109E) | | |
| 48 | 0.109 | (0.109) | 0.109 | (0.109) | 0.079 | 0.079 | (0.109) | 0.079 | (0.109) | 0.109 | (0.109) | 0.109 | (0.138) | (0.109) | 0.109 | (0.138E) | 0.109 | 0.109 | (0.138E) | 0.109 | (0.138) |
| 54 | 0.109 | (0.109) | 0.109 | (0.109) | 0.079 | 0.079 | 0.109 | (0.109) | 0.109 | 0.109 | (0.109) | 0.109 | (0.138) | 0.109 | 0.109 | (0.138E) | 0.109 | (0.138) | (0.138E) | 0.138 | 0.138 |
| 60 | 0.109 | 0.109 | 0.109 | 0.109 | 0.079 | (0.109) | 0.109 | (0.109) | 0.109 | 0.109 | (0.109) | 0.109 | (0.138) | 0.109 | 0.109 | (0.138E) | (0.138) | (0.138) | 0.138E | (0.138E) | (0.138E) |
| 66 | (0.138) | 0.109 | 0.109 | 0.109 | 0.079 | (0.109) | 0.109 | (0.109) | 0.109 | 0.109 | 0.109 | 0.109 | (0.138) | 0.109 | (0.138) | (0.138E) | 0.138 | 0.138 | 0.138E | (0.138E) | 0.138E |
| 72 | 0.138 | 0.109 | (0.138) | 0.138 | (0.109) | (0.109) | 0.138 | (0.109) | 0.109 | 0.138 | 0.109 | 0.109 | 0.138 | (0.138) | (0.138) | (0.168E) | (0.138E) | 0.138E | (0.168E) | (0.138E) | 0.138E |
| 78 | 0.168 | 0.109 | (0.138) | 0.168 | (0.109) | 0.109 | 0.168 | 0.109 | 0.109 | 0.168 | 0.109 | (0.138) | 0.168 | (0.138) | (0.138) | H0.168E | (0.138E) | 0.138E | H0.168E | 0.138E | (0.168E) |
| 84 | 0.168 | (0.138) | (0.138) | 0.168 | (0.109) | 0.109 | 0.168 | 0.109 | 0.109 | 0.168 | 0.109 | (0.138) | 0.168 | (0.138) | 0.138 | H0.168E | (0.138E) | 0.138E | H0.168E | (0.168E) | (0.168E) |
| 90 | | (0.138) | (0.138) | | (0.109) | 0.109 | | 0.109 | 0.109 | | (0.138) | (0.138) | | (0.138) | 0.138 | | 0.138E | (0.168E) | | (0.168E) | (0.168E) |
| 96 | | (0.138) | (0.138) | | (0.109) | 0.109 | | 0.109 | 0.109 | | (0.138) | (0.138) | | (0.138) | 0.138 | | (0.168E) | (0.168E) | | (0.168E) | (0.168E) |
| 102 | | 0.109Z | 0.109Z | | (0.109) | 0.109 | | 0.109 | 0.109 | | (0.138) | (0.138) | | (0.138) | 0.138 | | (0.168E) | (0.168E) | | H0.138E | H0.168E |
| 108 | | 0.109Z | (0.138Z) | | 0.109 | 0.109 | | 0.109 | (0.138) | | (0.138) | 0.138 | | 0.138 | (0.168) | | (0.168E) | (0.168E) | | H0.138E | H0.168E |
| 114 | | 0.109Z | (0.138Z) | | 0.109 | 0.109 | | 0.109 | (0.138) | | (0.138) | 0.138 | | (0.168) | (0.168) | | (0.168E) | 0.168E | | H0.138E | H0.168E |
| 120 | | 0.109Z | (0.138Z) | | 0.109 | 0.109 | | 0.109 | (0.138) | | (0.138) | 0.138 | | (0.168) | (0.168) | | H0.138E | H0.168E | | H0.168E | H0.168E |
| 126 | | 0.138Z | 0.138Z | | 0.138 | 0.138 | | 0.138 | 0.138 | | 0.138 | (0.168) | | (0.168) | (0.168) | | H0.138E | H0.168E | | H0.168E | H0.168E |
| 132 | | 0.138Z | 0.138Z | | 0.138 | 0.138 | | 0.138 | 0.138 | | (0.168) | (0.168) | | 0.168 | 0.168 | | H0.138E | H0.168E | | H0.168E | H0.168E |
| 138 | | 0.138Z | 0.138Z | | 0.138 | 0.138 | | 0.138 | 0.138 | | (0.168) | (0.168) | | (0.168E) | H0.168E | | H0.168E | H0.168E | | H0.168E | |
| 144 | | 0.168Z | 0.168Z | | 0.168 | 0.168 | | 0.168 | 0.168 | | 0.168 | 0.168 | | H0.168E | H0.168E | | H0.168E | H0.168E | | H0.168E | |

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 "()" can be reduced by one gage thickness if helical seam fabrication is utilized.
- A thickness preceded by "H" indicates only helical seam fabrication is allowed.
- E Elongation according to Article 542.04(e)
- Z 1'-6" Minimum fill

TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE
 FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm, 75 mm x 25 mm AND 125 mm x 25 mm CORRUGATIONS
 (Metric)

| Nominal Diameter mm * | Type 1 Fill Height: | | | Type 2 Fill Height: | | | Type 3 Fill Height: | | | Type 4 Fill Height: | | | Type 5 Fill Height: | | | Type 6 Fill Height: | | | Type 7 Fill Height: | | |
|--------------------------|----------------------------------|---------------|----------------|---------------------------------------|---------------|----------------|---|---------------|----------------|---|---------------|----------------|---|---------------|----------------|---|---------------|----------------|--|---------------|----------------|
| | 1 m and less 0.3 m min. cover | | | Greater than 1 m not exceeding 3 m | | | Greater than 3 m not exceeding 4.5 m | | | Greater than 4.5 m not exceeding 6 m | | | Greater than 6 m not exceeding 7.5 m | | | Greater than 7.5 m not exceeding 9 m | | | Greater than 9 m not exceeding 10.5 m | | |
| | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm |
| 300 | 1.63 | | | 1.63 | | | 1.63 | | | 1.63 | | | 1.63 | | | 1.63 | | | 1.63 | | |
| 375 | 1.63 | | | 1.63 | | | 1.63 | | | 1.63 | | | 1.63 | | | 1.63 | | | (2.01) | | |
| 450 | (2.01) | | | 1.63 | | | 1.63 | | | 1.63 | | | 1.63 | | | (2.01) | | | (2.01) | | |
| 525 | (2.01) | | | 1.63 | | | 1.63 | | | 1.63 | | | (2.01) | | | (2.01) | | | (2.01) | | |
| 600 | (2.01) | | | 1.63 | | | 1.63 | | | 1.63 | | | (2.01) | | | (2.01) | | | (2.01) | | |
| 750 | (2.77E) | | | 1.63 | | | 1.63 | | | (2.01) | | | (2.01) | | | (2.01) | | | (2.77) | | |
| 900 | (2.77E) | | | 1.63 | | | (2.01) | | | (2.01) | | | (2.77) | | | 2.77 | | | (3.51E) | | |
| 1050 | 2.01 | | | 1.63 | | | (2.01) | | | (2.01) | | | (2.77) | | | (2.77E) | | | (2.77E) | | |
| 1200 | 2.77 | (2.77) | 2.77 | (2.77) | 2.01 | 2.01 | (2.77) | 2.01 | (2.77) | 2.77 | (2.77) | 2.77 | (3.51) | (2.77) | 2.77 | (3.51E) | 2.77 | 2.77 | (3.51E) | 2.77 | (3.51) |
| 1350 | 2.77 | (2.77) | 2.77 | (2.77) | 2.01 | 2.01 | 2.77 | (2.77) | 2.77 | 2.77 | (2.77) | 2.77 | (3.51) | 2.77 | 2.77 | (3.51E) | 2.77 | (3.51) | (3.51E) | 3.51 | 3.51 |
| 1500 | 2.77 | 2.77 | 2.77 | 2.77 | 2.01 | (2.77) | 2.77 | (2.77) | 2.77 | 2.77 | (2.77) | 2.77 | (3.51) | 2.77 | 2.77 | (3.51E) | (3.51) | (3.51) | 3.51E | (3.51E) | (3.51E) |
| 1650 | (3.51) | 2.77 | 2.77 | 2.77 | 2.01 | (2.77) | 2.77 | (2.77) | 2.77 | 2.77 | (2.77) | 2.77 | (3.51) | 2.77 | (3.51) | (3.51E) | 3.51 | 3.51 | 3.51E | (3.51E) | 3.51E |
| 1800 | 3.51 | 2.77 | (3.51) | 3.51 | (2.77) | (2.77) | 3.51 | (2.77) | 2.77 | 3.51 | 2.77 | 2.77 | 3.51 | (3.51) | (3.51) | (4.27E) | (3.51E) | 3.51E | (4.27E) | (3.51E) | 3.51E |
| 1950 | 4.27 | 2.77 | (3.51) | 4.27 | (2.77) | 2.77 | 4.27 | 2.77 | 2.77 | 4.27 | 2.77 | (3.51) | 4.27 | (3.51) | (3.51) | H 4.27E | (3.51E) | 3.51E | H 4.27E | 3.51E | (4.27E) |
| 2100 | 4.27 | (3.51) | (3.51) | 4.27 | (2.77) | 2.77 | 4.27 | 2.77 | 2.77 | 4.27 | 2.77 | (3.51) | 4.27 | (3.51) | 3.51 | H 4.27E | (3.51E) | 3.51E | H 4.27E | (4.27E) | (4.27E) |
| 2250 | | (3.51) | (3.51) | | (2.77) | 2.77 | | 2.77 | 2.77 | | (3.51) | (3.51) | | (3.51) | 3.51 | | 3.51E | (4.27E) | | (4.27E) | (4.27E) |
| 2400 | | (3.51) | (3.51) | | (2.77) | 2.77 | | 2.77 | 2.77 | | (3.51) | (3.51) | | (3.51) | 3.51 | | (4.27E) | (4.27E) | | (4.27E) | (4.27E) |
| 2550 | | 2.77Z | 2.77Z | | (2.77) | 2.77 | | 2.77 | (3.51) | | (3.51) | (3.51) | | (3.51) | 3.51 | | (4.27E) | (4.27E) | | H 3.51E | H 4.27E |
| 2700 | | 2.77Z | (3.51Z) | | 2.77 | 2.77 | | 2.77 | (3.51) | | (3.51) | 3.51 | | 3.51 | (4.27) | | (4.27E) | (4.27E) | | H 3.51E | H 4.27E |
| 2850 | | 2.77Z | (3.51Z) | | 2.77 | 2.77 | | 2.77 | (3.51) | | (3.51) | 3.51 | | (4.27) | (4.27) | | (4.27E) | 4.27E | | H 3.51E | H 4.27E |
| 3000 | | 2.77Z | (3.51Z) | | 2.77 | 2.77 | | (3.51) | (3.51) | | (3.51) | 3.51 | | (4.27) | (4.27) | | H 3.51E | H 4.27E | | H 4.27E | H 4.27E |
| 3150 | | 3.51Z | 3.51Z | | 3.51 | 3.51 | | 3.51 | 3.51 | | 3.51 | (4.27) | | (4.27) | (4.27) | | H 3.51E | H 4.27E | | H 4.27E | H 4.27E |
| 3300 | | 3.51Z | 3.51Z | | 3.51 | 3.51 | | 3.51 | 3.51 | | (4.27) | (4.27) | | 4.27 | 4.27 | | H 3.51E | H 4.27E | | H 4.27E | H 4.27E |
| 3450 | | 3.51Z | 3.51Z | | 3.51 | 3.51 | | 3.51 | 3.51 | | (4.27) | (4.27) | | (4.27E) | H 4.27E | | H 4.27E | H 4.27E | | H 4.27E | H 4.27E |
| 3600 | | 4.27Z | 4.27Z | | 4.27 | 4.27 | | 4.27 | 4.27 | | 4.27 | 4.27 | | H 4.27E | H 4.27E | | H 4.27E | H 4.27E | | H 4.27E | H 4.27E |

Notes:

* 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

| TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS | | | | | | | | | | | | | | |
|---|--|----------|--|---------|---|---------|---|---------|---|---------|---|----------|---|----------|
| Nominal Diameter in. | Type 1 | | Type 2 | | Type 3 | | Type 4 | | Type 5 | | Type 6 | | Type 7 | |
| | Fill Height: 3' and less 1' min. cover | | Fill Height: Greater than 3' not exceeding 10' | | Fill Height: Greater than 10' not exceeding 15' | | Fill Height: Greater than 15' not exceeding 20' | | Fill Height: Greater than 20' not exceeding 25' | | Fill Height: Greater than 25' not exceeding 30' | | Fill Height: Greater than 30' not exceeding 35' | |
| | 2 2/3"x1/2" | 3"x1" | 2 2/3"x1/2" | 3"x1" | 2 2/3"x1/2" | 3"x1" | 2 2/3"x1/2" | 3"x1" | 2 2/3"x1/2" | 3"x1" | 2 2/3"x1/2" | 3"x1" | 2 2/3"x1/2" | 3"x1" |
| 12 | (0.075) | | 0.060 | | 0.060 | | 0.060 | | 0.060 | | 0.060 | | 0.060 | |
| 15 | (0.075) | | 0.060 | | 0.060 | | 0.060 | | 0.060 | | 0.060 | | 0.060 | (0.075) |
| 18 | (0.075) | | 0.060 | | 0.060 | | 0.060 | | 0.060 | | (0.075) | | H 0.060 | |
| 21 | H 0.060E | | 0.060 | | 0.060 | | 0.060 | | (0.075) | | H 0.060 | | H 0.060E | |
| 24 | (0.105E) | | 0.060 | | 0.060 | | (0.075) | | (0.105) | | (0.105) | | (0.105E) | |
| 30 | H 0.075E | H 0.060 | 0.075 | H 0.060 | 0.075 | H 0.060 | (0.105) | H 0.060 | (0.105) | H 0.060 | H 0.075E | H 0.060 | H 0.075E | H 0.060 |
| 36 | (0.135E) | H 0.060E | 0.075 | H 0.060 | (0.105) | H 0.060 | (0.105) | H 0.060 | (0.135) | H 0.060 | H 0.075E | H 0.060 | H 0.075E | H 0.060E |
| 42 | 0.105E | (0.075) | 0.105 | 0.060 | 0.105 | 0.060 | 0.105 | 0.060 | 0.105 | (0.075) | 0.105E | 0.105 | 0.105E | (0.105E) |
| 48 | 0.105E | (0.075) | 0.105 | 0.060 | 0.105 | 0.060 | 0.105 | (0.075) | 0.105 | (0.105) | 0.105E | (0.105E) | 0.105E | (0.135E) |
| 54 | 0.105E | (0.105) | 0.105 | 0.060 | 0.105 | 0.060 | 0.105 | (0.075) | 0.105 | (0.105) | 0.105E | (0.105E) | (0.135E) | (0.135E) |
| 60 | 0.135E | (0.105) | 0.135 | 0.060 | 0.135 | (0.075) | 0.135 | (0.105) | 0.135 | (0.105) | 0.135E | (0.135E) | (0.164E) | (0.135E) |
| 66 | 0.164E | (0.105) | 0.164 | 0.060 | 0.164 | (0.075) | 0.164 | (0.105) | 0.164 | (0.135) | 0.164E | (0.135E) | H 0.164E | (0.135E) |
| 72 | 0.164E | (0.105) | 0.164 | 0.060 | 0.164 | (0.075) | 0.164 | (0.105) | 0.164 | (0.135) | H 0.164E | (0.135E) | H 0.164E | (0.164E) |
| 78 | | (0.135) | | 0.075 | | (0.105) | | (0.105) | | (0.135) | | (0.135E) | | (0.164E) |
| 84 | | (0.135) | | 0.105 | | 0.105 | | (0.135) | | (0.135) | | (0.164E) | | (0.164E) |
| 90 | | (0.135) | | 0.105 | | 0.105 | | (0.135) | | (0.135) | | (0.164E) | | (0.164E) |
| 96 | | (0.135) | | 0.105 | | 0.105 | | (0.135) | | (0.135) | | (0.164E) | | H 0.135E |
| 102 | | 0.135Z | | 0.135 | | 0.135 | | 0.135 | | (0.164) | | (0.164E) | | H 0.135E |
| 108 | | 0.135Z | | 0.135 | | 0.135 | | 0.135 | | (0.164) | | (0.164E) | | H 0.164E |
| 114 | | 0.164Z | | 0.164 | | 0.164 | | 0.164 | | 0.164 | | H 0.164E | | H 0.164E |
| 120 | | 0.164Z | | 0.164 | | 0.164 | | 0.164 | | 0.164 | | H 0.164E | | |

Notes:

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

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

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1'-6"

Z 1"-6" Minimum fill

| TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm AND 75 mm x 25 mm CORRUGATIONS (Metric) | | | | | | | | | | | | | | |
|--|--|---------------|---|---------------|---|---------------|---|---------------|---|---------------|---|---------------|--|---------------|
| Nominal Diameter mm | Type 1 | | Type 2 | | Type 3 | | Type 4 | | Type 5 | | Type 6 | | Type 7 | |
| | Fill Height: 1 m and less 0.3 m min. cover | | Fill Height: Greater than 1 m not exceeding 3 m | | Fill Height: Greater than 3 m not exceeding 4.5 m | | Fill Height: Greater than 4.5 m not exceeding 6 m | | Fill Height: Greater than 6 m not exceeding 7.5 m | | Fill Height: Greater than 7.5 m not exceeding 9 m | | Fill Height: Greater than 9 m not exceeding 10.5 m | |
| | 68 x 13 mm | 75 x 25 mm | 68 x 13 mm | 75 x 25 mm | 68 x 13 mm | 75 x 25 mm | 68 x 13 mm | 75 x 25 mm | 68 x 13 mm | 75 x 25 mm | 68 x 13 mm | 75 x 25 mm | 68 x 13 mm | 75 x 25 mm |
| 300 | (1.91) | | 1.52 | | 1.52 | | 1.52 | | 1.52 | | 1.52 | | 1.52 | |
| 375 | (1.91) | | 1.52 | | 1.52 | | 1.52 | | 1.52 | | 1.52 | | (1.91) | |
| 450 | (1.91) | | 1.52 | | 1.52 | | 1.52 | | 1.52 | | (1.91) | | H 1.52 | |
| 525 | H 1.52E | | 1.52 | | 1.52 | | 1.52 | | (1.91) | | H 1.52 | | H 1.52E | |
| 600 | (2.67E) | | 1.52 | | 1.52 | | (1.91) | | (2.67) | | (2.67) | | (2.67E) | |
| 750 | H 1.91E | H 1.52 | 1.91 | H 1.52 | 1.91 | H 1.52 | (2.67) | H 1.52 | (2.67) | H 1.52 | H 1.91E | H 1.52 | H 1.91E | H 1.52 |
| 900 | (3.43E) | H 1.52E | 1.91 | H 1.52 | (2.67) | H 1.52 | (2.67) | H 1.52 | (3.43) | H 1.52 | H 1.91E | H 1.52 | H 1.91E | H 1.52E |
| 1050 | 2.67E | (1.91) | 2.67 | 1.52 | 2.67 | 1.52 | 2.67 | 1.52 | 2.67 | (1.91) | 2.67E | 2.67 | 2.67E | (2.67E) |
| 1200 | 2.67E | (1.91) | 2.67 | 1.52 | 2.67 | 1.52 | 2.67 | (1.91) | 2.67 | (2.67) | 2.67E | (2.67E) | 2.67E | (3.43E) |
| 1350 | 2.67E | (2.67) | 2.67 | 1.52 | 2.67 | 1.52 | 2.67 | (1.91) | 2.67 | (2.67) | 2.67E | (2.67E) | (3.43E) | (3.43E) |
| 1500 | 3.43E | (2.67) | 3.43 | 1.52 | 3.43 | (1.91) | 3.43 | (2.67) | 3.43 | (2.67) | 3.43E | (3.43E) | (4.17E) | (3.43E) |
| 1650 | 4.17E | (2.67) | 4.17 | 1.52 | 4.17 | (1.91) | 4.17 | (2.67) | 4.17 | (3.43) | 4.17E | (3.43E) | H 4.17E | (3.43E) |
| 1800 | 4.17E | (2.67) | 4.17 | 1.52 | 4.17 | (1.91) | 4.17 | (2.67) | 4.17 | (3.43) | H 4.17E | (3.43E) | H 4.17E | (4.17E) |
| 1950 | | (3.43) | | 1.91 | | (2.67) | | (2.67) | | (3.43) | | (3.43E) | | (4.17E) |
| 2100 | | (3.43) | | 2.67 | | 2.67 | | (3.43) | | (3.43) | | (4.17E) | | (4.17E) |
| 2250 | | (3.43) | | 2.67 | | 2.67 | | (3.43) | | (3.43) | | (4.17E) | | (4.17E) |
| 2400 | | (3.43) | | 2.67 | | 2.67 | | (3.43) | | (3.43) | | (4.17E) | | H 3.43E |
| 2550 | | 3.43Z | | 3.43 | | 3.43 | | 3.43 | | (4.17) | | (4.17E) | | H 3.43E |
| 2700 | | 3.43Z | | 3.43 | | 3.43 | | 3.43 | | (4.17) | | (4.17E) | | H 4.17E |
| 2850 | | 4.17Z | | 4.17 | | 4.17 | | 4.17 | | 4.17 | | H 4.17E | | H 4.17E |
| 3000 | | 4.17Z | | 4.17 | | 4.17 | | 4.17 | | 4.17 | | H 4.17E | | H 4.17E |

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

Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES
 FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE
 (Metric)

| Equivalent Round Size (mm) | Corrugated Steel & Aluminum Pipe Arch 68 x 13 mm | | Corrugated Steel & Aluminum Pipe Arch 75 x 25 mm | | Corrugated Steel Pipe Arch 125 x 25 mm | | Min. Cover | Type 1 | | | Type 2 | | | Type 3 | | | | | | | | |
|----------------------------|--|------------|--|------------|--|--------------------------------------|------------|--------------|------------|------------|--------------|------------|------------|--------------|------------|------------|------|--------|--------|--------|------|--------|
| | Span Rise (mm)* (mm) | | Span Rise (mm) | | Span Rise (mm) | | | Fill Height: | | | Fill Height: | | | Fill Height: | | | | | | | | |
| | 1 m and less | | Greater than 1 m not exceeding 3 m | | | Greater than 3 m not exceeding 4.5 m | | | | | | | | | | | | | | | | |
| | Steel & Aluminum | | Steel | | Aluminum | | | Steel | | Aluminum | | Steel | | Aluminum | | | | | | | | |
| | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | 125 x 25 mm | 68 x 13 mm | 75 x 25 mm | | | | | | |
| 375 | 430 | 330 | | | | 0.5 m | 1.63 | | | 1.52 | | 1.63 | | | 1.52 | | | 1.52 | | | | |
| 450 | 530 | 380 | | | | 0.5 m | 1.63 | | | 1.52 | | 1.63 | | | 1.52 | | | 1.52 | | | | |
| 525 | 610 | 460 | | | | 0.5 m | 1.63 | | | (1.91) | | 1.63 | | | 1.52 | | | 1.52 | | | | |
| 600 | 710 | 510 | | | | 0.5 m | (2.01) | | | (2.67) | | 1.63 | | | 1.91 | | | 1.91 | | | | |
| 750 | 870 | 630 | | | | 0.5 m | (2.01) | | | (2.67) | | 1.63 | | | 1.91 | | | (2.67) | | | | |
| 900 | 1060 | 740 | | | | 0.5 m | (2.01) | | | 2.67 | | 1.63 | | | 2.67 | | | 2.67 | | | | |
| 1050 | 1240 | 840 | | | | 0.5 m | 2.77 | | | 2.67 | | (2.77) | | | 2.67 | | | 2.67 | | | | |
| 1200 | 1440 | 970 | 1340 | 1050 | 1340 | 1050 | 0.5 m | 2.77 | (2.77) | (2.77) | 3.43 | 1.52 | 2.77 | 2.01 | 2.01 | 3.43 | 1.52 | 2.77 | 2.01 | (2.77) | 3.43 | 1.52 |
| 1350 | 1620 | 1100 | 1520 | 1170 | 1520 | 1170 | 0.5 m | 2.77 | (2.77) | 2.77 | 4.17 | (1.91) | 2.77 | 2.01 | 2.01 | 4.17 | 1.52 | 2.77 | (2.77) | 2.77 | 4.17 | (1.91) |
| 1500 | 1800 | 1200 | 1670 | 1300 | 1670 | 1300 | 0.5 m | 3.51 | (2.77) | 2.77 | 4.17 | (1.91) | 3.51 | 2.01 | (2.77) | 4.17 | 1.52 | 3.51 | (2.77) | 2.77 | 4.17 | (1.91) |
| 1650 | 1950 | 1320 | 1850 | 1400 | 1850 | 1400 | 0.5 m | 4.27 | (2.77) | 2.77 | | 1.91 | 4.27 | 2.01 | (2.77) | | 1.91 | 4.27 | (2.77) | 2.77 | | 1.91 |
| 1800 | 2100 | 1450 | 2050 | 1500 | 2050 | 1500 | 0.5 m | 4.27 | (2.77) | 2.77 | | 2.67 | 4.27 | 2.01 | (2.77) | | 2.67 | 4.27 | (2.77) | 2.77 | | 2.67 |
| 1950 | | | 2200 | 1620 | 2200 | 1620 | 0.5 m | | 2.77 | 2.77 | | 2.67 | | (2.77) | 2.77 | | 2.67 | | 2.77 | 2.77 | | 2.67 |
| 2100 | | | 2400 | 1720 | 2400 | 1720 | 0.5 m | | 2.77 | 2.77 | | 2.67 | | (2.77) | 2.77 | | 2.67 | | 2.77 | 2.77 | | 2.67 |
| 2250 | | | 2600 | 1820 | 2600 | 1820 | 0.5 m | | 2.77 | 2.77 | | 3.43 | | (2.77) | 2.77 | | 3.43 | | 2.77 | 2.77 | | 3.43 |
| 2400 | | | 2840 | 1920 | 2840 | 1920 | 0.5 m | | 2.77 | (3.51) | | 4.17 | | 2.77 | 2.77 | | 4.17 | | 2.77 | (3.51) | | 4.17 |
| 2550 | | | 2970 | 2020 | 2970 | 2020 | 0.5 m | | 2.77 | (3.51) | | 4.17 | | 2.77 | 2.77 | | 4.17 | | 2.77 | (3.51) | | 4.17 |
| 2700 | | | 3240 | 2120 | 3240 | 2120 | 0.5 m | | 3.51 | 3.51 | | | | 3.51 | 3.51 | | | | 3.51 | 3.51 | | |
| 2850 | | | 3470 | 2220 | 3470 | 2220 | 0.5 m | | 3.51 | 3.51 | | | | 3.51 | 3.51 | | | | 3.51 | 3.51 | | |
| 3000 | | | 3600 | 2320 | 3600 | 2320 | 0.5 m | | 4.27 | 4.27 | | | | 4.27 | 4.27 | | | | 4.27 | 4.27 | | |

Notes:

* 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.

| Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICAL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE | | | | | | | | | | | |
|---|---|------|-------------------------------------|---------|---------------|--------------------------|-------|--|-------|---|------|
| Equivalent Round Size (in.) | Reinforced Concrete Elliptical pipe (in.) | | Reinforced Concrete Arch pipe (in.) | | Minimum Cover | Type 1 | | Type 2 | | Type 3 | |
| | Span | Rise | Span | Rise | RCCP HE & A | Fill Height: 3' and less | | Fill Height: Greater than 3' not exceeding 10' | | Fill Height: Greater than 10' not exceeding 15' | |
| | | | | | | HE | Arch | HE | Arch | HE | Arch |
| 15 | 23 | 14 | 18 | 11 | 1' -0" | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 18 | 23 | 14 | 22 | 13 1/2 | 1' -0" | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 21 | 30 | 19 | 26 | 15 1/2 | 1' -0" | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 24 | 30 | 19 | 28 1/2 | 18 | 1' -0" | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 27 | 34 | 22 | 36 1/4 | 22 1/2 | 1' -0" | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 30 | 38 | 24 | 36 1/4 | 22 1/2 | 1' -0" | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 36 | 45 | 29 | 43 3/4 | 26 5/8 | 1' -0" | HE-II | A-II | HE-III | A-III | HE-IV | A-IV |
| 42 | 53 | 34 | 51 1/8 | 31 5/16 | 1' -0" | HE-I | A-II | HE-III | A-III | HE-IV | A-IV |
| 48 | 60 | 38 | 58 1/2 | 36 | 1' -0" | HE-I | A-II | HE-III | A-III | 1460 | 1450 |
| 54 | 68 | 43 | 65 | 40 | 1' -0" | HE-I | A-II | HE-III | A-III | 1460 | 1460 |
| 60 | 76 | 48 | 73 | 45 | 1' -0" | HE-I | A-II | HE-III | A-III | 1460 | 1470 |
| 66 | 83 | 53 | 88 | 54 | 1' -0" | HE-I | A-II | HE-III | A-III | 1470 | 1480 |
| 72 | 91 | 58 | 88 | 54 | 1' -0" | HE-I | A-II | HE-III | 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: CLASSES OF REINFORCED CONCRETE ELLIPTICAL AND REINFORCED CONCRETE ARCH PIPE
 FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE
 (Metric)

| Equivalent Round Size (mm) | Reinforced Concrete Elliptical pipe (mm) | | Reinforced Concrete Arch pipe (mm) | | Minimum Cover RCCP HE & A | Type 1 | | Type 2 | | Type 3 | |
|----------------------------|--|------|------------------------------------|------|------------------------------|---------------------------|-------|---|-------|---|------|
| | Span | Rise | Span | Rise | | Fill Height: 1 m and less | | Fill Height: Greater than 1 m not exceeding 3 m | | Fill Height: Greater than 3 m not exceeding 4.5 m | |
| | | | | | HE | Arch | HE | Arch | HE | Arch | |
| 375 | 584 | 356 | 457 | 279 | 0.3 m | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 450 | 584 | 356 | 559 | 343 | 0.3 m | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 525 | 762 | 483 | 660 | 394 | 0.3 m | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 600 | 762 | 483 | 724 | 457 | 0.3 m | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 686 | 864 | 559 | 921 | 572 | 0.3 m | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 750 | 965 | 610 | 921 | 572 | 0.3 m | HE-III | A-III | HE-III | A-III | HE-IV | A-IV |
| 900 | 1143 | 737 | 1111 | 676 | 0.3 m | HE-II | A-II | HE-III | A-III | HE-IV | A-IV |
| 1050 | 1346 | 864 | 1299 | 795 | 0.3 m | HE-I | A-II | HE-III | A-III | HE-IV | A-IV |
| 1200 | 1524 | 965 | 1486 | 914 | 0.3 m | HE-I | A-II | HE-III | A-III | 70 | 70 |
| 1350 | 1727 | 1092 | 1651 | 1016 | 0.3 m | HE-I | A-II | HE-III | A-III | 70 | 70 |
| 1500 | 1930 | 1219 | 1854 | 1143 | 0.3 m | HE-I | A-II | HE-III | A-III | 70 | 70 |
| 1676 | 2108 | 1346 | 2235 | 1372 | 0.3 m | HE-I | A-II | HE-III | A-III | 70 | 70 |
| 1800 | 2311 | 1473 | 2235 | 1372 | 0.3 m | HE-I | A-II | HE-III | A-III | 70 | 70 |

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required.
 Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

TABLE IIIA: PLASTIC PIPE PERMITTED
 FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE

| Nominal Diameter (in.) | Type 1 Fill Height: 3' and less, with 1' min | | | | | Type 2 Fill Height: Greater than 3', not exceeding 10' | | | | | Type 3 Fill Height: Greater than 10', not exceeding 15' | | | | | Type 4 Fill Height: Greater than 15', not exceeding 20' | | | |
|------------------------|---|------|----|-----|-----|---|------|----|-----|-----|--|------|----|-----|-----|--|------|----|-----|
| | PVC | CPVC | PE | CPE | CPP | PVC | CPVC | PE | CPE | CPP | PVC | CPVC | PE | CPE | CPP | PVC | CPVC | PE | CPP |
| | 10 | X | X | X | X | NA | X | X | X | X | NA | X | X | X | X | NA | X | X | X |
| 12 | X | X | X | X | X | X | X | X | X | X | X | X | X | NA | X | X | X | X | NA |
| 15 | X | X | NA | X | X | X | X | NA | X | X | X | X | NA | NA | X | X | X | NA | X |
| 18 | X | X | X | X | X | X | X | X | X | X | X | X | X | NA | X | X | X | X | NA |
| 21 | X | X | NA | NA | NA | X | X | NA | NA | NA | X | X | NA | NA | NA | X | X | NA | NA |
| 24 | X | X | X | X | X | X | X | X | X | X | X | X | NA | NA | NA | X | X | X | NA |
| 30 | X | X | X | X | X | X | X | X | X | X | X | X | X | NA | X | X | X | X | NA |
| 36 | X | X | X | X | X | X | X | X | X | X | X | X | X | NA | NA | X | X | X | NA |
| 42 | X | NA | X | X | NA | X | NA | X | NA | NA | X | NA | X | NA | NA | X | NA | X | NA |
| 48 | X | NA | X | X | X | X | NA | X | NA | NA | X | NA | X | NA | NA | X | NA | X | NA |

Notes:

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

| TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (Metric) | | | | | | | | | | | | | | | | | | | |
|--|---|------|----|-----|-----|---|------|----|-----|-----|---|------|----|-----|-----|---|------|----|-----|
| Nominal Diameter (mm) | Type 1 Fill Height: 1 m and less, with 0.3 m min. cover | | | | | Type 2 Fill Height: Greater than 1 m, not exceeding 3 m | | | | | Type 3 Fill Height: Greater than 3 m, not exceeding 4.5 m | | | | | Type 4 Fill Height: Greater than 4.5 m, not exceeding 6 m | | | |
| | PVC | CPVC | PE | CPE | CPP | PVC | CPVC | PE | CPE | CPP | PVC | CPVC | PE | CPE | CPP | PVC | CPVC | PE | CPP |
| | 250 | X | X | X | X | NA | X | X | X | X | NA | X | X | X | X | NA | X | X | X |
| 300 | X | X | X | X | X | X | X | X | X | X | X | X | X | NA | X | X | X | X | NA |
| 375 | X | X | NA | X | X | X | X | NA | X | X | X | X | NA | NA | X | X | X | NA | X |
| 450 | X | X | X | X | X | X | X | X | X | X | X | X | X | NA | X | X | X | X | NA |
| 525 | X | X | NA | NA | NA | X | X | NA | NA | NA | X | X | NA | NA | NA | X | X | NA | NA |
| 600 | X | X | X | X | X | X | X | X | X | X | X | X | NA | NA | NA | X | X | X | NA |
| 750 | X | X | X | X | X | X | X | X | X | X | X | X | X | NA | X | X | X | X | NA |
| 900 | X | X | X | X | X | X | X | X | X | X | X | X | X | NA | NA | X | X | X | NA |
| 1000 | X | NA | X | X | NA | X | NA | X | NA | NA | X | NA | X | NA | NA | X | NA | X | NA |
| 1200 | X | NA | X | X | X | X | NA | X | NA | NA | X | NA | X | NA | NA | X | NA | X | NA |

Notes:

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

| TABLE IIIB: PLASTIC PIPE PERMITTED | | | | | | | | |
|--|--|------|--|--|------|--|--|--|
| FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE | | | | | | | | |
| Nominal Diameter (in.) | Type 5 | | | Type 6 | | | Type 7 | |
| | Fill Height: Greater than 20', not exceeding 25' | | | Fill Height: Greater than 25', not exceeding 30' | | | Fill Height: Greater than 30', not exceeding 35' | |
| | PVC | CPVC | | PVC | CPVC | | CPVC | |
| 10 | X | X | | X | X | | X | |
| 12 | X | X | | X | X | | X | |
| 15 | X | X | | X | X | | X | |
| 18 | X | X | | X | X | | X | |
| 21 | X | X | | X | X | | X | |
| 24 | X | X | | X | X | | X | |
| 30 | X | X | | X | X | | X | |
| 36 | X | X | | X | X | | X | |
| 42 | X | NA | | X | NA | | NA | |
| 48 | X | NA | | X | NA | | NA | |

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

| TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (metric) | | | | | | | | |
|--|--|------|--|--|------|--|---|--|
| Nominal Diameter (mm) | Type 5 | | | Type 6 | | | Type 7 | |
| | Fill Height: Greater than 6 m, not exceeding 7.5 m | | | Fill Height: Greater than 7.5 m, not exceeding 9 m | | | Fill Height: Greater than 9 m, not exceeding 10.5 m | |
| | PVC | CPVC | | PVC | CPVC | | CPVC | |
| 250 | X | X | | X | X | | X | |
| 300 | X | X | | X | X | | X | |
| 375 | X | X | | X | X | | X | |
| 450 | X | X | | X | X | | X | |
| 525 | X | X | | X | X | | X | |
| 600 | X | X | | X | X | | X | |
| 750 | X | X | | X | X | | X | |
| 900 | X | X | | X | X | | X | |
| 1000 | X | NA | | X | NA | | NA | |
| 1200 | X | NA | | X | NA | | NA | |

Notes:

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

Revise the first sentence of the first paragraph of Article 542.04(c) of the Standard Specifications to read:

“Compacted aggregate, at least 4 in. (100 mm) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except compacted impervious material shall be used for the outer 3 ft (1 m) at each end of the pipe culvert.”

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

“PVC, PE and CPP pipes shall be joined according to the manufacturer’s specifications.”

Replace the third sentence of the first paragraph of Article 542.04(h) of the Standard Specifications with the following:

“The total cover required for various construction loadings shall be the responsibility of the Contractor.”

Delete “Table IV : Wheel Loads and Total Cover” in Article 542.04(h) of the Standard Specifications.

Revise the first and second paragraphs of Article 542.04(i) of the Standard Specifications to read:

“(i) Deflection Testing for Pipe Culverts. All PE, PVC and CPP pipe culverts shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP pipe culverts with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP pipe culverts with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used.”

Revise Articles 542.04(i)(1) and (2) of the Standard Specifications to read:

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

(2) For all PE and CPP pipe: the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications.”

Revise the second sentence of the second paragraph of Article 542.07 of the Standard Specifications to read:

“When a prefabricated end section is used, it shall be of the same material as the pipe culvert, except for polyethylene (PE), polyvinylchloride (PVC), and polypropylene (PP) pipes which shall have metal end sections.”

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

“1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.”

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

“(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.

(d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements.”

Add the following to Section 1040 of the Standard Specifications:

“1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

(a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size – 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.

(b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size – 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal.”

LRFD STORM SEWER BURIAL TABLES (BDE)

Effective: November 1, 2013

Revised: November 1, 2014

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 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 | 1040.07 |
| (j) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe | 1056 |
| (k) Mastic Joint Sealer for Pipe | 1055 |
| (l) 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 | 1042.16 |
| (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 |
|--------|---|
| A | 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 |
| B | 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 Polypropylene (CPP) Pipe with a Smooth Interior" |

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

| STORM SEWERS | | | | | | | | | | | | | | | | |
|--|---|-----|------|-----|------|----|-----|-----|---|-----|------|-----|------|----|-----|-----|
| KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED | | | | | | | | | | | | | | | | |
| FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE | | | | | | | | | | | | | | | | |
| Nominal Diameter in. | Type 1 | | | | | | | | Type 2 | | | | | | | |
| | Fill Height: 3' and less With 1' minimum cover | | | | | | | | Fill Height: Greater than 3' not exceeding 10' | | | | | | | |
| | RCCP | CSP | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP | CSP | ESCP | PVC | CPVC | PE | CPE | CPP |
| 10 | NA | 3 | X | X | X | X | X | NA | NA | 1 | *X | X | X | X | X | NA |
| 12 | IV | NA | X | X | X | X | X | X | II | 1 | *X | X | X | X | X | X |
| 15 | IV | NA | NA | X | X | NA | X | X | II | 1 | *X | X | X | NA | X | X |
| 18 | IV | NA | NA | X | X | X | X | X | II | 2 | X | X | X | X | X | X |
| 21 | III | NA | NA | X | X | NA | NA | NA | II | 2 | X | X | X | NA | NA | NA |
| 24 | III | NA | NA | X | X | X | X | X | II | 2 | X | X | X | X | X | X |
| 27 | III | NA | NA | NA | NA | NA | NA | NA | II | 3 | X | NA | NA | NA | NA | NA |
| 30 | IV | NA | NA | X | X | X | X | X | II | 3 | X | X | X | X | X | X |
| 33 | III | NA | NA | NA | NA | NA | NA | NA | II | NA | X | NA | NA | NA | NA | NA |
| 36 | III | NA | NA | X | X | X | X | X | II | NA | X | X | X | X | X | X |
| 42 | II | NA | X | X | NA | X | X | NA | II | NA | X | X | NA | X | NA | NA |
| 48 | II | NA | X | X | NA | X | X | X | II | NA | X | X | NA | X | NA | NA |
| 54 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 60 | II | NA | NA | NA | NA | NA | NA | X | II | NA | NA | NA | NA | NA | NA | X |
| 66 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 72 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 78 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 84 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 90 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 96 | II | NA | NA | NA | NA | NA | NA | NA | III | NA | NA | NA | NA | NA | NA | NA |
| 102 | II | NA | NA | NA | NA | NA | NA | NA | III | NA | NA | NA | NA | NA | NA | NA |
| 108 | II | NA | NA | NA | NA | NA | NA | NA | III | NA | NA | NA | NA | NA | NA | NA |

- RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
- CSP Concrete Sewer, Storm drain, and Culvert Pipe
- PVC Polyvinyl Chloride Pipe
- CPVC Corrugated Polyvinyl Chloride Pipe
- ESCP Extra Strength Clay Pipe
- PE Polyethylene Pipe with a Smooth Interior
- CPE Corrugated Polyethylene Pipe with a Smooth Interior
- CPP Corrugated Polypropylene pipe with a Smooth Interior
- X This material may be used for the given pipe diameter and fill height.
- NA This material is Not Acceptable for the given pipe diameter and fill height.
- * May also use Standard Strength Clay Pipe

| STORM SEWERS (Metric) | | | | | | | | | | | | | | | | |
|--|--|-----|------|-----|------|----|-----|-----|--|-----|------|-----|------|----|-----|-----|
| KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED | | | | | | | | | | | | | | | | |
| FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE | | | | | | | | | | | | | | | | |
| Nominal Diameter in. | Type 1 | | | | | | | | Type 2 | | | | | | | |
| | Fill Height: 1 m and less With 300 mm minimum cover | | | | | | | | Fill Height: Greater than 1 m not exceeding 3 m | | | | | | | |
| | RCCP | CSP | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP | CSP | ESCP | PVC | CPVC | PE | CPE | CPP |
| 250 | NA | 3 | X | X | X | X | X | NA | NA | 1 | *X | X | X | X | X | NA |
| 300 | IV | NA | X | X | X | X | X | X | II | 1 | *X | X | X | X | X | X |
| 375 | IV | NA | NA | X | X | NA | X | X | II | 1 | *X | X | X | NA | X | X |
| 450 | IV | NA | NA | X | X | X | X | X | II | 2 | X | X | X | X | X | X |
| 525 | III | NA | NA | X | X | NA | NA | NA | II | 2 | X | X | X | NA | NA | NA |
| 600 | III | NA | NA | X | X | X | X | X | II | 2 | X | X | X | X | X | X |
| 675 | III | NA | NA | NA | NA | NA | NA | NA | II | 3 | X | NA | NA | NA | NA | NA |
| 750 | IV | NA | NA | X | X | X | X | X | II | 3 | X | X | X | X | X | X |
| 825 | III | NA | NA | NA | NA | NA | NA | NA | II | NA | X | NA | NA | NA | NA | NA |
| 900 | III | NA | NA | X | X | X | X | X | II | NA | X | X | X | X | X | X |
| 1050 | II | NA | X | X | NA | X | X | NA | II | NA | X | X | NA | X | NA | NA |
| 1200 | II | NA | X | X | NA | X | X | X | II | NA | X | X | NA | X | NA | NA |
| 1350 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 1500 | II | NA | NA | NA | NA | NA | NA | X | II | NA | NA | NA | NA | NA | NA | X |
| 1650 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 1800 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 1950 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 2100 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 2250 | II | NA | NA | NA | NA | NA | NA | NA | II | NA | NA | NA | NA | NA | NA | NA |
| 2400 | II | NA | NA | NA | NA | NA | NA | NA | III | NA | NA | NA | NA | NA | NA | NA |
| 2550 | II | NA | NA | NA | NA | NA | NA | NA | III | NA | NA | NA | NA | NA | NA | NA |
| 2700 | II | NA | NA | NA | NA | NA | NA | NA | III | NA | NA | NA | NA | NA | NA | NA |

- RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
- CSP Concrete Sewer, Storm drain, and Culvert Pipe
- PVC Polyvinyl Chloride Pipe
- CPVC Corrugated Polyvinyl Chloride Pipe
- ESCP Extra Strength Clay Pipe
- PE Polyethylene Pipe with a Smooth Interior
- CPE Corrugated Polyethylene Pipe with a Smooth Interior
- CPP Corrugated Polypropylene pipe with a Smooth Interior
- X This material may be used for the given pipe diameter and fill height.
- NA This material is Not Acceptable for the given pipe diameter and fill height.
- * May also use Standard Strength Clay Pipe

| STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE | | | | | | | | | | | | | | | | |
|--|--|-----|------|-----|------|----|-----|-----|--|-----|------|-----|------|----|-----|--|
| Nominal Diameter in. | Type 3 | | | | | | | | Type 4 | | | | | | | |
| | Fill Height: Greater than 10' not exceeding 15' | | | | | | | | Fill Height: Greater than 15' not exceeding 20' | | | | | | | |
| | RCCP | CSP | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP | CSP | ESCP | PVC | CPVC | PE | CPP | |
| 10 | NA | 2 | X | X | X | X | X | NA | NA | 3 | X | X | X | X | NA | |
| 12 | III | 2 | X | X | X | X | NA | X | IV | NA | NA | X | X | X | NA | |
| 15 | III | 3 | X | X | X | NA | NA | X | IV | NA | NA | X | X | NA | X | |
| 18 | III | NA | X | X | X | X | NA | X | IV | NA | NA | X | X | X | NA | |
| 21 | III | NA | NA | X | X | NA | NA | NA | IV | NA | NA | X | X | NA | NA | |
| 24 | III | NA | NA | X | X | X | NA | NA | IV | NA | NA | X | X | X | NA | |
| 27 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 30 | III | NA | NA | X | X | X | NA | X | IV | NA | NA | X | X | X | NA | |
| 33 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 36 | III | NA | NA | X | X | X | NA | NA | IV | NA | NA | X | X | X | NA | |
| 42 | III | NA | NA | X | NA | X | NA | NA | IV | NA | NA | X | NA | X | NA | |
| 48 | III | NA | NA | X | NA | X | NA | NA | IV | NA | NA | X | NA | X | NA | |
| 54 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 60 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 66 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 72 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 78 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 84 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 90 | III | NA | NA | NA | NA | NA | NA | NA | 1680 | NA | NA | NA | NA | NA | NA | |
| 96 | III | NA | NA | NA | NA | NA | NA | NA | 1690 | NA | NA | NA | NA | NA | NA | |
| 102 | III | NA | NA | NA | NA | NA | NA | NA | 1700 | NA | NA | NA | NA | NA | NA | |
| 108 | 1360 | NA | NA | NA | NA | NA | NA | NA | 1710 | NA | NA | NA | NA | NA | NA | |

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

PE Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior

CPP Corrugated Polypropylene pipe with a Smooth Interior

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

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

* May also use Standard Strength Clay Pipe

Note 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 | | | | | | | | | | | | | | | | |
| Nominal Diameter in. | Type 3 | | | | | | | | Type 4 | | | | | | | |
| | Fill Height: Greater than 3 m not exceeding 4.5 m | | | | | | | | Fill Height: Greater than 4.5 m not exceeding 6 m | | | | | | | |
| | RCCP | CSP | ESCP | PVC | CPVC | PE | CPE | CPP | RCCP | CSP | ESCP | PVC | CPVC | PE | CPP | |
| 250 | NA | 2 | X | X | X | X | X | NA | NA | 3 | X | X | X | X | NA | |
| 300 | III | 2 | X | X | X | X | NA | X | IV | NA | NA | X | X | X | NA | |
| 375 | III | 3 | X | X | X | NA | NA | X | IV | NA | NA | X | X | NA | X | |
| 450 | III | NA | X | X | X | X | NA | X | IV | NA | NA | X | X | X | NA | |
| 525 | III | NA | NA | X | X | NA | NA | NA | IV | NA | NA | X | X | NA | NA | |
| 600 | III | NA | NA | X | X | X | NA | NA | IV | NA | NA | X | X | X | NA | |
| 675 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 750 | III | NA | NA | X | X | X | NA | X | IV | NA | NA | X | X | X | NA | |
| 825 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 900 | III | NA | NA | X | X | X | NA | NA | IV | NA | NA | X | X | X | NA | |
| 1050 | III | NA | NA | X | NA | X | NA | NA | IV | NA | NA | X | NA | X | NA | |
| 1200 | III | NA | NA | X | NA | X | NA | NA | IV | NA | NA | X | NA | X | NA | |
| 1350 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 1500 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 1650 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 1800 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 1950 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 2100 | III | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA | NA | NA | |
| 2250 | III | NA | NA | NA | NA | NA | NA | NA | 80 | NA | NA | NA | NA | NA | NA | |
| 2400 | III | NA | NA | NA | NA | NA | NA | NA | 80 | NA | NA | NA | NA | NA | NA | |
| 2550 | III | NA | NA | NA | NA | NA | NA | NA | 80 | NA | NA | NA | NA | NA | NA | |
| 2700 | 70 | NA | NA | NA | NA | NA | NA | NA | 80 | NA | NA | NA | NA | NA | NA | |

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

PE Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior

CPP Corrugated Polypropylene pipe with a Smooth Interior

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

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

* May also use Standard Strength Clay Pipe

Note 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.

| STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE | | | | | | | | |
|--|--|-----|------|--|-----|------|--|------|
| Nominal Diameter in. | Type 5 | | | Type 6 | | | Type 7 | |
| | Fill Height: Greater than 20' not exceeding 25' | | | Fill Height: Greater than 25' not exceeding 30' | | | Fill Height: Greater than 30' not exceeding 35' | |
| | RCCP | PVC | CPVC | RCCP | PVC | CPVC | RCCP | CPVC |
| 10 | NA | X | X | NA | X | X | NA | X |
| 12 | IV | X | X | V | X | X | V | X |
| 15 | IV | X | X | V | X | X | V | X |
| 18 | IV | X | X | V | X | X | V | X |
| 21 | IV | X | X | V | X | X | V | X |
| 24 | IV | X | X | V | X | X | V | X |
| 27 | IV | NA | NA | V | NA | NA | V | NA |
| 30 | IV | X | X | V | X | X | V | X |
| 33 | IV | NA | NA | V | NA | NA | V | NA |
| 36 | IV | X | X | V | X | X | V | X |
| 42 | IV | X | NA | V | X | NA | V | NA |
| 48 | IV | X | NA | V | X | NA | V | NA |
| 54 | IV | NA | NA | V | NA | NA | V | NA |
| 60 | IV | NA | NA | V | NA | NA | V | NA |
| 66 | IV | NA | NA | V | NA | NA | V | NA |
| 72 | V | NA | NA | V | NA | NA | V | NA |
| 78 | 2020 | NA | NA | 2370 | NA | NA | 2730 | NA |
| 84 | 2020 | NA | NA | 2380 | NA | NA | 2740 | NA |
| 90 | 2030 | NA | NA | 2390 | NA | NA | 2750 | NA |
| 96 | 2040 | NA | NA | 2400 | NA | NA | 2750 | NA |
| 102 | 2050 | NA | NA | 2410 | NA | NA | 2760 | NA |
| 108 | 2060 | NA | NA | 2410 | NA | NA | 2770 | NA |

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

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

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

Note 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 | | | | | | | | |
| Nominal Diameter in. | Type 5 | | | Type 6 | | | Type 7 | |
| | Fill Height: Greater than 20' not exceeding 25' | | | Fill Height: Greater than 25' not exceeding 30' | | | Fill Height: Greater than 30' not exceeding 35' | |
| | RCCP | PVC | CPVC | RCCP | PVC | CPVC | RCCP | CPVC |
| 250 | NA | X | X | NA | X | X | NA | X |
| 300 | IV | X | X | V | X | X | V | X |
| 375 | IV | X | X | V | X | X | V | X |
| 450 | IV | X | X | V | X | X | V | X |
| 525 | IV | X | X | V | X | X | V | X |
| 600 | IV | X | X | V | X | X | V | X |
| 675 | IV | NA | NA | V | NA | NA | V | NA |
| 750 | IV | X | X | V | X | X | V | X |
| 825 | IV | NA | NA | V | NA | NA | V | NA |
| 900 | IV | X | X | V | X | X | V | X |
| 1050 | IV | X | NA | V | X | NA | V | NA |
| 1200 | IV | X | NA | V | X | NA | V | NA |
| 1350 | IV | NA | NA | V | NA | NA | V | NA |
| 1500 | IV | NA | NA | V | NA | NA | V | NA |
| 1650 | IV | NA | NA | V | NA | NA | V | NA |
| 1800 | V | NA | NA | V | NA | NA | V | NA |
| 1950 | 100 | NA | NA | 110 | NA | NA | 130 | NA |
| 2100 | 100 | NA | NA | 110 | NA | NA | 130 | NA |
| 2250 | 100 | NA | NA | 110 | NA | NA | 130 | NA |
| 2400 | 100 | NA | NA | 120 | NA | NA | 130 | NA |
| 2550 | 100 | NA | NA | 120 | NA | NA | 130 | NA |
| 2700 | 100 | NA | NA | 120 | NA | NA | 130 | NA |

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

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

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

Note 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.”

MECHANICAL SIDE TIE BAR INSERTER (BDE)

Effective: August 1, 2014

Revised: January 1, 2015

Add the following to Article 420.03 of the Standard Specifications:

“(k) Mechanical Side Tie Bar Inserters1103.18”

Revise Article 420.05(b) of the Standard Specifications to read:

- “(b) Longitudinal Construction Joint. The tie bars shall be installed using one of the following methods.
 - (1) Preformed or Drilled Holes. The tie bars shall be installed with an approved nonshrink grout or chemical adhesive providing a minimum pull-out strength as follows.

| Bar Size | Minimum Pull-Out Strength |
|----------------|---------------------------|
| No. 6 (No. 19) | 11,000 lb (49 kN) |
| No. 8 (No. 25) | 19,750 lb (88 kN) |

Holes shall be blown clean and dry prior to placing the grout or adhesive. If compressed air is used, the pneumatic tool lubricator shall be bypassed and a filter installed on the discharge valve to keep water and oil out of the lines. The installation shall be with methods and tools conforming to the grout or adhesive manufacturer’s recommendations.

The Contractor shall load test five percent of the first 500 tie bars installed. No further installation will be allowed until the initial five percent testing has been completed and approval to continue installation has been given by the Engineer. Testing will be required for 0.5 percent of the bars installed after the initial 500. For each bar that fails to pass the minimum requirements, two more bars selected by the Engineer shall be tested. Each bar that fails to meet the minimum load requirement shall be reinstalled and retested. The equipment and method used for testing shall meet the requirements of ASTM E 488. All tests shall be performed within 72 hours of installation. The tie bars shall be installed and approved before concrete is placed in the adjacent lane.”

- (2) Inserted. The tie bars shall be installed with the use of a mechanical side tie bar inserter. The inserter shall insert the tie bars with vibration while still within the extrusion process, after the concrete has been struck off and consolidated without deformation of the slab. The inserter shall remain stationary relative to the pavement when inserting tie bars, while the formless paver continues to move in the direction of paving.

A void greater than 1/8 in. (3 mm) at any location around the tie bar shall require immediate adjustment of the paving operation. A void greater than 1/2 in.(13 mm) shall be repaired with a nonshrink grout or chemical adhesive after the concrete has hardened. If at the end of the day of paving more than 20 percent of the tie bars show a void larger than 1/8 in. (3 mm) at any point around the bar, the use of the side tie bar inserter shall be discontinued.

- (3) Formed in Place. The tie bar shall be formed in place as shown on the plans.

The sealant reservoir shall be formed either by sawing after the concrete has set according to Article 420.05(a) or by hand tools when the concrete is in a plastic state.”

Add the following to Section 1103 of the Standard Specifications:

“**1103.18 Mechanical Side Bar Inserters.** The mechanical side tie bar inserter shall be self-contained and supported on the formless paver with the ability to move independently from the formless paver. The insertion apparatus shall vibrate within a frequency of 2000 to 6000 vpm. A vibrating reed tachometer, hand type, shall be provided according to Article 1103.12.”

PAVED SHOULDER REMOVAL (BDE)

Effective: April 1, 2014

Revise the first paragraph of Article 440.07(b) of the Standard Specifications to read:

“(b) Measured Quantities. Pavement removal, driveway pavement removal, and paved shoulder removal will be measured for payment in place and the area computed in square yards (square meters).”

Revise Article 440.07(c) of the Standard Specifications to read:

“(c) Adjustment of Quantities. The quantity of pavement removal and paved shoulder removal will be adjusted if their respective thickness varies more than 15 percent from that shown on the plans. The quantity will be either increased or decreased according to the following table.

| % change of thickness | % change of quantity |
|-----------------------|----------------------|
| 0 to less than 15 | 0 |
| 15 to less than 20 | 10 |
| 20 to less than 30 | 15 |
| 30 to less than 50 | 20 |

If the thickness of the existing pavement varies by 50 percent or more from that shown on the plans, the character of the work will be considered significantly changed and an adjustment to the contract will be made according to Article 104.02.

When an adjustment is made for variations in pavement or shoulder thickness a resulting adjustment will also be made in the earthwork quantities when applicable.

No adjustment will be made for variations in the amount of reinforcement.”

PAVEMENT STRIPING - SYMBOLS (BDE)

Effective: January 1, 2015

Revise the Symbol Table of Article 780.14 of the Supplemental Specifications to read:

“SYMBOLS

| Symbol | Large Size sq ft (sq m) | Small Size sq ft (sq m) |
|--|----------------------------|----------------------------|
| Through Arrow | 11.5 (1.07) | 6.5 (0.60) |
| Left or Right Arrow | 15.6 (1.47) | 8.8 (0.82) |
| 2 Arrow Combination Left (or Right) and Through | 26.0 (2.42) | 14.7 (1.37) |
| 3 Arrow Combination Left, Right, and Through | 38.4 (3.56) | 20.9 (1.94) |
| Lane Drop Arrow | 41.5 (3.86) | -- |
| Wrong Way Arrow | 24.3 (2.26) | -- |
| Railroad "R" 6 ft (1.8 m) | 3.6 (0.33) | -- |
| Railroad "X" 20 ft (6.1 m) | 54.0 (5.02) | -- |
| International Symbol of Accessibility | 3.1 (0.29) | -- |
| Bike Symbol | 4.7 (0.44) | -- |
| Shared Lane Symbol | 8.0 (0.74) | --“ |

PRECAST CONCRETE HANDHOLE (BDE)

Effective: August 1, 2014

Revise the third paragraph of Article 814.03 of the Standard Specifications to read:

“Handholes shall be constructed as shown on the plans and shall be cast-in-place, composite concrete, or precast units. Heavy duty handholes shall be either cast-in-place or precast units.”

Add the following to Article 814.03 of the Standard Specifications:

“(c) Precast Concrete. Precast concrete handholes shall be fabricated according to Article 1042.17. Where a handhole is contiguous to a sidewalk, preformed joint filler of 1/2 inch (13 mm) thickness shall be placed between the handhole and the sidewalk.”

Add the following to Section 1042 of the Standard Specifications:

“**1042.17 Precast Concrete Handholes.** Precast concrete handholes shall be according to Articles 1042.03(a)(c)(d)(e).”

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.”

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

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 produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (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 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and 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. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. “Homogeneous Surface”).

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) 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 fractionated prior to testing by screening into a minimum of two size 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 shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

| Mixture FRAP will be used in: | Sieve Size that 100% of FRAP Shall Pass |
|-------------------------------|---|
| IL-25.0 | 2 in. (50 mm) |
| IL-19.0 | 1 1/2 in. (40 mm) |
| IL-12.5 | 1 in. (25 mm) |
| IL-9.5 | 3/4 in. (20 mm) |
| IL-4.75 | 1/2 in. (13 mm) |

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) 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 prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, HMA (High or Low ESAL), or "All Other" (as defined by Article 1030.04(a)(3)) mixtures. 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.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be 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. RAP/FRAP and RAS testing shall be according to the following.

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

(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) 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.

Each sample shall be split to obtain two equal 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 or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Illinois Department of Transportation Policy Memorandum, “Reclaimed Asphalt Shingle (RAS) Source”.

Samples shall be collected during stockpiling 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 250 tons (225 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 or RAS blended with manufactured sand shall be stockpiled in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall perform a washed extraction and test for unacceptable materials on 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.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

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

- (a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

| Parameter | FRAP/Homogeneous /Conglomerate | Conglomerate “D” Quality |
|-----------------------------|--------------------------------|--------------------------|
| 1 in. (25 mm) | | $\pm 5 \%$ |
| 1/2 in. (12.5 mm) | $\pm 8 \%$ | $\pm 15 \%$ |
| No. 4 (4.75 mm) | $\pm 6 \%$ | $\pm 13 \%$ |
| No. 8 (2.36 mm) | $\pm 5 \%$ | |
| No. 16 (1.18 mm) | | $\pm 15 \%$ |
| No. 30 (600 μm) | $\pm 5 \%$ | |
| No. 200 (75 μm) | $\pm 2.0 \%$ | $\pm 4.0 \%$ |
| Asphalt Binder | $\pm 0.4 \%$ ^{1/} | $\pm 0.5 \%$ |
| G_{mm} | ± 0.03 | |

1/ The tolerance for FRAP shall be $\pm 0.3 \%$.

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

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

- (b) Evaluation of RAS and RAS Blended with Manufactured Sand 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. Individual test results, when compared to the averages, 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) | ± 2.0 % |
| Asphalt Binder Content | ± 1.5 % |

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

1031.05 Quality Designation of Aggregate in RAP/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. Coarse and fine FRAP 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.

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

- (a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.

- (1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
- (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous RAP and FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.
- (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given N Design.

- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.
 - (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

| HMA Mixtures ^{1/, 2/} | RAP/RAS Maximum ABR % | | |
|--------------------------------|------------------------|---------|------------------|
| | Binder/Leveling Binder | Surface | Polymer Modified |
| Ndesign | | | |
| 30 | 30 | 30 | 10 |
| 50 | 25 | 15 | 10 |
| 70 | 15 | 10 | 10 |
| 90 | 10 | 10 | 10 |
| 105 | 10 | 10 | 10 |

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given N design.

FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

| HMA Mixtures <small>1/, 2/</small> | FRAP/RAS Maximum ABR % | | |
|---------------------------------------|---------------------------|---------|--|
| Ndesign | Binder/Leveling Binder | Surface | Polymer Modified <small>3/, 4/</small> |
| 30 | 50 | 40 | 10 |
| 50 | 40 | 35 | 10 |
| 70 | 40 | 30 | 10 |
| 90 | 40 | 30 | 10 |
| 105 | 40 | 30 | 10 |

- 1/ For HMA “All Other” (shoulder and stabilized subbase) N30, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.
- 4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 percent.

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) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under “Testing” herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix 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 RAP/FRAP and/or RAS shall be as follows.

- (a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

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

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

- (b) 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.

- (c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/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 RAP/FRAP/RAS 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 RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
 - h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
- (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. RAP/FRAP/RAS weight to the nearest pound (kilogram).
 - f. Virgin asphalt binder weight to the nearest pound (kilogram).
 - g. Residual asphalt binder in the RAP/FRAP/RAS 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 in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders Type B 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. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

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)

| Observation Angle (deg.) | Entrance Angle (deg.) | Yellow | FO |
|--------------------------|-----------------------|--------|-----|
| 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)

| Observation Angle (deg.) | Entrance Angle (deg.) | White | Yellow | Red | Green | Blue | Brown | FO |
|--------------------------|-----------------------|-------|--------|-----|-------|------|-------|-----|
| 0.2 | -4 | 500 | 380 | 75 | 55 | 35 | 25 | 150 |
| 0.2 | +30 | 180 | 135 | 30 | 20 | 15 | 10 | 55 |
| 0.5 | -4 | 300 | 225 | 50 | 30 | 20 | 15 | 90 |
| 0.5 | +30 | 90 | 70 | 15 | 10 | 7.5 | 5 | 30 |

Type AZ Sheeting
 Minimum Coefficient of Retroreflection
 Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AZ (Average of 0 and 90 degree rotation)

| Observation Angle (deg.) | Entrance Angle (deg.) | White | Yellow | Red | Green | Blue | FYG | FY |
|--------------------------|-----------------------|-------|--------|-----|-------|------|-----|------|
| 0.2 | -4 | 375 | 280 | 75 | 45 | 25 | 300 | 230 |
| 0.2 | +30 | 235 | 170 | 40 | 25 | 15 | 190 | 150 |
| 0.5 | -4 | 245 | 180 | 50 | 30 | 20 | 200 | 155 |
| 0.5 | +30 | 135 | 100 | 25 | 15 | 10 | 100 | 75 |
| 1.0 | -4 | 50 | 37.5 | 8.5 | 5 | 2 | 45 | 25 |
| 1.0 | +30 | 22.5 | 20 | 5 | 3 | 1 | 25 | 12.5 |

Type ZZ Sheeting
 Minimum Coefficient of Retroreflection
 Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type ZZ (Average of 0 and 90 degree rotation)

| 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 $\pm 1/4$ 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.”

RIGID METAL CONDUIT (BDE)

Effective: August 1, 2014

Add the following to Article 1088.01(a) of the Standard Specifications:

“(6) Stainless Steel Conduit. The conduit shall be Type 304 or Type 316 stainless steel, shall be manufactured according to UL Standard 6A, and shall meet ANSI Standard C80.1. Conduit fittings shall be Type 304 or Type 316 stainless steel and shall be manufactured according to UL Standard 514B.

All conduit supports, straps, clamps. And other attachments shall be Type 304 or Type 316 stainless steel. Attachment hardware shall be stainless steel according to Article 1006.31.”

SIDEWALK, CORNER, OR CROSSWALK CLOSURE (BDE)

Effective: January 1, 2015

Revise the first sentence of Article 1106.02(m) of the Supplemental Specifications to read:

“The top and bottom panels shall have alternating white and orange stripes sloping 45 degrees on both sides.”

SPEED DISPLAY TRAILER (BDE)

Effective: April 2, 2014

Add the following to Article 701.15(l) of the Standard Specifications:

“(l) Speed Display Trailer. A speed display trailer shall be utilized on freeways and expressways as part of Highway Standard 701400. The trailer shall be placed on the right hand side of the roadway adjacent to, or within 100 ft (30 m) beyond, the first work zone speed limit sign.

Whenever the speed display trailer is not in use, it shall be considered non-operating equipment and shall be stored according to Article 701.11.”

Add the following to Article 701.20 of the Standard Specifications:

“(k) Speed Display Trailer will be paid for at the contract unit price per calendar month or fraction thereof for each trailer as SPEED DISPLAY TRAILER.”

Add the following to Article 1106.02 of the Standard Specifications:

“(o) Speed Display Trailer. The speed display trailer shall consist of a LED speed indicator display with self-contained, one-direction radar mounted on an orange see-through trailer. The height of the display and radar shall be such that it will function and be visible when located behind concrete barrier.

The speed measurement shall be by radar and provide a minimum detection distance of 1000 ft (300 m). The radar shall have an accuracy of ± 1 mile per hour.

The speed indicator display shall face approaching traffic and shall have a sign legend of “YOUR SPEED” immediately above or below the speed display. The digital speed display shall show two digits (00 to 99) in mph. The color of the changeable message legend shall be a yellow legend on a black background. The minimum height of the numerals shall be 18 in. (450 mm), and the nominal legibility distance shall be at least 750 ft (250 m).

The speed indicator display shall be equipped with a violation alert that flashes the displayed detected speed when the posted limit is exceeded. The speed indicator shall have a maximum speed cutoff. The display shall include automatic dimming for nighttime operation.

The speed indicator measurement and display functions shall be equipped with the power supply capable of providing 24 hours of uninterrupted service.”

TEMPORARY CONCRETE BARRIER (BDE)

Effective: January 1, 2015

Revise Article 704.02 of the Standard Specifications to read:

“704.02 Materials. Materials shall be according to the following.

| Item | Article/Section |
|---|-----------------|
| (a) Precast Temporary Concrete Barrier | 1042 |
| (b) Reinforcement Bars (Note 1) | 1006.10(a) |
| (c) Connecting Pins and Anchor Pins (Note 2) | |
| (d) Connecting Loop Bars (Note 3) | |
| (e) Packaged Rapid Hardening Mortar or Concrete | 1018 |

Note 1. Reinforcement bars shall be Grade 60 (Grade 400).

Note 2. Connecting Pins and Anchor Pins shall be according to the requirements of ASTM F 1554 Grade 36 (Grade 250).

Note 3. Connecting loop bars shall be smooth bars according to the requirements of ASTM A 36 (A 36M).”

Revise Article 704.04 of the Standard Specifications to read:

“704.04 Installation. The barriers shall be seated on bare, clean pavement or paved shoulder and connected together in a smooth, continuous line at the locations provided by the Engineer.

Except on bridge decks, or where alternate anchoring details are shown on the plans, the barrier unit at each end of an installation shall be anchored to the pavement or paved shoulder using six anchor pins and protected with an impact attenuator as shown on the plans. When pinning of additional barrier units within the installation is specified, three anchor pins shall be installed in the traffic side holes of the required barriers.

Where both pinned and unpinned barrier units are used in a continuous installation, a transition shall be provided between them. The transition from pinned to unpinned barrier shall consist of two anchor pins installed in the end holes on the traffic side of the first barrier beyond the pinned section and one anchor pin installed in the middle hole on the traffic side of the second barrier beyond the pinned section. The third barrier beyond the pinned section shall then be unpinned.

Barriers located on bridge decks shall be restrained as shown in the plans. Anchor pins shall not be installed through bridge decks.

Barriers or attachments damaged during transportation or handling, or by traffic during the life of the installation, shall be repaired or replaced. The Engineer will be the sole judge in determining which units or attachments require repair or replacement.

The barriers shall be removed when no longer required by the contract. After removal, all anchor holes in the pavement or paved shoulder shall be filled with a rapid hardening mortar or concrete. Only enough water to permit placement and consolidation by rodding shall be used and the material shall be struck-off flush.”

Add the following after the first paragraph of Article 704.05 of the Standard Specifications:

“Anchor pins, except for the six anchor pins for the barrier unit at each end of an installation, will be measured for payment as each, per anchor pin installed.”

Add the following after the second paragraph of Article 704.06 of the Standard Specifications:

“Anchor pins, except for the six anchor pins for the barrier unit at each end of an installation, will be paid for at the contract unit price per each for PINNING TEMPORARY CONCRETE BARRIER.”

TRACKING THE USE OF PESTICIDES (BDE)

Effective: August 1, 2012

Add the following paragraph after the first paragraph of Article 107.23 of the Standard Specifications:

“Within 48 hours of the application of pesticides, including but not limited to herbicides, insecticides, algacides, and fungicides, the Contractor shall complete and return to the Engineer, Operations form “OPER 2720”.”

TRAFFIC BARRIER TERMINALS TYPE 6 OR 6B (BDE)

Effective: January 1, 2015

Add the following to the Article 631.02 of the Standard Specifications:

“(h) Chemical Adhesive 1027.01”

TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975

This Training Special Provision supersedes Section 7b of the Special Provision entitled “Specific Equal Employment Opportunity Responsibilities,” and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor’s equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be **5**. In the event the Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

Method of Measurement. The unit of measurement is in hours.

Basis of Payment. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION (TPG)

Effective: August 1, 2012

Revised: February 1, 2014

In addition to the Contractor's equal employment opportunity affirmative action efforts undertaken as elsewhere required by this Contract, the Contractor is encouraged to participate in the incentive program to provide additional on-the-job training to certified graduates of IDOT funded pre-apprenticeship training programs outlined by this Special Provision.

It is the policy of IDOT to fund IDOT pre-apprenticeship training programs throughout Illinois to provide training and skill-improvement opportunities to assure the increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The intent of this IDOT Training Program Graduate (TPG) Special Provision is to place certified graduates of these IDOT funded pre-apprentice training programs on IDOT project sites when feasible, and provide the graduates with meaningful on-the-job training intended to lead to journey-level employment. IDOT and its sub-recipients, in carrying out the responsibilities of a state contract, shall determine which construction contracts shall include "Training Program Graduate Special Provisions." To benefit from the incentives to encourage the participation in the additional on-the-job training under this Training Program Graduate Special Provision, the Contractor shall make every reasonable effort to employ certified graduates of IDOT funded Pre-apprenticeship Training Programs to the extent such persons are available within a reasonable recruitment area.

Participation pursuant to IDOT's requirements by the Contractor or subcontractor in this Training Program Graduate (TPG) Special Provision entitles the Contractor or subcontractor to be reimbursed at \$15.00 per hour for training given a certified TPG on this contract. As approved by the Department, reimbursement will be made for training persons as specified herein. This reimbursement will be made even though the Contractor or subcontractor may receive additional training program funds from other sources for other trainees, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving other reimbursement. For purposes of this Special Provision the Contractor is not relieved of requirements under applicable federal law, the Illinois Prevailing Wage Act, and is not eligible for other training fund reimbursements in addition to the Training Program Graduate (TPG) Special Provision reimbursement.

No payment shall be made to the Contractor if the Contractor or subcontractor fails to provide the required training. It is normally expected that a TPG will begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project through completion of the contract, so long as training opportunities exist in his work classification or until he has completed his training program. Should the TPG's employment end in advance of the completion of the contract, the Contractor shall promptly notify the designated IDOT staff member under this Special Provision that the TPG's involvement in the contract has ended and supply a written report of the reason for the end of the involvement, the hours completed by the TPG under the Contract and the number of hours for which the incentive payment provided under this Special Provision will be or has been claimed for the TPG.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting its performance under this Special Provision.

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for certified TRAINEES TRAINING PROGRAM GRADUATE. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

The Contractor shall provide training opportunities aimed at developing full journeyworker in the type of trade or job classification involved. The initial number of TPGs for which the incentive is available under this contract is 5. During the course of performance of the Contract the Contractor may seek approval from the Department for additional incentive eligible TPGs. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the TPGs are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Special Provision. The Contractor shall also insure that this Training Program Graduate Special Provision is made applicable to such subcontract if the TPGs are to be trained by a subcontractor and that the incentive payment is passed on to each subcontractor.

For the Contractor to meet the obligations for participation in this TPG incentive program under this Special Provision, the Department has contracted with several entities to provide screening, tutoring and pre-training to individuals interested in working in the applicable construction classification and has certified those students who have successfully completed the program and are eligible to be TPGs. A designated IDOT staff member, the Director of the Office of Business and Workforce Diversity (OBWD), will be responsible for providing assistance and referrals to the Contractor for the applicable TPGs. For this contract, the Director of OBWD is designated as the responsible IDOT staff member to provide the assistance and referral services related to the placement for this Special Provision. For purposes of this Contract, contacting the Director of OBWD and interviewing each candidate he/she recommends constitutes reasonable recruitment.

Prior to commencing construction, the Contractor shall submit to the Department for approval the TPGs to be trained in each selected classification. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. No employee shall be employed as a TPG in any classification in which he/she has successfully completed a training course leading to journeyman status or in which he/she has been employed as a journeyman. Notwithstanding the on-the-job training purpose of this TPG Special Provision, some offsite training is permissible as long as the offsite training is an integral part of the work of the contract and does not comprise a significant part of the overall training.

Training and upgrading of TPGs of IDOT pre-apprentice training programs is intended to move said TPGs toward journeyman status and is the primary objective of this Training Program Graduate Special Provision. Accordingly, the Contractor shall make every effort to enroll TPGs by recruitment through the IDOT funded TPG programs to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance and entitled to the Training Program Graduate Special Provision \$15.00 an hour incentive.

The Contractor or subcontractor shall provide each TPG with a certificate showing the type and length of training satisfactorily completed.

TRAVERSABLE PIPE GRATE (BDE)

Effective: January 1, 2013

Revised: April 1, 2014

Description. This work shall consist of constructing a traversable pipe grate on a concrete end section.

Materials. Materials shall be according to the following Articles of Division 1000 – Materials of the Standard Specifications.

| Item | Article/Section |
|---|-----------------|
| (a) Traversable Pipe Grate Components (Note 1) | |
| (b) Chemical Adhesive Resin System | 1027 |
| (c) High Strength Steel Bolts, Nuts, and Washers (Note 2) | 1006.08 |

Note 1. All steel pipe shall be according to ASTM A 53 (Type E or S), Grade B, or ASTM A 500 Grade B, standard weight (SCH. 40). Structural steel shapes and plates shall be according to AASHTO M270 Grade 50 (M 270M Grade 345) and the requirements of Article 1006.04 of the Standard Specifications. All steel components of the grating system shall be galvanized according to AASHTO M 111 or M 232 as applicable.

Anchor rods shall be according to ASTM F 1554, Grade 36 (Grade 250).

Note 2. Threaded rods conforming to the requirements of ASTM F 1554, Grade 105 (Grade 725) may be used for the thru bolts.

CONSTRUCTION REQUIREMENTS

Fabrication of the traversable pipe grate shall be according to the requirements of Section 505 of the Standard Specifications and as shown on the plans.

Anchor rods shall be set according to Article 509.06 of the Standard Specifications. Bolts and anchor rods shall be snug tightened by a few impacts of an impact wrench or the full force of a worker using an ordinary spud wrench. Thru bolts shall be snug tightened and shall be brought to a snug tight condition followed by an additional 2/3 turn on one of the nuts. Match marks shall be provided on the bolt and nut to verify relative rotation between the bolt and the nut.

Splicing of pipes shall be made by utilizing full penetration butt welds according to Article 505.04(q) of the Standard Specifications. In lieu of welding, bolted or sleeve type splices may be utilized, provided the splices are located over intermediate supports with no more than one splice per pipe run with the exception that no splice may occur in pipe runs under 30 ft (9 m) in length.

Method of Measurement. This work will be measured for payment in place in feet (meters). The length measured shall be along the pipe grate elements from end to end for both longitudinal and intermediate support pipes.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for TRAVERSABLE PIPE GRATE.

UNDERPASS LUMINAIRE (BDE)

Effective: August 1, 2014

Revise the first paragraph of Article 821.06 of the Standard Specifications to read:

“821.06 Underpass Installation. When attached directly to a structure, the underpass luminaire shall have stainless steel brackets installed between the luminaire and the structure to create a gap of not less than 1 in. (25 mm).”

Revise the third sentence of the third paragraph of Article 821.06 of the Standard Specifications to read:

“All mounting hardware, including the vibration dampers, shall be stainless steel.”

Revise Article 1067.04(a) of the Standard Specifications to read:

“(a) Housing. The housing and lens frame shall be made of heavy duty die cast aluminum or 16 gauge (1.5 mm) minimum thickness stainless steel according to ASTM A 269, Grade 304L. All seams in the housing enclosure shall be welded by continuous welds.

The housing shall have an opening for installation of 3/4 in. (19 mm) diameter conduit.”

Revise the third sentence of the first paragraph of Article 1067.04(b) of the Standard Specifications to read:

“The lens frame shall be hinged with a continuous stainless steel piano type hinge for stainless steel housings.”

Revise the first sentence of the first paragraph of Article 1067.04(c) of the Standard Specifications to read:

“Four luminaire mounting brackets fabricated from 11 gauge (3.05 mm) stainless steel according to ASTM A 269, Grade 304L shall be used to attach the luminaire housing.”

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012

Revised: November 1, 2014

Description. 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

The Contractor shall provide 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 on the jobsite; or used for the delivery and/or removal of equipment/material to and from the jobsite. The jobsite shall also include offsite locations, such as plant sites or storage sites, when those locations are used solely for this contract.

The report shall be submitted on the form provided by the Department within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur. The report shall be submitted to the Engineer and a copy shall be provided to the district EEO Officer.

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.

WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within **220** working days.

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

Effective: November 2, 2006

Revised: August 1, 2013

Description. 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: $Q, \text{ tons} = A \times D \times (G_{mb} \times 46.8) / 2000$. For HMA mixtures measured in square meters: $Q, \text{ metric tons} = A \times D \times (G_{mb} \times 1) / 1000$. 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: $Q, \text{ tons} = V \times 8.33 \text{ lb/gal} \times SG / 2000$
For bituminous materials measured in liters: $Q, \text{ metric tons} = V \times 1.0 \text{ kg/L} \times SG / 1000$

- Where: A = Area of the HMA mixture, sq yd (sq m).
D = Depth of the HMA mixture, in. (mm).
G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.
V = Volume of the bituminous material, gal (L).
SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(BPI_L - BPI_P) \div BPI_L\} \times 100$$

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:

Is your company opting to include this special provision as part of the contract?

Yes No

Signature: _____ **Date:** _____

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

Effective: April 1, 2009

Revised: July 1, 2009

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

General. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and work added by adjusted unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Added work paid for by time and materials will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

(a) Categories of Work.

- (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
- (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

(b) Fuel Usage Factors.

| English Units | | |
|--|--------|--------------|
| Category | Factor | Units |
| A - Earthwork | 0.34 | gal / cu yd |
| B – Subbase and Aggregate Base courses | 0.62 | gal / ton |
| C – HMA Bases, Pavements and Shoulders | 1.05 | gal / ton |
| D – PCC Bases, Pavements and Shoulders | 2.53 | gal / cu yd |
| E – Structures | 8.00 | gal / \$1000 |

| Metric Units | | |
|--|--------|---------------------|
| Category | Factor | Units |
| A - Earthwork | 1.68 | liters / cu m |
| B – Subbase and Aggregate Base courses | 2.58 | liters / metric ton |
| C – HMA Bases, Pavements and Shoulders | 4.37 | liters / metric ton |
| D – PCC Bases, Pavements and Shoulders | 12.52 | liters / cu m |
| E – Structures | 30.28 | liters / \$1000 |

(c) Quantity Conversion Factors.

| Category | Conversion | Factor |
|----------|--------------------|--------------------------------------|
| B | sq yd to ton | 0.057 ton / sq yd / in depth |
| | sq m to metric ton | 0.00243 metric ton / sq m / mm depth |
| C | sq yd to ton | 0.056 ton / sq yd / in depth |
| | sq m to metric ton | 0.00239 m ton / sq m / mm depth |
| D | sq yd to cu yd | 0.028 cu yd / sq yd / in depth |
| | sq m to cu m | 0.001 cu m / sq m / mm depth |

Method of Adjustment. Fuel cost adjustments will be computed as follows.

$$CA = (FPI_P - FPI_L) \times FUF \times Q$$

Where: CA = Cost Adjustment, \$
FPI_P = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)
FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting, \$/gal (\$/liter)
FUF = Fuel Usage Factor in the pay item(s) being adjusted
Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

Progress Payments. Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Final Quantities. Upon completion of the work and determination of final pay quantities, an adjustment will be prepared to reconcile any differences between estimated quantities previously paid and the final quantities. The value for the balancing adjustment will be based on a weighted average of FPI_P and Q only for those months requiring the cost adjustment. The cost adjustment will be applicable to the final measured quantities of all applicable pay items.

Basis of Payment. Fuel cost adjustments may be positive or negative but will only be made when there is a difference between the FPI_L and FPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(FPI_L - FPI_P) \div FPI_L\} \times 100$$

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
FUEL COST ADJUSTMENT**

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

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract plans for the following categories of work?

- | | | |
|--|-----|--------------------------|
| Category A Earthwork. | Yes | <input type="checkbox"/> |
| Category B Subbases and Aggregate Base Courses | Yes | <input type="checkbox"/> |
| Category C HMA Bases, Pavements and Shoulders | Yes | <input type="checkbox"/> |
| Category D PCC Bases, Pavements and Shoulders | Yes | <input type="checkbox"/> |
| Category E Structures | Yes | <input type="checkbox"/> |

Signature: _____ **Date:** _____

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

Effective: April 2, 2004

Revised: April 1, 2009

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

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

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

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

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

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

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

$$SCA = Q \times D$$

Where: SCA = steel cost adjustment, in dollars
Q = quantity of steel incorporated into the work, in lb (kg)
D = price factor, in dollars per lb (kg)

$$D = MPI_M - MPI_L$$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

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

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

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

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

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

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

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

Attachment

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

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
STEEL COST ADJUSTMENT**

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

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract plans for the following items of work?

- | | | |
|--|-----|--------------------------|
| Metal Piling | Yes | <input type="checkbox"/> |
| Structural Steel | Yes | <input type="checkbox"/> |
| Reinforcing Steel | Yes | <input type="checkbox"/> |
| Dowel Bars, Tie Bars and Mesh Reinforcement | Yes | <input type="checkbox"/> |
| Guardrail | Yes | <input type="checkbox"/> |
| Steel Traffic Signal and Light Poles, Towers and Mast Arms | Yes | <input type="checkbox"/> |
| Metal Railings (excluding wire fence) | Yes | <input type="checkbox"/> |
| Frames and Grates | Yes | <input type="checkbox"/> |

Signature: _____ **Date:** _____

SWPPP



Storm Water Pollution Prevention Plan

| | | | |
|---------|-------------|--------------|-------|
| Route | FAI 57 | Marked Rte. | I-57 |
| Section | (46-1)HBK-1 | Project No. | |
| County | KANKAKEE | Contract No. | 66982 |

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

| | |
|---------------------------------------|------------------------|
| PAUL LOETE | <i>Paul Loete P.E.</i> |
| Print Name | Signature |
| REGIONAL ENGINEER / REGION 2 | 11/17/2014 |
| Title | Date |
| ILLINOIS DEPARTMENT OF TRANSPORTATION | |
| Agency | |

I. Site Description:

- A. Provide a description of the project location (include latitude and longitude):
This work shall include constructing a new interchange at I-57 and 6000 N Road and removing and replacing SN 046-0086 at Latitude – N 41° 12' 23.976" and Longitude – E 87° 52' 0.336".
- B. Provide a description of the construction activity which is the subject of this plan:
Project work consists of constructing a diamond interchange for 6000N Road and I-57. The improvement consists of a new bridge over I-57, reconstructing and widening 6000N and intersection improvements at US 45/52 and IL 50. Other items include storm sewer, shared use path, sidewalk, embankment, curb and gutter and landscape restoration. Installation of roadway lighting, traffic signals and other related items to complete the work as described herein.
- C. Provide the estimated duration of this project:
The estimated duration of this project is 20 months.
- D. The total area of the construction site is estimated to be **98.5** acres.
 The total area of the site estimated to be disturbed by excavation, grading or other activities is **82.6** acres.
- E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:
C=0.38
- F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:
Milford Silty Clay Loam, 0 to 2 percent slopes (69A) – A poorly drained soil with moderately high permeability. This soil has a moderate susceptibility to water erosion and wind erosion.
Elliott Silt Loam, 0 to 2 percent slopes (146A) – A somewhat poorly drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Elliott Silt Loam, 2 to 4 percent slopes (146B) – A somewhat poorly drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Martinton Silt Loam, 0 to 2 percent slopes (189A) – A somewhat poorly drained soil with moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Varna Silt Loam, 2 to 4 percent slopes (223B) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Varna Silt Loam, 2 to 4 percent slopes, eroded (223B2) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Platteville Silt Loam, 0 to 2 percent slopes (204A) – A well drained soil with moderately high to high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Andres Silt Loam, 0 to 2 percent slopes (293A) – A somewhat poorly drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Symerton Silt Loam, 0 to 2 percent slopes (294A) – A moderately well drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Beecher Silt Loam, 0 to 2 percent slopes (298A) – A somewhat poorly drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Peotone Silty Clay Loam, 0 to 2 percent slopes (330A) – A very poorly drained soil with moderately high permeability. This soil has a moderately low susceptibility to water erosion and a moderately low susceptibility to wind erosion.

Jasper Loam, 2 to 5 percent slopes (440B) – A well drained soil with moderately high to high permeability. This soil has a moderately low susceptibility to water erosion and a moderately low susceptibility to wind erosion.

Rockton Silt Loam, 0 to 2 percent slopes (503A) – A well drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Rockton Silt Loam, 2 to 4 percent slopes (503B) – A well drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Reddick Clay Loam, 0 to 2 percent slopes (594A) – A poorly drained soil with moderately low to moderately high permeability. This soil has a moderately low susceptibility to water erosion and a slight susceptibility to wind erosion.

Tallmadge Sandy Loam, 0 to 2 percent slopes (610A) – A poorly drained soil with moderately high to high permeability. This soil has a moderately low susceptibility to water erosion and a moderately high susceptibility to wind erosion.

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

No Wetland Impact

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

Since soil properties are fairly similar throughout the majority of project, the most potentially critical areas would be the areas with the steepest slopes.

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):

The nature and purpose of the soil disturbing activities on the project involves the removal and replacement of the existing structure and the construction of the ramps for the new interchange. There are no activities outside the project limits that will involve land disturbances.

The predominant soil type on the project, Milford Silty Clay Loam (69A) This soil has a moderate susceptibility to water erosion and wind erosion with slopes that are between 0 and 2 percent.

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

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

State

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

Bourbonnais, Bradley, Bourbonnais Township

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:

Tributary to Rock Creek

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.

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

- Floodplain
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
- Applicable Federal, Tribal, State or Local Programs
- Other

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

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

b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

- c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

- d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

2. TMDL (fill out this section if checked above)

- a. The name(s) of the listed water body:

- b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

- c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

P. The following pollutants of concern will be associated with this construction project:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soil Sediment | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Concrete | <input checked="" type="checkbox"/> Antifreeze / Coolants |
| <input checked="" type="checkbox"/> Concrete Truck Waste | <input checked="" type="checkbox"/> Waste water from cleaning construction equipment |
| <input checked="" type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Solid Waste Debris | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paints | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Solvents | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Fertilizers / Pesticides | <input type="checkbox"/> Other (specify) |

II. Controls:

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

- A. **Erosion and Sediment Controls:** At a minimum, controls must be coordinated, installed and maintained to:
 1. Minimize the amount of soil exposed during construction activity;
 2. Minimize the disturbance of steep slopes;
 3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
 4. Minimize soil compaction and, unless infeasible, preserve topsoil.

- B. **Stabilization Practices:** Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- | | |
|---|--|
| <input type="checkbox"/> Preservation of Mature Vegetation | <input checked="" type="checkbox"/> Erosion Control Blanket / Mulching |
| <input type="checkbox"/> Vegetated Buffer Strips | <input type="checkbox"/> Sodding |
| <input type="checkbox"/> Protection of Trees | <input type="checkbox"/> Geotextiles |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7) | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Mulching | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Permanent Seeding | <input type="checkbox"/> Other (specify) |

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

Temporary Erosion Control Seeding – Seed mixture will depend on the time of year it is applied. Seeding will be completed in accordance with IDOT Standard Specifications.

Permanent Seeding– Seeding, Class 2, 2A and 3 will be installed per IDOT specifications.

Erosion Control Blanket – Heavy Duty Erosion control blanket will be installed over fill slopes and in high velocity areas (i.e. ditches) that have been brought to final grade and seeded to protect slopes from erosion and allow seeds to germinate.

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

The permanent seeding will protect unpaved areas.

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

The following structural practices will be used for this project:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Rock Outlet Protection |
| <input checked="" type="checkbox"/> Temporary Ditch Check | <input checked="" type="checkbox"/> Riprap |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions |
| <input type="checkbox"/> Sediment Trap | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Temporary Pipe Slope Drain | <input type="checkbox"/> Retaining Walls |
| <input type="checkbox"/> Temporary Sediment Basin | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Temporary Stream Crossing | <input checked="" type="checkbox"/> Concrete Revetment Mats |
| <input type="checkbox"/> Stabilized Construction Exits | <input type="checkbox"/> Level Spreaders |
| <input type="checkbox"/> Turf Reinforcement Mats | <input checked="" type="checkbox"/> Other (specify) Temporary Aggregate |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (specify) |

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

Perimeter Erosion Barrier – Perimeter erosion barrier (silt fence) will be used in all areas where runoff from disturbed areas has the potential to travel offsite or into swales, ditches, ponds, wetlands or other natural water bodies. See Erosion Control Plan Sheet.

Temporary Ditch Checks – Temporary Ditch Checks will be used in all ditches where runoff from disturbed areas is collected.

Storm Drain Inlet Protection – Inlet and Pipe Protection will be used at all drainage structures.

Riprap – Stone riprap with filter fabric will be used at the inlets of some pipes to prevent scouring.

Fabric Formed Revetment Mats – Fabric Formed Revetment Mats will be used in some ditch locations to prevent scouring.

Temporary Aggregate – Temporary Aggregate will be used at temporary culvert locations for ditch/outlet protection.

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

Riprap will remain in place at end sections after construction to prevent erosion.

Riprap and fabric formed revetment mat will remain in high velocity ditch areas.

D. Treatment Chemicals

Will polymer flocculants or treatment chemicals be utilized on this project: Yes No

If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.

E. Permanent Storm Water Management Controls: Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

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 construction activities).

Description of permanent storm water management controls:

Permanent Storm Water Management Controls – overflow weirs on culverts, oversized storm sewer detention, and detention basins

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

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

All management practices, controls and other provisions provided in the plans are in accordance with the IDOT Standard Specifications.

- G. **Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
 - Approximate duration of the project, including each stage of the project
 - Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - Mobilization timeframe
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operations
 - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
 - Permanent stabilization activities for each area of the project

2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:
 - Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
 - Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
 - Stockpile Management – Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
 - Waste Disposal – Discuss methods of waste disposal that will be used for this project.
 - Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
 - Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
 - Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
 - Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
 - Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
 - Dewatering Activities – Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
 - Polymer Flocculants and Treatment Chemicals – Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
 - Additional measures indicated in the plan.

III. Maintenance:

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

During construction the contractor shall clean up and the grade the work area to eliminate concentration of runoff, cover the opens of pipes in trenches and open inlets at the close of each working day. Maintain or replace (if specified by the Engineer) erosion and sediment control items. Prior to any landscaping/restoration work, the contractor shall remove and dispose of silt retained by temporary erosion barrier. Areas of erosion control blanket which fail will be repaired immediately. Temporary seeding shall be placed in accordance to the IDOT Standard Specifications.

All maintenance of erosion control systems will be the responsibility of the contractor. All locations where vehicles enter and exit the construction site and all other areas subject to erosion should also be inspected periodically. Inspection of these areas shall be made at least once every seven days and within 24 hours of the end of a storm that is 0.5 inches or greater rainfall, or an equivalent snowfall.

IV. Inspections:

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

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

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

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

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

Additional Inspections Required:

V. Failure to Comply:

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

404 PERMIT



REPLY TO
 ATTENTION OF

DEPARTMENT OF THE ARMY
 CORPS OF ENGINEERS, ROCK ISLAND DISTRICT
 PO BOX 2004 CLOCK TOWER BUILDING
 ROCK ISLAND, ILLINOIS 61204-2004

| | | |
|----------------------------|----|----|
| RECEIVED | | |
| STUDIES & PLANS | | |
| MAY 9 '13 | | |
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May 7, 2013

Operations Division

SUBJECT: CEMVR-OD-P-2013-679

Mr. Paul Loete
 Illinois Department of Transportation
 700 East Norris Drive
 Ottawa, Illinois 61350

*I-57 @ 6000 N Rd
 Contract # 66982
 6000 N Rd over
 Tributary to Rock
 Creek
 Unnumbered structures*

Dear Mr. Loete:

Our office reviewed all information provided to us in your application dated April 30, 2013 concerning the proposed culvert replacement project in a tributary of Rock Creek Section 6, Township 31 North, Range 12 East, Kankakee County, Illinois.

Your project is covered under Nationwide Permit No. 14, as published in the enclosed Fact Sheet No. 7 (IL), provided you meet the permit conditions for the nationwide permits, which are also included in the Fact Sheet. The Corps has also made a determination of no effect on federally threatened and endangered species or critical habitat. The Illinois Environmental Protection Agency (IEPA) also issued Section 401 Water Quality Certification with conditions for this nationwide permit. Please note these additional conditions included in the Fact Sheet. The decision regarding this action is based on information found in the administrative record, which documents the District's decision-making process, the basis for the decision, and the final decision.

You are encouraged to conduct your construction activities during a period of low flow. You are required to remove all fill material used as a temporary crossing to an upland, non-wetland site, to seed all disturbed areas with native grasses and to implement appropriate measures to insure that sediments are not introduced into waters of the United States during construction of this project.

Bank and shoreline protection shall consist of suitable clean materials, free from debris, trash, and other deleterious materials. If broken concrete is used as riprap, all reinforcing rods must be cut flush with the surface of the concrete, and individual pieces of concrete shall not exceed 3 feet in any dimension. Asphalt and broken concrete containing asphalt are specifically excluded from this authorization.

This verification is valid until March 18, 2017, unless the nationwide permit is modified, reissued or revoked. It is your responsibility to remain informed of changes to the nationwide permit program. We will issue a public notice announcing any changes if and when they occur. Furthermore, if you commence or are under contract to commence this activity before the date the nationwide permit is modified or revoked, you will have twelve months from this date to complete your activity under the present terms and conditions of this nationwide permit. If your project plans change, you should contact our office for another determination.

Our office has completed a Preliminary Jurisdictional Determination concerning your project area. A Preliminary Jurisdictional Determination is not appealable, and it is applicable only to the permit program administered by the Corps of Engineers.

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This authorization does not eliminate the requirement that you must still acquire other applicable Federal, state, and local permits. If you have not already coordinated your project with the Illinois Department of Natural Resources – Office of Water Resources, please contact them at 217/782-3863 to determine if a floodplain development permit is required for your project. You may contact the IEPA Facility Evaluation Unit at 217/782-3362 to determine whether additional authorizations are required from the IEPA. Please send any electronic correspondence to EPA.401.bow@illinois.gov.

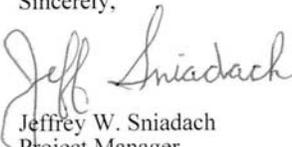
This delineation/determination has been conducted to identify the limits of the Corps of Engineers' Clean Water Act jurisdiction for the particular site identified in this request. This delineation/determination may not be valid for the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should coordinate with the local office of the Natural Resources Conservation Service prior to starting work.

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 free 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.

You are required to complete and return the enclosed "Completed Work Certification" upon completion of your project, in accordance with General Condition No. 30 of the nationwide permits.

The Rock Island District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete the attached postcard and return it or go to our Customer Service Survey found on our web site at <http://per2.nwp.usace.army.mil/survey.html>. (Be sure to select "Rock Island District" under the area entitled: Which Corps office did you deal with?)

Should you have any questions, please contact our Regulatory Branch by letter, or telephone me at 309/794-5369.

Sincerely,

Jeffrey W. Sniadach
Project Manager
Enforcement Section

-3-

When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Transferee

Date

Enclosures

Copies Furnished: (w/o enclosures)

Mr. Mike Diedrichsen, P.E.
Office of Water Resources
IL Department of Natural Resources
One Natural Resources Way
Springfield, Illinois 62701-1271

Mr. Dan Heacock
Illinois Environmental Protection Agency
Watershed Management Section, Permit Sec. 15
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
Epa.401.bow@illinois.gov (email copy)

U.S. Army Corps of Engineers
Illinois Waterway Project Office
257 Grant Street
Peoria, Illinois 61603

Mr. Peter J. Frantz/Ms. Kathy Ames
Bureau of Location and Environment
Illinois Department of Transportation
Division of Highways
2300 South Dirksen Parkway
Springfield, Illinois 62754

COMPLETED WORK CERTIFICATION

Permit Number: CEMVR-OD-P-2013-679

Name of Permittee: Illinois DOT

Date of Issuance: May 7, 2013

Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:

U.S. Army Engineer District,
Rock Island
ATTN: Regulatory Branch
Clock Tower Building
Post Office Box 2004
Rock Island, Illinois 61204-2004

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.

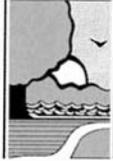
I hereby certify that the work authorized by the above reference permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

Signature of Permittee

Date

JS

IDNR PERMIT



**Illinois Department of
 Natural Resources**

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

Pat Quinn, Governor
 Marc Miller, Director

September 13, 2013

SUBJECT: Permit No. DS2013066
 Culvert Crossing Replacement
 Tributary to Rock Creek
 FAU 6226 (6000 N Road)
 Kankakee County

Illinois Department of Transportation, District 3
 ATTN: Mr. Paul Loete
 700 East Norris Drive
 Ottawa, Illinois 61350

Dear Mr. Loete:

Enclosed is Illinois Department of Natural Resources, Office of Water Resources Permit No. DS2013066 authorizing the subject project. Our approval is based on our determination that the replacement crossing has been designed to reduce the induced flood damages to the fullest practical extent. This permit does not supersede any other federal, state or local authorizations that may be required for the project.

If any changes in 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 feel free to contact Jerry Bishoff of my staff at 217/558-6617 if you have any questions concerning this authorization.

Sincerely,

Michael L. Diedrichsen, P.E.
 Acting Manager, Downstate Regulatory Programs

MLD:JMB:crw
 Enclosure

cc: IDOT (D. Carl Puzey, Attn: David Greifzu)
 U.S. Army Corps of Engineers, Rock Island District
 Kankakee County (Don Pallissard, Building Manager)

| RECEIVED STUDIES & PLANS SEP 16 '13 | | |
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PERMIT NO. DS2013066
DATE: SEPTEMBER 13, 2013

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

Permission is hereby granted to:

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS, DISTRICT 3
700 EAST NORRIS DRIVE
OTTAWA, ILLINOIS 61350

to replace the 6000 N Road culvert crossing of an unnamed tributary to Rock Creek in the Northeast ¼
of Section 6, Township 31 North, Range 12 East of the 3rd Principal Meridian in Kankakee County,

in accordance with an application dated June 5, 2013, and the plans and specifications entitled:

6000N PLAN & PROFILE, I-57 AT 6000N, BOURBONNAIS, IL (1 Sheet, Plotted 3/28/2013); &
6000N CULVERT, ROADWAY CROSS SECTION (1 Sheet, Plotted 3/28/2013).

Examined and Recommended:

Michael L. Diedrichsen, Acting Manager
Downstate Regulatory Programs

Approval Recommended:

Arlan R. Juhl, Director
Office of Water Resources

Approved:

Marc Miller, Director
Department of Natural Resources

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

PERMIT NO. DS2013066

THIS PERMIT IS SUBJECT TO THE FOLLOWING CONDITIONS:

- 1) This permit is granted in accordance with the Rivers, Lakes and Streams Act "615 ILCS 5."
- 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 property on which the activity or any part thereof will be located, or otherwise grant to the permittee any right or interest in or to the property, whether the property is owned or possessed by the State of Illinois or by any private or public party or parties.
- 3) This permit does not release the permittee from liability for damage to persons or property resulting from the work covered by this permit, and does not authorize any injury to private property or invasion of private rights.
- 4) This permit does not relieve the permittee of the responsibility to obtain other federal, state or local authorizations required for the construction of the permitted activity; and if the permittee is required by law to obtain approvals from any federal or other state agency to do the work, this permit is not effective until the federal and state approvals are obtained.
- 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.
- 9) The Department in issuing this permit has relied upon the statements and representations made by the permittee; if any substantive statement or representation made by the permittee is found to be false, this permit will be revoked; and when revoked, all rights of the permittee under the permit are voided.
- 10) In public waters, the permittee and the permittee's successors shall make no claim whatsoever to any interest in any accretions caused by the activity.
- 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 December 31, 2016, this permit shall cease and be null and void.

PROJECT LABOR AGREEMENT - QUARTERLY EMPLOYMENT REPORT

Public Act 97-0199 requires the Department to submit quarterly reports regarding the number of minorities and females employed under Project Labor Agreements. To assist in this reporting effort, the Contractor shall provide a quarterly workforce participation report for all minority and female employees working under the project labor agreement of this contract. The data shall be reported on Construction Form BC 820, Project Labor Agreement (PLA) Workforce Participation Quarterly Reporting Form available on the Department's website <http://www.dot.il.gov/const/conforms.html>.

The report shall be submitted no later than the 15th of the month following the end of each quarter (i.e. April 15 for the January – March reporting period). The form shall be emailed to DOT.PLA.Reporting@illinois.gov or faxed to (217) 524-4922.

Any costs associated with complying with this provision 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.

Illinois Department of Transportation
PROJECT LABOR AGREEMENT

This Project Labor Agreement (“PLA” or “Agreement”) is entered into this _____ day of _____, 2014, by and between the Illinois Department of Transportation (“IDOT” or “Department”) in its proprietary capacity, and each relevant Illinois AFL-CIO Building Trades signatory hereto as determined by the Illinois AFL-CIO Statewide Project Labor Agreement Committee on behalf of each of its affiliated members (individually and collectively, the “Unions”). This PLA shall apply to Construction Work (as defined herein) to be performed by IDOT’s Prime Contractor and each of its subcontractors of whatever tier (“Subcontractor” or “Subcontractors”) on Contract No. **66982** (hereinafter, the “Project”).

ARTICLE 1 - INTENT AND PURPOSES

- 1.1 This PLA is entered into in accordance with the Project Labor Agreement Act (“Act”, 30 ILCS 571). It is mutually understood and agreed that the terms and conditions of this PLA are intended to promote the public interest in obtaining timely and economical completion of the Project by encouraging productive and efficient construction operations; by establishing a spirit of harmony and cooperation among the parties; and by providing for peaceful and prompt settlement of any and all labor grievances or jurisdictional disputes of any kind without strikes, lockouts, slowdowns, delays, or other disruptions to the prosecution of the work. The parties acknowledge the obligations of the Contractors and Subcontractors to comply with the provisions of the Act. The parties will work with the Contractors and Subcontractors within the parameters of other statutory and regulatory requirements to implement the Act’s goals and objectives.
- 1.2 As a condition of the award of the contract for performance of work on the Project, IDOT's Prime Contractor and each of its Subcontractors shall execute a “Contractor Letter of Assent”, in the form attached hereto as Exhibit A, prior to commencing Construction Work on the Project. The Contractor shall submit a Subcontractor’s Contractor Letter of Assent to the Department prior to the Subcontractor’s performance of Construction Work on the Project. Upon request copies of the applicable collective bargaining agreements will be provided by the appropriate signatory labor organization consistent with this Agreement and at the pre-job conference referenced in Article III, Section 3.1.
- 1.3 Each Union affiliate and separate local representing workers engaged in Construction Work on the Project in accordance with this PLA are bound to this agreement by the Illinois AFL-CIO Statewide Project Labor Agreement Committee which is the central committee established with full authority to negotiate and sign PLAs with the State on behalf of all respective crafts. Upon their signing the Contractor Letter of Assent, the Prime Contractor, each Subcontractor, and the individual Unions shall thereafter be deemed a party to this PLA. No party signatory to this PLA shall, contract or subcontract, nor permit any other person, firm, company, or entity to contract or subcontract for the performance of Construction Work for the Project to any person, firm, company, or entity that does not agree in writing to become bound for the term of this Project by the terms of this PLA prior to commencing such work and to the applicable area-wide collective bargaining agreement(s) with the Union(s) signatory hereto.

- 1.4 It is understood that the Prime Contractor(s) and each Subcontractor will be considered and accepted by the Unions as separate employers for the purposes of collective bargaining, and it is further agreed that the employees working under this PLA shall constitute a bargaining unit separate and distinct from all others. The parties hereto also agree that this PLA shall be applicable solely with respect to this Project, and shall have no bearing on the interpretation of any other collective bargaining agreement or as to the recognition of any bargaining unit other than for the specific purposes of this Project.
- 1.5 In the event of a variance or conflict, whether explicit or implicit, between the terms and conditions of this PLA and the provisions of any other applicable national, area, or local collective bargaining agreement, the terms and conditions of this PLA shall supersede and control. For any work performed under the NTL Articles of Agreement, the National Stack/Chimney Agreement, the National Cooling Tower Agreement, the National Agreement of the International Union of Elevator Constructors, and for any instrument calibration work and loop checking performed under the UA/IBEW Joint National Agreement for Instrument and Control Systems Technicians, the preceding sentence shall apply only with respect to Articles I, II, V, VI, and VII.
- 1.6 Subject to the provisions of paragraph 1.5 of this Article, it is the parties' intent to respect the provisions of any other collective bargaining agreements that may now or hereafter pertain, whether between the Prime Contractor and one or more of the Unions or between a Subcontractor and one or more of the Unions. Accordingly, except and to the extent of any contrary provision set forth in this PLA, the Prime Contractor and each of its Subcontractors agrees to be bound and abide by the terms of the following in order of precedence: (a) the applicable collective bargaining agreement between the Prime Contractor and one or more of the Unions made signatory hereto; (b) the applicable collective bargaining agreement between a Subcontractor and one or more of the Unions made signatory hereto; or (c) the current applicable area collective bargaining agreement for the relevant Union that is the agreement certified by the Illinois Department of Labor for purposes of establishing the Prevailing Wage applicable to the Project. The Union will provide copies of the applicable collective bargaining agreements pursuant to part (c) of the preceding sentence to the Prime Contractor. Assignments by the Contractors or Subcontractors amongst the trades shall be consistent with area practices; in the event of unresolved disagreements as to the propriety of such assignments, the provisions of Article VI shall apply.
- 1.7 Subject to the limitations of paragraphs 1.4 to 1.6 of this Article, the terms of each applicable collective bargaining agreement as determined in accordance with paragraph 1.6 are incorporated herein by reference, and the terms of this PLA shall be deemed incorporated into such other applicable collective bargaining agreements only for purposes of their application to the Project.

- 1.8 To the extent necessary to comply with the requirements of any fringe benefit fund to which the Prime Contractor or Subcontractor is required to contribute under the terms of an applicable collective bargaining agreement pursuant to the preceding paragraph, the Prime Contractor or Subcontractor shall execute all "Participation Agreements" as may be reasonably required by the Union to accomplish such purpose; provided, however, that such Participation Agreements shall, when applicable to the Prime Contractor or Subcontractor solely as a result of this PLA, be amended as reasonably necessary to reflect such fact. Upon written notice in the form of a lien of a Contractor's or Subcontractor's delinquency from any applicable fringe benefit fund, IDOT will withhold from the Contractor's periodic pay request an amount sufficient to extinguish any delinquency obligation of the Contractor or Subcontractor arising out of the Project.
- 1.9 In the event that the applicable collective bargaining agreement between a Prime Contractor and the Union or between the Subcontractor and the Union expires prior to the completion of this Project, the expired applicable contract's terms will be maintained until a new applicable collective bargaining agreement is ratified. The wages and fringe benefits included in any new applicable collective bargaining agreement will apply on and after the effective date of the newly negotiated collective bargaining agreement, except to the extent wage and fringe benefit retroactivity is specifically agreed upon by the relevant bargaining parties.

ARTICLE II – APPLICABILITY, RECOGNITION, AND COMMITMENTS

- 2.1 The term Construction Work as used herein shall include all "construction, demolition, rehabilitation, renovation, or repair" work performed by a "laborer or mechanic" at the "site of the work" for the purpose of "building" the specific structures and improvements that constitute the Project. Terms appearing within quotation marks in the preceding sentence shall have the meaning ascribed to them pursuant to 29 CFR Part 5 and Illinois labor laws.
- 2.2 By executing the Letters of Assent, Prime Contractor and each of its Subcontractors recognizes the Unions signatory to this PLA as the sole and exclusive bargaining representatives for their craft employees employed on the jobsite for this Project. Unions who are signatory to this PLA will have recognition on the Project for their craft.
- 2.3 The Prime Contractor and each of its Subcontractors retains and shall be permitted to exercise full and exclusive authority and responsibility for the management of its operations, except as expressly limited by the terms of this PLA or by the terms and conditions of the applicable collective bargaining agreement.
- 2.4 Except to the extent contrary to an express provision of the relevant collective bargaining agreement, equipment or materials used in the Project may be pre-assembled or pre-fabricated, and there shall be no refusal by the Union to handle, transport, install, or connect such equipment or materials. Equipment or materials delivered to the job-site will be unloaded and handled promptly without regard to potential jurisdictional disputes; any such disputes shall be handled in accordance with the provisions of this PLA.

- 2.5 The parties are mutually committed to promoting a safe working environment for all personnel at the job-site. It shall be the responsibility of each employer to which this PLA applies to provide and maintain safe working conditions for its employees, and to comply with all applicable federal, state, and local health and safety laws and regulations.
- 2.6 The use or furnishing of alcohol or drugs and the conduct of any other illegal activity at the job-site is strictly prohibited. The parties shall take every practical measure consistent with the terms of applicable collective bargaining agreements to ensure that the job-site is free of alcohol and drugs.
- 2.7 All parties to this PLA agree that they will not discriminate against any employee based on race, creed, religion, color, national origin, union activity, age, gender or sexual orientation and shall comply with all applicable federal, state, and local laws.
- 2.8 In accordance with the Act and to promote diversity in employment, IDOT will establish, in cooperation with the other parties, the apprenticeship hours which are to be performed by minorities and females on the Project. IDOT shall consider the total hours to be performed by these underrepresented groups, as a percentage of the workforce, and create aspirational goals for each Project, based on the level of underutilization for the service area of the Project (together "Project Employment Objectives"). IDOT shall provide a quarterly report regarding the racial and gender composition of the workforce on the Project.

Persons currently lacking qualifications to enter apprenticeship programs will have the opportunity to obtain skills through basic training programs as have been established by the Department. The parties will endeavor to support such training programs to allow participants to obtain the requisite qualifications for the Project Employment Objectives.

The parties agree that all Contractors and Subcontractors working on the Project shall be encouraged to utilize the maximum number of apprentices as permitted under the terms of the applicable collective bargaining agreements to realize the Project Employment Objectives.

The Unions shall assist the Contractor and each Subcontractor in efforts to satisfy Project Employment Objectives. A Contractor or Subcontractor may request from a Union specific categories of workers necessary to satisfy Project Employment Objectives. The application of this section shall be consistent with all local Union collective bargaining agreements, and the hiring hall rules and regulations established for the hiring of personnel, as well as the apprenticeship standards set forth by each individual Union.

- 2.9 The parties hereto agree that engineering/architectural/surveying consultants' materials testing employees are subject to the terms of this PLA for Construction Work performed for a Contractor or Subcontractor on this Project. These workers shall be fully expected to objectively and responsibly perform their duties and obligations owed to the Department without regard to the potential union affiliation of such employees or of other employees on the Project.
- 2.10 This Agreement shall not apply to IDOT employees or employees of any other governmental entity.

ARTICLE III - ADMINISTRATION OF AGREEMENT

- 3.1 In order to assure that all parties have a clear understanding of the PLA, and to promote harmony, at the request of the Unions a post-award pre-job conference will be held among the Prime Contractor, all Subcontractors and Union representatives prior to the start of any Construction Work on the Project. No later than the conclusion of such pre-job conference, the parties shall, among other matters, provide to one another contact information for their respective representatives (including name, address, phone number, facsimile number, e-mail). Nothing herein shall be construed to limit the right of the Department to discuss or explain the purpose and intent of this PLA with prospective bidders or other interested parties prior to or following its award of the job.
- 3.2 Representatives of the Prime Contractor and the Unions shall meet as often as reasonably necessary following award until completion of the Project to assure the effective implementation of this PLA.
- 3.3 Any notice contemplated under Article VI and VII of this Agreement to a signatory labor organization shall be made in writing to the Local Union with copies to the local union's International Representative.

ARTICLE IV - HOURS OF WORK AND GENERAL CONDITIONS

- 4.1 The standard work day and work week for Construction Work on the Project shall be consistent with the respective collective bargaining agreements. In the event Project site or other job conditions dictate a change in the established starting time and/or a staggered lunch period for portions of the Project or for specific crafts, the Prime Contractor, relevant Subcontractors and business managers of the specific crafts involved shall confer and mutually agree to such changes as appropriate. If proposed work schedule changes cannot be mutually agreed upon between the parties, the hours fixed at the time of the pre-job meeting shall prevail.
- 4.2 Shift work may be established and directed by the Prime Contractor or relevant Subcontractor as reasonably necessary or appropriate to fulfill the terms of its contract with the Department. If used, shift hours, rates and conditions shall be as provided in the applicable collective bargaining agreement.
- 4.3 The parties agree that chronic and/or unexcused absenteeism is undesirable and must be controlled in accordance with procedures established by the applicable collective bargaining agreement. Any employee disciplined for absenteeism in accordance with such procedures shall be suspended from all work on the Project for not less than the maximum period permitted under the applicable collective bargaining agreement.
- 4.4 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, employment begins and ends at the Project site; employees shall be at their place of work at the starting time; and employees shall remain at their place of work until quitting time.

- 4.5 Except as may be otherwise expressly provided by the applicable collective bargaining agreement, there shall be no limit on production by workmen, no restrictions on the full use of tools or equipment, and no restrictions on efficient use of manpower or techniques of construction other than as may be required by safety regulations.
- 4.6 The parties recognize that specialized or unusual equipment may be installed on the Project. In such cases, the Union recognizes the right of the Prime Contractor or Subcontractor to involve the equipment supplier or vendor's personnel in supervising the setting up of the equipment, making modifications and final alignment, and performing similar activities that may be reasonably necessary prior to and during the start-up procedure in order to protect factory warranties. The Prime Contractor or Subcontractor shall notify the Union representatives in advance of any work at the job-site by such vendor personnel in order to promote a harmonious relationship between the equipment vendor's personnel and other Project employees.
- 4.7 For the purpose of promoting full and effective implementation of this PLA, authorized Union representatives shall have access to the Project job-site during scheduled work hours. Such access shall be conditioned upon adherence to all reasonable visitor and security rules of general applicability that may be established for the Project site at the pre-job conference or from time to time thereafter.

ARTICLE V – GRIEVANCE PROCEDURES FOR DISPUTES ARISING UNDER A PARTICULAR COLLECTIVE BARGAINING AGREEMENT

- 5.1 In the event a dispute arises under a particular collective bargaining agreement specifically not including jurisdictional disputes referenced in Article VI below, said dispute shall be resolved by the Grievance/Arbitration procedure of the applicable collective bargaining agreement. The resulting determination from this process shall be final and binding on all parties bound to its process.
- 5.2 Employers covered under this Agreement shall have the right to discharge or discipline any employee who violates the provisions of this Agreement. Such discharge or discipline by a contractor or subcontractor shall be subject to Grievance/Arbitration procedure of the applicable collective bargaining agreement only as to the fact of such violation of this agreement. If such fact is established, the penalty imposed shall not be disturbed. Work at the Project site shall continue without disruption or hindrance of any kind as a result of a Grievance/Arbitration procedure under this Article.
- 5.3 In the event there is a deadlock in the foregoing procedure, the parties agree that the matter shall be submitted to arbitration for the selection and decision of an Arbitrator governed under paragraph 6.8.

ARTICLE VI –DISPUTES: GENERAL PRINCIPLES

- 6.1 This Agreement is entered into to prevent strikes, lost time, lockouts and to facilitate the peaceful adjustment of jurisdictional disputes in the building and construction industry and to prevent waste and unnecessary avoidable delays and expense, and for the further purpose of at all times securing for the employer sufficient skilled workers.

- 6.2 A panel of Permanent Arbitrators are attached as addendum (A) to this agreement. By mutual agreement between IDOT and the Unions, the parties can open this section of the agreement as needed to make changes to the list of permanent arbitrators.
- 6.3 The PLA Jurisdictional Dispute Resolution Process (“Process”) sets forth the procedures below to resolve jurisdictional disputes between and among Contractors, Subcontractors, and Unions engaged in the building and construction industry. Further, the Process will be followed for any grievance or dispute arising out of the interpretation or application of this PLA by the parties except for the prohibition on attorneys contained in 6.11. All decisions made through the Process are final and binding upon all parties.

DISPUTE PROCESS

- 6.4 Administrative functions under the Process shall be performed through the offices of the President and/or Secretary-Treasurer of the Illinois State Federation of Labor, or their designated representative, called the Administrator. In no event shall any officer, employee, agent, attorney, or other representative of the Illinois Federation of Labor, AFL-CIO be subject to any subpoena to appear or testify at any jurisdictional dispute hearing.
- 6.5 There shall be no abandonment of work during any case participating in this Process or in violation of the arbitration decision. All parties to this Process release the Illinois State Federation of Labor (“Federation”) from any liability arising from its action or inaction and covenant not to sue the Federation, nor its officers, employees, agents or attorneys.
- 6.6 In the event of a dispute relating to trade or work jurisdiction, all parties, including the employers, Contractors or Subcontractors, agree that a final and binding resolution of the dispute shall be resolved as follows:
- (a) Representatives of the affected trades and the Contractor or Subcontractor shall meet on the job site within two (2) business days after receiving written notice in an effort to resolve the dispute. (In the event there is a dispute between local unions affiliated with the same International Union, the decision of the General President, or his/her designee, as the internal jurisdictional authority of that International Union, shall constitute a final and binding decision and determination as to the jurisdiction of work.)
 - (b) If no settlement is achieved subsequent to the preceding Paragraph, the matter shall be referred to the local area Building & Construction Trades Council, which shall meet with the affected trades within two (2) business days subsequent to receiving written notice. In the event the parties do not wish to avail themselves of the local Building & Construction Trades Council, the parties may elect to invoke the services of their respective International Representatives with no extension of the time limitations. An agreement reached at this Step shall be final and binding upon all parties.

(c) If no settlement agreement is reached during the proceedings contemplated by Paragraphs "a" or "b" above, the matter shall be immediately referred to the Illinois Jurisdictional Dispute Process for final and binding resolution of said dispute. Said referral submission shall be in writing and served upon the Illinois State Federation of Labor, or the Administrator, pursuant to paragraph 6.4 of this agreement. The Administrator shall, within three (3) days, provide for the selection of an available Arbitrator to hear said dispute within this time period. Upon good cause shown and determined by the Administrator, an additional three (3) day extension for said hearing shall be granted at the sole discretion of the Administrator. Only upon mutual agreement of all parties may the Administrator extend the hearing for a period in excess of the time frames contemplated under this Paragraph. Business days are defined as Monday through Friday, excluding contract holidays.

6.7 The primary concern of the Process shall be the adjustment of jurisdictional disputes arising out of the Project. A sufficient number of Arbitrators shall be selected from list of approved Arbitrators as referenced Sec. 6.2 and shall be assigned per Sec. 6.8. Decisions shall be only for the Project and shall become effective immediately upon issuance and complied with by all parties. The authority of the Arbitrator shall be restricted and limited specifically to the terms and provisions of Article VI and generally to this Agreement as a whole.

6.8 The Arbitrator chosen shall be randomly selected based on the list of Arbitrators in Sec. 6.2 and geographical location of the jurisdictional dispute and upon his/her availability, and ability to conduct a Hearing within two (2) business days of said notice. The Arbitrator may issue a "bench" decision immediately following the Hearing or he/she may elect to only issue a written decision, said decision must be issued within two (2) business days subsequent to the completion of the Hearing. Copies of all notices, pleadings, supporting memoranda, decisions, etc. shall be provided to all disputing parties and the Illinois State Federation of Labor.

Any written decision shall be in accordance with this Process and shall be final and binding upon all parties to the dispute and may be a "short form" decision. Fees and costs of the arbitrator shall be divided evenly between the contesting parties except that any party wishing a full opinion and decision beyond the short form decision shall bear the reasonable fees and costs of such full opinion. The decision of the Arbitrator shall be final and binding upon the parties hereto, their members, and affiliates.

In cases of jurisdictional disputes or other disputes between a signatory labor organization and another labor organization, both of which is an affiliate or member of the same International Union, the matter or dispute shall be settled in the manner set forth by their International Constitution and/or as determined by the International Union's General President whose decision shall be final and binding upon all parties. In no event shall there be an abandonment of work.

- 6.9 In rendering a decision, the Arbitrator shall determine:
- (a) First, whether a previous agreement of record or applicable agreement, including a disclaimer agreement, between National or International Unions to the dispute or agreements between local unions involved in the dispute, governs;
 - (b) Only if the Arbitrator finds that the dispute is not covered by an appropriate or applicable agreement of record or agreement between the crafts to the dispute, he shall then consider the established trade practice in the industry and prevailing practice in the locality. Where there is a previous decision of record governing the case, the Arbitrator shall give equal weight to such decision of record, unless the prevailing practice in the locality in the past ten years favors one craft. In that case, the Arbitrator shall base his decision on the prevailing practice in the locality. Except, that if the Arbitrator finds that a craft has improperly obtained the prevailing practice in the locality through raiding, the undercutting of wages or by the use of vertical agreements, the Arbitrator shall rely on the decision of record and established trade practice in the industry rather than the prevailing practice in the locality; and,
 - (c) Only if none of the above criteria is found to exist, the Arbitrator shall then consider that because efficiency, cost or continuity and good management are essential to the well being of the industry, the interests of the consumer or the past practices of the employer shall not be ignored.
- 6.10 The Arbitrator shall set forth the basis for his/her decision and shall explain his/her findings regarding the applicability of the above criteria. If lower ranked criteria are relied upon, the Arbitrator shall explain why the higher-ranked criteria were not deemed applicable. The Arbitrator's decision shall only apply to the Project. Agreements of Record, for other PLA projects, are applicable only to those parties signatory to such agreements. Decisions of Record are those that were either attested to by the former Impartial Jurisdictional Disputes Board or adopted by the National Arbitration Panel.
- 6.11 All interested parties, as determined by the Arbitrator, shall be entitled to make presentations to the Arbitrator. Any interested labor organization affiliated to the PLA Committee and party present at the Hearing, whether making a presentation or not, by such presence shall be deemed to accept the jurisdiction of the Arbitrator and to agree to be bound by its decision. In addition to the representative of the local labor organization, a representative of the labor organization's International Union may appear on behalf of the parties. Each party is responsible for arranging for its witnesses. In the event an Arbitrator's subpoena is required, the party requiring said subpoena shall prepare the subpoena for the Arbitrator to execute. Service of the subpoena upon any witness shall be the responsibility of the issuing party.

Attorneys shall not be permitted to attend or participate in any portion of a Hearing.

The parties are encouraged to determine, prior to Hearing, documentary evidence which may be presented to the Arbitrator on a joint basis.

- 6.12 The Order of Presentation in all Hearings before an Arbitrator shall be
- I. Identification and Stipulation of the Parties
 - II. Unions(s) claiming the disputed work presents its case
 - III. Union(s) assigned the disputed work presents its case
 - IV. Employer assigning the disputed work presents its case
 - V. Evidence from other interested parties (i.e., general contractor, project manager, owner)
 - VI. Rebuttal by union(s) claiming the disputed work
 - VII. Additional submissions permitted and requested by Arbitrator
 - VIII. Closing arguments by the parties
- 6.13 All parties bound to the provisions of this Process hereby release the Illinois State Federation of Labor and IDOT, their respective officers, agents, employees or designated representatives, specifically including any Arbitrator participating in said Process, from any and all liability or claim, of whatsoever nature, and specifically incorporating the protections provided in the Illinois Arbitration Act, as amended from time to time.
- 6.14 The Process, as an arbitration panel, nor its Administrator, shall have any authority to undertake any action to enforce its decision(s). Rather, it shall be the responsibility of the prevailing party to seek appropriate enforcement of a decision, including findings, orders or awards of the Arbitrator or Administrator determining non-compliance with a prior award or decision.
- 6.15 If at any time there is a question as to the jurisdiction of the Illinois Jurisdictional Dispute Resolution Process, the primary responsibility for any determination of the arbitrability of a dispute and the jurisdiction of the Arbitrator shall be borne by the party requesting the Arbitrator to hear the underlying jurisdictional dispute. The affected party or parties may proceed before the Arbitrator even in the absence or one or more stipulated parties with the issue of jurisdiction as an additional item to be decided by the Arbitrator. The Administrator may participate in proceedings seeking a declaration or determination that the underlying dispute is subject to the jurisdiction and process of the Illinois Jurisdictional Dispute Resolution Process. In any such proceedings, the non-prevailing party and/or the party challenging the jurisdiction of the Illinois Jurisdictional Dispute Resolution Process shall bear all the costs, expenses and attorneys' fees incurred by the Illinois Jurisdictional Dispute Resolution Process and/or its Administrator in establishing its jurisdiction.

ARTICLE VII - WORK STOPPAGES AND LOCKOUTS

- 7.1 During the term of this PLA, no Union or any of its members, officers, stewards, employees, agents or representatives shall instigate, support, sanction, maintain, or participate in any strike, picketing, walkout, work stoppage, slow down or other activity that interferes with the routine and timely prosecution of work at the Project site or at any other contractor's or supplier's facility that is necessary to performance of work at the Project site. Hand billing at the Project site during the designated lunch period and before commencement or following conclusion of the established standard workday shall not, in itself, be deemed an activity that interferes with the routine and timely prosecution of work on the Project.

7.2 Should any activity prohibited by paragraph 7.1 of this Article occur, the Union shall undertake all steps reasonably necessary to promptly end such prohibited activities.

7.2.A No Union complying with its obligations under this Article shall be liable for acts of employees for which it has no responsibility or for the unauthorized acts of employees it represents. Any employee who participates or encourages any activity prohibited by paragraph 7.1 shall be immediately suspended from all work on the Project for a period equal to the greater of (a) 60 days; or (b) the maximum disciplinary period allowed under the applicable collective bargaining agreement for engaging in comparable unauthorized or prohibited activity.

7.2.B Neither the PLA Committee nor its affiliates shall be liable for acts of employees for which it has no responsibility. The principal officer or officers of the PLA Committee will immediately instruct, order and use the best efforts of his office to cause the affiliated union or unions to cease any violations of this Article. The PLA Committee in its compliance with this obligation shall not be liable for acts of its affiliates. The principal officer or officers of any involved affiliate will immediately instruct, order or use the best effort of his office to cause the employees the union represents to cease any violations of this Article. A union complying with this obligation shall not be liable for unauthorized acts of employees it represents. The failure of the Contractor to exercise its rights in any instance shall not be deemed a waiver of its rights in any other instance.

During the term of this PLA, the Prime Contractor and its Subcontractors shall not engage in any lockout at the Project site of employees covered by this Agreement.

7.3 Upon notification of violations of this Article, the principal officer or officers of the local area Building and Construction Trades Council, and the Illinois AFL-CIO Statewide Project Labor Agreement Committee as appropriate, will immediately instruct, order and use their best efforts to cause the affiliated union or unions to cease any violations of this Article. A Trades Council and the Committee otherwise in compliance with the obligations under this paragraph shall not be liable for unauthorized acts of its affiliates.

7.4 In the event that activities in violation of this Article are not immediately halted through the efforts of the parties, any aggrieved party may invoke the special arbitration provisions set forth in paragraph 7.5 of this Article.

7.5 Upon written notice to the other involved parties by the most expeditious means available, any aggrieved party may institute the following special arbitration procedure when a breach of this Article is alleged:

7.5.A The party invoking this procedure shall notify the individual designated as the Permanent Arbitrator pursuant to paragraph 6.8 of the nature of the alleged violation; such notice shall be by the most expeditious means possible. The initiating party may also furnish such additional factual information as may be reasonably necessary for the Permanent Arbitrator to understand the relevant circumstances. Copies of any written materials provided to the arbitrator shall also be contemporaneously provided by the most expeditious means possible to the party alleged to be in violation and to all other involved parties.

- 7.5.B Upon receipt of said notice the Permanent Arbitrator shall set and hold a hearing within twenty-four (24) hours if it is contended the violation is ongoing, but not before twenty-four (24) hours after the written notice to all parties involved as required above.
- 7.5.C The Permanent Arbitrator shall notify the parties by facsimile or any other effective written means, of the place and time chosen by the Permanent Arbitrator for this hearing. Said hearing shall be completed in one session. A failure of any party or parties to attend said hearing shall not delay the hearing of evidence or issuance of an Award by the Permanent Arbitrator.
- 7.5.D The sole issue at the hearing shall be whether a violation of this Article has, in fact, occurred. An Award shall be issued in writing within three (3) hours after the close of the hearing, and may be issued without a written opinion. If any party desires a written opinion, one shall be issued within fifteen (15) days, but its issuance shall not delay compliance with, or enforcement of, the Award. The Permanent Arbitrator may order cessation of the violation of this Article, and such Award shall be served on all parties by hand or registered mail upon issuance.
- 7.5.E Such Award may be enforced by any court of competent jurisdiction upon the filing of the Award and such other relevant documents as may be required. Facsimile or other hardcopy written notice of the filing of such enforcement proceedings shall be given to the other relevant parties. In a proceeding to obtain a temporary order enforcing the Permanent Arbitrator's Award as issued under this Article, all parties waive the right to a hearing and agree that such proceedings may be ex parte. Such agreement does not waive any party's right to participate in a hearing for a final order of enforcement. The Court's order or orders enforcing the Permanent Arbitrator's Award shall be served on all parties by hand or by delivery to their last known address or by registered mail.
- 7.6 Individuals found to have violated the provisions of this Article are subject to immediate termination. In addition, IDOT reserves the right to terminate this PLA as to any party found to have violated the provisions of this Article.
- 7.7 Any rights created by statute or law governing arbitration proceedings inconsistent with the above procedure or which interfere with compliance therewith are hereby waived by parties to whom they accrue.
- 7.8 The fees and expenses of the Permanent Arbitrator shall be borne by the party or parties found in violation, or in the event no violation is found, such fees and expenses shall be borne by the moving party.

ARTICLE VIII – TERMS OF AGREEMENT

- 8.1 If any Article or provision of this Agreement shall be declared invalid, inoperative or unenforceable by operation of law or by any of the above mentioned tribunals of competent jurisdiction, the remainder of this Agreement or the application of such Article or provision to persons or circumstances other than those as to which it has been held invalid, inoperative or unenforceable shall not be affected thereby.

- 8.2 This Agreement shall be in full force as of and from the date of the Notice of Award until the Project contract is closed.
- 8.3 This PLA may not be changed or modified except by the subsequent written agreement of the parties. All parties represent that they have the full legal authority to enter into this PLA. This PLA may be executed by the parties in one or more counterparts.
- 8.4 Any liability arising out of this PLA shall be several and not joint. IDOT shall not be liable to any person or other party for any violation of this PLA by any other party, and no Contractor or Union shall be liable for any violation of this PLA by any other Contractor or Union.
- 8.5 The failure or refusal of a party to exercise its rights hereunder in one or more instances shall not be deemed a waiver of any such rights in respect of a separate instance of the same or similar nature.

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Addendum A

IDOT Slate of Permanent Arbitrators

1. Bruce Feldacker
2. Thomas F. Gibbons
3. Edward J. Harrick
4. Brent L. Motchan
5. Robert Perkovich
6. Byron Yaffee
7. Glenn A. Zipp

Execution Page

Illinois Department of Transportation

Omer M. Osman, Director of Highways

Michael A. Forti, Chief Counsel

Erica J. Borggren, Acting Secretary

(Date)

Illinois AFL-CIO Statewide Project Labor Agreement Committee, representing the Unions listed below:

(Date)

List Unions:

****RETURN WITH BID****

Exhibit A - Contractor Letter of Assent

(Date)

To All Parties:

In accordance with the terms and conditions of the contract for Construction Work on [Contract No. **66982**], this Letter of Assent hereby confirms that the undersigned Prime Contractor or Subcontractor agrees to be bound by the terms and conditions of the Project Labor Agreement established and entered into by the Illinois Department of Transportation in connection with said Project.

It is the understanding and intent of the undersigned party that this Project Labor Agreement shall pertain only to the identified Project. In the event it is necessary for the undersigned party to become signatory to a collective bargaining agreement to which it is not otherwise a party in order that it may lawfully make certain required contributions to applicable fringe benefit funds, the undersigned party hereby expressly conditions its acceptance of and limits its participation in such collective bargaining agreement to its work on the Project.

(Authorized Company Officer)

(Company)

****RETURN WITH BID****

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. 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 on-the-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 non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; 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.

b. (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 from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

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.