## **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 <a href="http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin">http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin</a> 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.DE-Contracts@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 PAPER 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, <b>followed by your bid (the Schedule of Prices/Pay Items).</b> If you are using special software or CBID to generate your schedule of prices, <u>do not include the blank pages of the schedule of prices that came with the proposal package.</u>   |
|---|
| 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.  |
| <b>After page 4</b> – Insert the following documents: Cost Adjustments for Steel, Bituminous and Fuel (if applicable) and the Contractor Letter of Assent (if applicable). The general rule should be, if you don't know where it goes, put it after page 4.  |
| Page 10 (Paragraph J) - Check "YES" or "NO" whether your company has any business in Iran.  |
| Page 10 (Paragraph K) – (Not applicable to federally funded projects) List the name of the apprenticeship and training program sponsor holding the certificate of registration from the US Department of Labor. If no applicable program exists, please indicate the work/job category. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.   |
| Page 11 (Paragraph L) – 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 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 – Do Not Submit with Bid The bidder shall submit an Disadvantaged Business Utilization Plan on completed Department forms SBE 2025 and 2026. (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting. (2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to <a href="DOT.DBE.UP@illinois.gov">DOT.DBE.UP@illinois.gov</a> or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery. |
| Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:   |
| Illinois Department of Transportation Bureau of Small Business Enterprises Contract Compliance Section 2300 South Dirksen Parkway, Room 319 Springfield, Illinois 62764   |
| The 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.   |
| 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  |
| QUESTIONS: following contract execution   |

115

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

# Letting January 20, 2017

## NOTICE TO PROSPECTIVE BIDDERS

This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.

**BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL** 

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



Springfield, Illinois 62764

Contract No. 61C67
LAKE County
Section 14-F3000-04-BT
Route LYONS WOODS TRAIL
Project TE-01D1(039)
District 1 Construction Funds

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

Prepared by

Checked by

F

(Printed by authority of the State of Illinois)

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1.

**PROPOSAL** 

#### TO THE DEPARTMENT OF TRANSPORTATION

**District 1 Construction Funds** 

| Proposal of   |
|---|
| Taxpayer Identification Number (Mandatory)  |
| For the improvement identified and advertised for bids in the Invitation for Bids as:  Contract No. 61C67 |
| LAKE County Section 14-F3000-04-BT Project TE-01D1(039) Route LYONS WOODS TRAIL                           |

This project consists of constructing a pedestrian path, construction of pedestrian truss structure and pedestrian traffic signals, located within the Commonwealth Edison Right-of-Way from Green Bay Road east for 1.93 miles to the Robert McClory pedestrian path in the City of Waukegan.

2. The undersigned bidder will furnish all labor, material and equipment to complete the above described project in a good and workmanlike manner as provided in the contract documents provided by the Department of Transportation. This proposal will become part of the contract and the terms and conditions contained in the contract documents will govern performance and payments.

- 3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned bidder further declares that he/she has carefully examined the proposal, plans, specifications, addenda form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this bid proposal he/she waives all right to plead any misunderstanding regarding the same.
- 4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned bidder further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, or as specified in the special provisions, guaranteeing the faithful performance of the work in accordance with the terms of the contract.
- 5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

| <u>A</u>    | mount o | of Bid      | Proposal<br><u>Guaranty</u> | <u>Am</u>    | ount c |                  | roposal<br>luaranty |
|-------------|---------|-------------|-----------------------------|--------------|--------|------------------|---------------------|
| Up to       |         | \$5,000     | \$150                       | \$2,000,000  | to     | \$3,000,000\$    | \$100,000           |
| \$5,000     | to      | \$10,000    | \$300                       | \$3,000,000  | to     | \$5,000,000\$    | \$150,000           |
| \$10,000    | to      | \$50,000    | \$1,000                     | \$5,000,000  | to     | \$7,500,000\$    | 250,000             |
| \$50,000    | to      | \$100,000   | \$3,000                     | \$7,500,000  | to     | \$10,000,000\$   | 3400,000            |
| \$100,000   | to      | \$150,000   | \$5,000                     | \$10,000,000 | to     | \$15,000,000\$   | \$500,000           |
| \$150,000   | to      | \$250,000   | \$7,500                     | \$15,000,000 | to     | \$20,000,000\$   | 600,000             |
| \$250,000   | to      | \$500,000   | \$12,500                    | \$20,000,000 | to     | \$25,000,000\$   | \$700,000           |
| \$500,000   | to      | \$1,000,000 | \$25,000                    | \$25,000,000 | to     | \$30,000,000\$   | 000,008             |
| \$1,000,000 | to      | \$1,500,000 | \$50,000                    | \$30,000,000 | to     | \$35,000,000\$   | 3900,000            |
| \$1,500,000 | to      | \$2,000,000 | \$75,000                    | over         |        | \$35,000,000 \$1 | ,000,000            |

Bank cashier's checks or properly certified checks accompanying bid proposals will be made payable to the Treasurer, State of Illinois.

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

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

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

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

| 6.  | following combit<br>the combination<br>proportion to th  | A BIDS. The undersigned bidder further agrees that if awarded the nation, he/she will perform the work in accordance with the requirem bid specified in the schedule below, and that the combination bid e bid submitted for the same. If an error is found to exist in the grosed in a combination, the combination bid shall be corrected as provide                                     | ents of each individual contract comprisin<br>I shall be prorated against each section i<br>ss sum bid for one or more of the individua             |  |  |  |  |  |  |  |
|-----|--|--|---|--|--|--|--|--|--|--|
|     |  | n a combination bid is submitted, the schedule below must be corising the combination.   | ompleted in each proposal   |  |  |  |  |  |  |  |
|     |  | ernate bids are submitted for one or more of the sections comproination bid must be submitted for each alternate.  | rising the combination, a   |  |  |  |  |  |  |  |
|     |  | Schedule of Combination Bids   |   |  |  |  |  |  |  |  |
| Со  | mbination<br>No.   | Sections Included in Combination   | Combination Bid<br>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.  | 500/20-43) prov  | O DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Provides that a person (other than an individual acting as a sole propriet as or conduct affairs in the State of Illinois prior to submitting the bid.  | or) must be a legal entity authorized to  |  |  |  |  |  |  |  |
| 9.  | Department pro<br>and make payr<br>Purchasing Of<br>Department. N  | DF CONTRACT: The Department of Transportation will, in a currements, execute the contract and shall be the sole entity havin ments under the contract. Execution of the contract by the Chief Princer (SPO) is for approval of the procurement process and leither the CPO nor the SPO shall be responsible for administration or payment there under except as otherwise permitted in the | g the authority to accept performance rocurement Officer (CPO) or the State execution of the contract by the tion of the contract or determinations |  |  |  |  |  |  |  |
| 10. | The services of  | of a subcontractor will be used.   |   |  |  |  |  |  |  |  |
|     | Check box<br>Check box   |  |   |  |  |  |  |  |  |  |
|     | their name   | subcontractors with subcontracts with an annual value of more than, address, general type of work to be performed, and the dollar alloca 00/20-120)  |   |  |  |  |  |  |  |  |

ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 12/13/16 RUN TIME - 183024 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61C67

STATE JOB #- C-91-165-16 PPS NBR -

| COUNTY N        | NAME CODE<br>097 | - <u>DIST</u> -                 | SECTION<br>14-F3000-04-BT               | NUMBER          |          | PROJECT NUM<br>1D1/039/000                | BER   | ROUTE                                   |
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| 3 ECMR003 PAGE<br>3/16<br>24           | TOTAL PRICE DOLLARS C |                            | 1 | 1 |                              | 1 1 1                     |                                    |                                 |                       |                  |                      |                     | 1 |                       |                               | 400.0     |
| GECM0<br>12/1<br>1830                  | CENTS                 | 1<br>                      | <br>                                    | [<br>[<br>]<br>]                        | 1<br>1<br>1<br>1             | [<br>]<br>]<br>]          | <br>                               | 1<br>1<br>1<br>1                | <br> <br> <br> <br>   | !<br>!<br>!      | 1<br>1<br>1          | 1<br>1<br>1<br>1    | 1<br>1<br>1<br>1                        | !<br>!<br>!           | <br>                          | 80        |
| ECMS002 DT<br>RUN DATE -<br>RUN TIME - | UNIT PRIC             | !<br>1<br>1<br>1<br>1<br>1 | <br>  1<br>  1<br>  1<br>  1<br>  1     | 1<br>1<br>1<br>1<br>1<br>1              | <br>  1<br>  1<br>  1<br>  1 | <br>   <br>   <br>   <br> | <br> <br> <br> <br> <br> <br> <br> | 1<br>1<br>1<br>1<br>1<br>1<br>1 |                       |                  | <br>                 | <br>                | <br>  1<br>  1<br>  1<br>  1            | †<br>                 | <br> <br> <br> <br> <br> <br> | 0         |
| TRANSPORTATION<br>RICES<br>- 61C67     | QUANTITY              | 2.250 X                    | 19.500 X                                | 3.500 X                                 | 1,695.000 X                  | 28.000 X                  | 1.000 X                            | 1.000 X                         | 1.000 X               | 2.000 X          | 1,560.000 X          | 1.000 X             | 110.000 X                               | 1.000 X               | X 000.96                      | 500.000 X |
| S DEPARTMENT OF SCHEDULE OF PR         | UNIT OF<br>MEASURE    | ACRE                       | ACRE                                    |   |                              | CU YD                     |                                    | EACH                            |                       |                  | 80                   |                     | 0                                       |                       | FOOT                          | HOUR      |
| ILLINOI                                | PAY ITEM DESCRIPTION  | SEED MIXTURE ZONE A        | SEED MIXTURE ZONE B                     | SEED MIXTURE ZONE C                     | AGG SURF CSE B SPL           | GRANULAR BACKFILL STR     | TRAF CONT & PROT SPL               | FAC T4 CAB SPL                  | UNINTER POWER SUP SPL | S MAA & P 26 SPL | STAB CONSTR ENTRANCE | CONSTRUCTION LAYOUT | FENCE REMOVAL                           | RE-OPTIMIZE SIG SYS 2 | P UNDR FOR STRUCT 4           | TRAINEES  |
| LYONS<br>14-F3000-04-BT<br>LAKE        | ITEM                  | 2502100                    | 0210                                    | 2502104                                 | 4020900                      | 5860110                   | 7010216                            | 8570226                         | 620200                | 8771170          | 0013797              | 0013798             | 002280                                  | 033046                | 0046304                       | 0026600   |

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ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61C67

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|                 | UNIT PRICE IUIAL PRICE DOLLARS CENTS DOLLARS CTS | 0 X 15.00 = 7,500.00 | - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | - H                |                 |                       | - H - H - H - H - H - H - H - H - H - H |                | - II - I - I - I - I - I - I - I - I - |                 |                  | - II - I - I - I - I - I - I - I - I - | - II - I - I - I - I - I - I - I - I - |                 | - H - H - H - H - H - H - H - H - H - H | - II - II - I         |
|-----------------|--|----------------------|--|--------------------|-----------------|-----------------------|---|----------------|--|-----------------|------------------|--|--|-----------------|---|-----------------------|
| 200             | QUANTITY   | 500.00               | 1,264.00                               | 06.00              | 00.00           | 25.000                | 15.000                                  | 8.00           | 00                                     | 4.              | 11,315.00        | 280.00                                 | 0.00                                   | 35.00           | 00.                                     | 950.00                |
| CONTRACT NOMBEN | UNIT OF<br>MEASURE                               | HOUR                 | LIND                                   |                    |                 |                       | EAC                                     | EAC            | EACH                                   |                 | no               |  | no !                                   | no<br>No        | CU YD                                   | SQ YD                 |
|                 | PAY ITEM DESCRIPTION                             | RAINEES TPG          | TREE REMOV 6-15                        | TREE REMOV OVER 15 | TEMPORARY FENCE | TREE TRUNK PROTECTION | TREE ROOT PRUNING                       | TREE PRUN 1-10 | TREE PRUN OVER 10                      | SUPPLE WATERING | EARTH EXCAVATION | REM & DISP UNS MATL                    | FURNISHED EXCAVATION                   | TRENCH BACKFILL | POROUS GRAN BACKFILL                    | GEOTECH FAB F/GR STAB |
| LAKE            | ITEM   | 007660               | ١                                      | 010021             | 0101000         | 0101100               | 0101200                                 | 0101300        | 0101350                                | 0101700         | 0200100          | 0201200                                | 400800                                 | 0800150         | 0900110                                 | 21001000              |

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ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61067

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|                                      | CTS                         | !<br>!                                 | 1<br>1<br>1                            | <br>          | !<br>!<br>!     | ‡<br>                                      | !<br>!                                 | 1<br>1<br>1                            | !<br>!                                   | <br> <br> <br>                       | <br>                                | !<br>!<br>!                          | I<br>I<br>I                     | ,<br>,<br>,                          | <br>                                      |                |
|--------------------------------------|-----------------------------|--|--|---------------|-----------------|--|--|--|--|--------------------------------------|-------------------------------------|--------------------------------------|---------------------------------|--------------------------------------|---|----------------|
| / 16<br>4                            | TOTAL PRICE<br>DOLLARS      | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1   |  |               |                 | <br>   <br>  1<br>  1<br>  1<br>  1<br>  1 | <br>                                   | I<br>I<br>I<br>I<br>I<br>I<br>I        | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1     | t<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | <br>  1<br>  1<br>  1<br>  1<br>  1 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 1<br>1<br>1<br>1<br>1<br>1<br>1 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1 |                |
| RUN DAIE - 12/13<br>RUN TIME - 18302 | UNIT PRICE<br>DOLLARS CENTS | - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | - 11 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | - II          | - 11            | - 11 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1     | - II - I I I I I I I I I I I I I I I I | - 11 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 11 | - II                                 | []                                  | 11                                   | 11                              | - II                                 | - II                                      | - II ——        |
| PRICES<br>:R - 61C67                 | QUANTITY                    | 5,695.000 X                            | 75.00                                  | . 25          | .50             | 6,700.000 X                                | 00.00                                  | 45.00                                  | .00                                      | 14.00                                | 00.                                 | 00.                                  | 0.00                            | .00                                  | 5,300.000 X                               | 2,040.000 X    |
| SCHEDULE OF PL<br>CONTRACT NUMBER    | UNIT OF<br>MEASURE          | CN YD                                  | OY OS                                  | ACRE          |                 | SQ YD                                      |  |  | ٠ Ā                                      |                                      | OS .                                |                                      | (a)                             |                                      |   | TON            |
| ВТ                                   | PAY ITEM DESCRIPTION        | TOPSOIL EXC & PLAC                     | TOPSOIL F & P 4                        | SEEDING CL 2A | MULCH METHOD 3A | EROSION CONTR BLANKET                      | TEMP DITCH CHECKS                      | PERIMETER EROS BAR                     | INLET & PIPE PROTECT                     | INLET FILTERS                        | STONE RIPRAP CL A4                  | FILTER FABRIC                        | AGG BASE CSE B 4                | AGG BASE CSE B 5                     | BIT MATLS TACK CT                         | HMA SC "D" N50 |
| 14-F3000-04-<br>LAKE                 | I TEM<br>NUMBER             | 1101505                                | 1101615                                | 5000210       | 5100127         | 5100630                                    | 8000305                                | 8000400                                | 8000500                                  | 8000510                              | 8100107                             | 8200200                              | 5101600                         | 01700                                | 06000290                                  | 0603335        |

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ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 12/13/16 RUN TIME - 183024 ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61C67 Same Francisco LYONS 14-F3000-04-BT LAKE

|                 | ENTS DOLLARS CTS         | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 |              |                    |           |              |                      |             | 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |                       |                       |               |                      | - 11        |
|-----------------|--------------------------|---------------------------------------|---|--------------|--------------------|-----------|--------------|----------------------|-------------|---|---------------------------------------|-----------------------|-----------------------|---------------|----------------------|-------------|
|                 | UNIT PRICE<br>DOLLARS CE | -X-                                   | -X -                                    | - X - 0      | X X                | X - 0     | - X - C      | -X-                  |             | -X-                                     | -X-                                   |                       | -X-                   |               | -X-                  | × -         |
| 5               | QUANTITY                 | 1,863.000                             | 188.00(                                 | 380.00(      | 0 1                | 00        | 6.00         | 1.00                 | 0.30        | 10.00                                   | 00.0                                  | 20.00                 | 4.00                  | 84.00         | 00.                  | 1.00(       |
| CONTRACT NOMBEN | UNIT OF<br>MEASURE       | SQ FT                                 | SQ FT                                   | S            | SQ                 |           | S            | k no                 | L NO        | L OO                                    | Y 08                                  | NOOA                  | F00.                  |               | EACH                 | EACH        |
| i. 3            | PAY ITEM DESCRIPTION     | CONC SIDEWALK 5                       | DETECTABLE WARNINGS                     | PAVEMENT REM | DRIVE PAVEMENT REM | COMB CURB | SIDEWALK REM | STRUCTURE EXCAVATION | CONC STRUCT | CONC SUP-STR                            | PROTECTIVE COAT                       | REINF BARS, EPOXY CTD | FUR M S PILE 12X0.179 | DRIVING PILES | TEST PILE MET SHELLS | NAME PLATES |
| LAKE            | ITEM<br>NUMBER           | 240020                                | 240080                                  | 400010       | 400020             | 40005     | 400060       | 020010               | 50300225    | 030025                                  | 030030                                | 080020                | 120095                | 120230        | 1203200              | 150010      |

LYONS 14-F3000-04-BT

| N ECMS002 DTGECM03 ECMR003 PAGE 7<br>RUN DATE - 12/13/16<br>RUN TIME - 183024 | UNIT PRICE TOTAL PRICE DOLLARS CTS |            |             |                |                |                |               |                  |                 |                   |           |                  |                  |              |                  |                   |
|---|------------------------------------|------------|-------------|----------------|----------------|----------------|---------------|------------------|-----------------|-------------------|-----------|------------------|------------------|--------------|------------------|-------------------|
| IT OF TRANSPORTATION<br>OF PRICES<br>IMBER - 61C67                            | OF QUANTITY                        | 306.000    | 00T 128.000 | 197.000        | CH 16,000      | СН 8.0         | CH 10.0       | 10T 228.000      | FT 120.0        | YD 20.000         | CH 7.000  | СН 6.0           | CH 2.0           | OT 50.0      | 107.0            | MO 12.000         |
| ILLINOIS DEPARTMENT C<br>SCHEDULE OF<br>CONTRACT NUMBE                        | DESCRIPTION MEASUR                 | 1          |             |                |                | EA             | EA            |                  |                 | DR SQ             |           | EA               |                  |              |                  |                   |
|   | PAY ITEM DES                       | L CL C 1 1 | CUL CL      | P CUL CL C 1 1 | MET END SEC 15 | MET END SEC 18 | MET END SEC 2 | STORM SEW CL A 1 | CONCRETE SEALER | GEOCOMPOSITE WALL | CB TC T8G | INLETS TA T1F CL | FR & LIDS ADJUST | CONC CURB TB | COMB CC&G TB6.12 | ENGR FIELD OFFICE |
| .YONS<br>14-F3000-04-BT<br>.AKE   | ITEM                               | 42C021     | 42C022      | 42C0223        | 4215550        | 4215553        | 4215556       | 040050           | 8700300         | 9100100           | 020760    | 0235300          | 0300305          | 0600605      | 0603800          | 67000400          |

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ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT NUMBER - 61C67

N ECMS002 DTGECM03 ECMR003 PAGE RUN DATE - 12/13/16 RUN TIME - 183024

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| 14-F3000-04-BT<br>LAKE | )4-BT                 | SCHEDULE OF PRICES<br>CONTRACT NUMBER - 61 | 4 - 61067 | KUN DAIE - 12/13/16<br>RUN TIME - 183024   |        |
|------------------------|-----------------------|--|-----------|--|--------|
| ITEM                   | PAY ITEM DESCRIPTION  | UNIT OF<br>MEASURE                         | QUANTITY  | UNIT PRICE TOTAL PRICE DOLLARS CI  | TS     |
| 7100100                | MOBILIZATION          | L SUM                                      | 1.000 X   | - 11 - 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -  | I<br>I |
| 010680                 | CHANGEABLE MESSAGE SN | CAL MO                                     | X 000 1   | - E1  | l<br>I |
| 2000100                | SIGN PANEL T1         | SQ FT                                      | 49.000 X  |  | 1      |
| 90010                  | METAL POST TY A       | FOOT                                       | 44.000 X  |  | l<br>I |
| 2900200                | METAL POST TY B       | FOOT                                       | 28.000 X  | - 11 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1   | 1      |
| 000200                 | THPL PVT MK LINE 4    | l  |           | - 11 11 1 1 1 1 1  | I<br>I |
| 800030                 | THPL PVT MK LINE 5    | 1  |           | II | 1      |
| 800060                 | THPL PVT MK LINE 12   | 1<br>1                                     | X 000.008 | - II - I   | !<br>! |
| 800065                 | THPL PVT MK LINE 24   | F001                                       |           |  | 1      |
| 102820                 | UNDRGRD C GALVS 2     | l  | X 000.6   |  | 1      |
| 1028210                | UNDRGRD C GALVS 2 1/2 | FOOT                                       | Z6.000 X  |  |        |
| 1028220                | UNDRGRD C GALVS 3     | FOOT                                       | 45.000 X  | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  | I<br>I |
| 1028240                | UNDRGRD C GALVS       | FOOT                                       | 81.000 X  |  | I<br>I |
| 1400100                | HANDHOLE              | EACH                                       | 1.000 X   |  | 1      |
| 81400300               | DBL HAN               | EACH                                       | 1.000 x   | - (1 —   | 1      |
|                        |                       |  |           |  |        |

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ILLINOIS DEPARTMENT OF TRANSPORTATION ECI SCHEDULE OF PRICES CONTRACT NUMBER - 61C67

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| -               | UNIT PRICE TOTAL PRICE DOLLARS CENTS DOLLARS CTS | - II - I - I - I - I - I - I - I - I - |                      |                      |                      |                      |                   |                    |               |               |                   |                  |                 |                      |                       |                 |
|-----------------|--|--|----------------------|----------------------|----------------------|----------------------|-------------------|--------------------|---------------|---------------|-------------------|------------------|-----------------|----------------------|-----------------------|-----------------|
| - 0100/         | QUANTITY   | 2.000)                                 | 0.1                  | 00                   | 167.00               |                      | .000              | 00.                | 00.           | 00.           | .00               | 00:              | 00.             |                      | 4.000                 | 4.000           |
| CONTRACT NUMBER | UNIT OF<br>MEASURE                               | EACH                                   | FOOT                 |                      |                      |                      |                   |                    |               |               | FOOT              |                  |                 | EACH                 |                       | EACH            |
|                 | PAY ITEM DESCRIPTION                             | MAIN EX TS INSTA_ SP                   | ELCBL C TRACER 14 1C | ELCBL C SIGNAL 14 2C | ELCBL C SIGNAL 14 3C | ELCBL C SIGNAL 14 5C | ELCBL C SERV 6 2C | ELCBL C EGRDC 3 1C | CONC FDN TY A | CONC FDN TY C | CONC FDN TY E 360 | SH LED 1F 3S MAM | SH LED 1F 3S BM | PED SH LED 1F BM CDT | TS BACKPLATE LOU ALUM | PED PUSH-BUTTON |
| LAKE            | ITEM   | 5000205                                | 7300925              | 7301215              | 7301225              | 7301245              | 7301805           | 7301900            | 7800100       | 0150          | 7800415           | 8030020          | 8030050         | 8102717              | 8200210               | 88800100        |

| LYONS<br>14-F3000-04-BT<br>LAKE | ILLINOIS DE SC CONT   | PARTMENT OF TRANSPO<br>HEDULE OF PRICES<br>RACT NUMBER - 61C67 | PARTMENT OF TRANSPORTATION<br>HEDULE OF PRICES<br>RACT NUMBER - 61C67 | ECMS002 DTGECM03 ECMR003 PAGE 10<br>RUN DATE - 12/13/16<br>RUN TIME - 183024 |
|---------------------------------|-----------------------|--|---|--|
| ITEM                            | PAY ITEM DESCRIPTION  | UNIT OF MEASURE  | QUANTITY  | UNIT PRICE TOTAL PRICE DOLLARS CENTS DOLLARS CTS                             |
| 89502300                        | REM ELCBL             | FOOT   | 2,692.000 X   | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1  |
| 89502350                        | REM & RE ELCBL FR CON | FOOT   |   | - 11   |
|                                 |                       |  |   | TOTAL \$   |
| NOTE:                           |                       |  | L<br>(<br>2   |  |

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

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

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

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

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

#### I. GENERAL

- **A.** Article 50 of the Code establishes the duty of all State CPOs, SPOs, and their designees to maximize the value of the expenditure of public moneys in procuring goods, services, and contracts for the State of Illinois and to act in a manner that maintains the integrity and public trust of State government. In discharging this duty, they are charged by law to use all available information, reasonable efforts, and reasonable actions to protect, safeguard, and maintain the procurement process of the State of Illinois.
- **B.** In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances have been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.
- **C.** In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the CPO to void the contract, and may result in the suspension or debarment of the bidder or subcontractor. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.
- ☐ I acknowledge, understand and accept these terms and conditions.

#### II. ASSURANCES

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

#### A. Conflicts of Interest

Section 50-13. Conflicts of Interest.

- (a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois State Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois State Toll Highway Authority.
- (b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.
- (d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.
- (e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 calendar days after the officer, member, or employee takes office or is employed. The current salary of the Governor is \$177,412.00. Sixty percent of the salary is \$106,447.20.

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

#### B. Negotiations

Section 50-15. Negotiations.

It is unlawful for any person employed in or on a continual contractual relationship with any of the offices or agencies of State government to participate in contract negotiations on behalf of that office or agency with any firm, partnership, association, or corporation with whom that person has a contract for future employment or is negotiating concerning possible future employment.

The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-15, and that the bidder has no knowledge of any facts relevant to the kinds of acts prohibited therein.

#### C. Inducements

Section 50-25. Inducement.

Any person who offers or pays any money or other valuable thing to any person to induce him or her not to provide a submission to a vendor portal or to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract, not making a submission to a vendor portal, or who withholds a bid or submission to a vendor portal in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

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

#### D. Revolving Door Prohibition

Section 50-30. Revolving door prohibition.

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

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

#### E. Reporting Anticompetitive Practices

Section 50-40. Reporting anticompetitive practices.

When, for any reason, any vendor, bidder, contractor, CPO, SPO, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the CPO.

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

#### F. Confidentiality

Section 50-45. Confidentiality.

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

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

#### G. Insider Information

Section 50-50. Insider information.

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

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

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

#### **III. CERTIFICATIONS**

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

#### A. Bribery

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
  - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
  - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
  - (1) the business has been finally adjudicated not guilty; or
  - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

#### B. Felons

Section 50-10. Felons.

- (a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.
- (b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code and every vendor's submission to a vendor portal shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

#### C. Debt Delinquency

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

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

#### D. Prohibited Bidders, Contractors and Subcontractors

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

The bidder or contractor or subcontractor, respectively, certifies in accordance with Section 50-10.5 that no officer, director, partner or other managerial agent of the contracting business has been convicted of a felony under the Sarbanes-Oxley Act of 2002 or a Class 3 or Class 2 felony under the Illinois Securities Law of 1953 or if in violation of Subsection (c) for a period of five years from the date of conviction. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder, contractor, or subcontractor, respectively, that the bidder, contractor, or subcontract under this Section and acknowledges that the CPO shall declare the related contract void if any of the certifications completed pursuant to this Section are false.

#### E. Section 42 of the Environmental Protection Act

Section 50-14 Environmental Protection Act violations.

The bidder or contractor or subcontractor, respectively, certifies in accordance with Section 50-14 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

#### F. Educational Loan

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

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

The bidder, if an individual as opposed to a corporation, partnership or other form of business organization, certifies that the bidder is not in default on an educational loan as provided in Section 3 of the Act.

#### G. Bid-Rigging/Bid Rotating

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

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

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

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

#### H. International Anti-Boycott

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

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

#### I. Drug Free Workplace

The Illinois "Drug Free Workplace Act" applies to this contract and it is necessary to comply with the provisions of the "Act" if the contractor is a corporation, partnership, or other entity (including a sole proprietorship) which has 25 or more employees.

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

#### J. Disclosure of Business Operations in Iran

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

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

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

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

| Check the appro | priate statement:  |
|-----------------|--|
| //              | Company has no business operations in Iran to disclose.                        |
| //              | Company has business operations in Iran as disclosed on the attached document. |

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

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

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

| 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.

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

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

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

The undersigned bidder certifies that it has registered as a business with the State Board of Elections and acknowledges a continuing duty to update the registration in accordance with the above referenced statutes. If the business entity is required to register, the CPO shall verify that it is in compliance on the date the bid or proposal is due. The CPO shall not accept a bid or proposal if the business entity is not in compliance with the registration requirements.

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

#### M. Lobbyist Disclosure

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

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

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

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

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

|      |     | Bidder has not hired any person required to register pursuant to the Illinois Lobbyist Registration Act in connection with this contract.       |
|------|-----|---|
|      | Or  |   |
|      |     | Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract: |
|      |     | address of person:ees, compensation, reimbursements and other remuneration paid to said person:   |
|      |     |   |
| □lac | knc | welledge understand and accept these terms and conditions for the above certifications  |

#### **IV. DISCLOSURES**

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

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

#### B. Financial Interests and Conflicts of Interest

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

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each individual making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each individual making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

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

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

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification. **The forms must be included with each bid.** 

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

#### Form A Instructions for Financial Information & Potential Conflicts of Interest

If the bidder is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. If a bidder is not subject to Federal 10K reporting, the bidder must determine if any individuals are required by law to complete a financial disclosure form. To do this, the bidder should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on Form A must be signed and dated by an individual that is authorized to execute contracts for the bidding company. Note: These questions are for assistance only and are not required to be completed.

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

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

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

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

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

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

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

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

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form A Financial Information & Potential Conflicts of Interest Disclosure

| Contractor Name  |               |                           |
|------------------|---------------|---------------------------|
| Legal Address    |               |                           |
| O'the Otate 7's  |               |                           |
| City, State, Zip |               |                           |
| Telephone Number | Email Address | Fax Number (if available) |
|                  |               |                           |

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

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

#### DISCLOSURE OF FINANCIAL INFORMATION

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

| FOR IND | IVIDUAL (typ     | e or print information)         |             |                                     |
|---------|------------------|---------------------------------|-------------|-------------------------------------|
| NA      | ME:              |                                 |             |                                     |
| AD      | DRESS            |                                 |             |                                     |
|         |                  |                                 |             |                                     |
| Тур     | e of ownershi    | p/distributable income share    | :           |                                     |
| stoo    |                  | sole proprietorship             | Partnership | other: (explain on separate sheet): |
| % 0     | r \$ value of ow | nership/distributable income sh | nare:       |                                     |

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

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

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

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

| e previous 2 years; spouse, father, mother,<br>YesNo   |
|--|
| s, by any registered election or reelection elerk of the State of Illinois, or any political the Federal Board of Elections.  YesNo  |
| r; who was a compensated employee in the registered with the Secretary of State or any ttee registered with either the Secretary of  |
| Yes No   |
|  |
|  |
| t of the bidder or offeror who is not identified ig, or may communicate with any State officer continuing obligation and must be prompout the term of the contract. If no person |
|  |

**4. Suspension or 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: suspension or 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:   |        |
|   |        |
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|   |        |
| APPLICABLE STATEMENT  |        |
| This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Unpenalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of knowledge. |        |
| Completed by:   |        |
| Signature of Individual or Authorized Representative Date   |        |
| NOT APPLICABLE STATEMENT  |        |
| Under penalty of perjury, I have determined that no individuals associated with this organization the criteria that would require the completion of this Form A.  | n meet |
|   |        |
| This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page   | €.     |
|   |        |
| Signature of Authorized Representative Date   | _      |
|   |        |

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

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Other Contracts & Financial Related Information Disclosure

| Contractor Na              | ıme   |                            |   |  |           |
|----------------------------|---|----------------------------|---|--|-----------|
| Legal Address              | 3   |                            |   |  | $\dashv$  |
| City, State, Zi            | p   |                            |   |  | _         |
| Telephone Nu               | ımber   |                            | Email Address   | Fax Number (if available)  |           |
|                            |   |                            | l<br>s Form is required by Section 50-3<br>dicly available contract file. This Fo                               | I<br>5 of the Code (30 ILCS 500).<br>rm B must be completed for all bids | <br>S.    |
|                            | DISCLOSURE (                                    | OF OTHER (                 | CONTRACTS AND PROCUREME   | NT RELATED INFORMATION   |           |
| has any per<br>any other S | nding contracts (inc<br>state of Illinois agend | luding leases<br>cy: Yes _ | ement Related Information. The Es), bids, proposals, or other ongoin No<br>to complete the signature box on the | g procurement relationship with  |           |
|                            | such as bid or proje                            |                            | relationship by showing State of III<br>attach additional pages as necessa                                      | inois agency name and other descr<br>ry). SEE DISCLOSURE FORM            | iptive    |
|                            |   |                            |   |  |           |
|                            |   |                            |   |  |           |
|                            |   | THE FOL                    | LOWING STATEMENT MUST BE  | CHECKED  |           |
|                            |   |                            |   |  |           |
|                            |   |                            |   |  |           |
|                            |   |                            | Signature of Authorized Representative  | Date   |           |
|                            |   |                            |   |  |           |
|                            |   |                            |   |  |           |
|                            |   |                            |   |  |           |
|                            |   |                            | OWNERSHIP CERTIFICATI   | <u>ON</u>  |           |
|                            | e certify that the foll of ownership.           | owing stater               | nent is true if the individuals for al  | submitted Form A disclosures do  | not total |
|                            |   |                            | erest is held by individuals receiv<br>butive income or holding less than                                       | ring less than \$106,447.20 of the a 5% ownership interest.              | bidding   |
|                            | ☐ Yes ☐ No                                      |                            | Form A disclosure(s) established 1  | 00% ownership)   |           |

#### **SPECIAL NOTICE TO CONTRACTORS**

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

#### CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

- (a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.
- (b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Title 44, Illinois Administrative Code, Section 750.120. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.
- (c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.



**PART I. IDENTIFICATION** 

Contract No. 61C67 LAKE County Section 14-F3000-04-BT Project TE-01D1(039) Route LYONS WOODS TRAIL District 1 Construction Funds

| Dept. of Human Rights #   |                      |                        |                  | Duration of Project: |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
|---|----------------------|------------------------|------------------|----------------------|-----------|----------|--------|---------|----------|----------------------------|--------|--------------|----------|----------------|--------------|----------|-----------|--|
| Name of Bidder:   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| PART II. WORKFO A. The undersigned which this contract wor projection including a p | bidder hark is to be | as analyz<br>e perform | ed mir<br>ed, an | d for th<br>d fema   | ne locati | ons fro  | m whic | h the b | idder re | ecruits                    | employ | ees, and her | eby subm | nits the follo | owin<br>cont | g workfo | n<br>orce |  |
|   |                      | TOTA                   | AL Wo            | rkforce              | Projec    | tion for | Contra | ıct     |          |                            |        |              | (        | CURRENT        |              |          | S         |  |
|   |                      | MINORITY EMPLOYEES     |                  |                      |           | TRAINEES |        |         |          | TO BE ASSIGNED TO CONTRACT |        |              |          |                |              |          |           |  |
| JOB   | TO                   | TAL                    |                  | IVIIIV               | JRITT     |          |        | HER     |          |                            | HE JOB | TC           | OTAL     | l N            |              | INORITY  |           |  |
| CATEGORIES  | EMPL                 | OYEES                  | BLACK            |                      | HISPANIC  |          | MINOR. |         | TICES    |                            | TR     | AINEES       | EMPL     | OYEES          | ļ            | EMPLOYE  |           |  |
| OFFICIALS<br>(MANAGERS)   | M                    | F                      | M                | F                    | М         | F        | М      | F       | M        | F                          | M      | F            | M        | F              | -            | M        | F         |  |
| SUPERVISORS   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| FOREMEN   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| CLERICAL  |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| EQUIPMENT<br>OPERATORS  |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                | -            |          |           |  |
| MECHANICS   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| TRUCK DRIVERS   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| IRONWORKERS   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| CARPENTERS  |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| CEMENT MASONS   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| ELECTRICIANS  |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| PIPEFITTERS,<br>PLUMBERS  |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                | -            |          |           |  |
| PAINTERS  |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| LABORERS,<br>SEMI-SKILLED   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| LABORERS,<br>UNSKILLED  |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| TOTAL   | <u> </u>             |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| Т   | OTAL Tra             | BLE C                  | niectio          | n for C              | ontract   |          |        |         | 1        |                            |        | FOR [        | DEPARTI  | MENT USE       | ON           | LY       |           |  |
| EMPLOYEES   |                      | TAL                    | Jectio           | 11 101 C             | Ontract   |          | *OT    | THER    | _        |                            |        |              |          |                |              |          |           |  |
| IN  |                      | OYEES                  |                  | ACK                  |           | ANIC     | 1      | VOR.    | _        |                            |        |              |          |                |              |          |           |  |
| TRAINING APPRENTICES  | М                    | F                      | М                | F                    | М         | F        | М      | F       | -        |                            |        |              |          |                |              |          |           |  |
| AFFRENTICES   |                      |                        |                  |                      |           |          |        |         |          |                            |        |              |          |                |              |          |           |  |
| ON THE JOB<br>TRAINEES  |                      |                        |                  |                      |           |          |        | _       |          |                            |        |              |          |                |              |          |           |  |

Note: See instructions on page 2

BC 1256 (Rev. 12/11/07)

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

Contract No. 61C67 LAKE County Section 14-F3000-04-BT Project TE-01D1(039) Route LYONS WOODS TRAIL District 1 Construction Funds

#### PART II. WORKFORCE PROJECTION - continued

|             | Included in "Total Employees" under Table A is the total number of <b>new hires</b> 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.   |
|             | 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 II     | I. AFFIRMATIVE ACTION PLAN  |
|             | The undersigned bidder understands and agrees that in the event the foregoing minority and female employee utilization projection included under <b>PART II</b> 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 <b>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.   |
| Compa       | ny Telephone Number   |
| Addres      | <br>S   |
|             | NOTICE REGARDING SIGNATURE  |
|             | dder's signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs ompleted only if revisions are required.   |
| Signatu     | re: Title: Date:  |
| Instruction | ns: 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.  |
|             |   |

### **ADDITIONAL FEDERAL REQUIREMENTS**

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

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

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

### **RETURN WITH BID**

Contract No. 61C67 LAKE County Section 14-F3000-04-BT Project TE-01D1(039) Route LYONS WOODS TRAIL District 1 Construction Funds

### PROPOSAL SIGNATURE SHEET

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

|  | Firm Name  |  |
|--|--|--|
| (IF AN INDIVIDUAL)   | Signature of Owner   |  |
|  | Business Address   |  |
|  |  |  |
|  |  |  |
|  | Firm Name  |  |
|  | Ву   |  |
| (IF A CO-PARTNERSHIP)  |  |  |
|  |  |  |
|  |  | Name and Address of All Members of the Firm:                 |
|  |  |  |
|  |  |  |
|  | Corporate Name   |  |
|  | Ву   |  |
| (IF A CORPORATION)   |  | Signature of Authorized Representative                       |
| ,  |  | Typed or printed name and title of Authorized Representative |
|  |  | 7,4000.  |
|  | Attest   | Cignoture  |
| (IF A JOINT VENTURE, USE THIS SECTION                          | Duning a Addus a   | Signature  |
| FOR THE MANAGING PARTY AND THE SECOND PARTY SHOULD SIGN BELOW) | Business Address   |  |
|  |  |  |
|  | Corporate Name   |  |
|  |  |  |
| (IF A JOINT VENTURE)   | , and the second | Signature of Authorized Representative                       |
|  |  | To advantable and the state of December 1                    |
|  |  | Typed or printed name and title of Authorized Representative |
|  | Attest   |  |
|  |  | Signature  |
|  | Business Address   |  |
| If more than two parties are in the joint venture,             | places attach an addit   | ional aignatura about  |

### **Return with Bid**



### Division of Highways Annual Proposal Bid Bond

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

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

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

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

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

# Illinois Department of Transportation

### **Return with Bid**

## Division of Highways Proposal Bid Bond

|  |   | Item No.   |   |
|--|---|--|---|
|  |   | Letting Date   | e   |
| (NOW ALL PERSONS BY THE  | SE PRESENTS, That We  |  |   |
| as PRINCIPAL, and  |   |  |   |
| the amount specified in the bid  | proposal under "Proposal Guaranty" i  | in effect on the date of the Invitation for  | of 5 percent of the total bid price, or for r Bids, whichever is the lesser sum, well s, executors, administrators, successors  |
|  |   |  | omitted a bid proposal to the STATE OF retation Bulletin Item Number and Letting  |
| specified in the bidding and cor<br>with the terms of the bidding and<br>with good and sufficient surety<br>prosecution thereof; or if, in the<br>pays to the Department the diffe | ntract documents; and if, after award documents including evide for the faithful performance of such event of the failure of the PRINCIP perence not to exceed the penalty here tract with another party to perform the | by the Department, the PRINCIPAL sence of the required insurance coverage contract and for the prompt payment AL to enter into such contract and to go for between the amount specified in the | RINCIPAL shall, within the time and as shall enter into a contract in accordance es and providing such bond as specified to of labor and material furnished in the give the specified bond, the PRINCIPAL bid proposal and such larger amount for the this obligation shall be null and void, |
| hen Surety shall pay the penal within such period of time, the [   | sum to the Department within fiftee   | n (15) days of written demand therefo<br>ollect the amount owed. Surety is liable  | as set forth in the preceding paragraph, r. If Surety does not make full payment e to the Department for all its expenses,  |
| n TESTIMONY WHEREOF,<br>caused this instrument to be<br>day of   |   | In TESTIMONY WHEREOF, instrument to be signed by its day of  | the said SURETY has caused this officer  A.D.,  |
| (Compa   | any Name)   | (Com   | pany Name)  |
| Зу   |   | Ву   |   |
| (Sign  | ature and Title)  |  | e of Attorney-in-Fact)  |
| Notary for PRINCIPAL   |   | Notary for SURETY  |   |
| STATE OF   |   | STATE OF   |   |
| COUNTY OF  |   | COUNTY OF  |   |
| Signed and attested before r   | ne on (date)  | Signed and attested before m   | ne on (date)  |
| (Name of   | Notary Public)  | (Name o  | f Notary Public)  |
|  |   |  |   |
| (Seal)   |   | (Seal)   |   |
| ,,   | (Signature of Notary Public)  |  | (Signature of Notary Public)  |
|  | (Date Commission Expires)   | _  | (Date Commission Expires)   |
| proposal the Principal is en   |   | oid bond has been executed and   | Electronic Bid Bond. By signing the the Principal and Surety are firmly   |
| Electronic Bid Bond ID #   | Company/Bidder Nan  | ne   | Signature and Title   |



### **DBE Utilization Plan**

### (1) Policy

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

### (2) Obligation

Date

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

| (3) Pro   | ject and Bid Identification  |  |   |  |
|-----------|--|--|---|--|
| Comple    | te the following information concerning the project and bid:   |  |   |  |
| Route     |  | Total Bid  |   | _  |
| Section   |  | Contract DBE Goal  |   |  |
| Project   |  |  | (Percent)   | (Dollar Amount)  |
| County    |  |  |   |  |
| Letting [ | Date   |  |   |  |
| Contrac   | t No.  |  |   |  |
| Letting I | Item No.   |  |   |  |
| (4) Ass   | surance  |  |   |  |
|           | in my capacity as an officer of the undersigned bidder (or bidding company: (check one)  Meets or exceeds contract award goals and has provided do Disadvantaged Business Participation percent  Attached are the signed participation statements, forms SBE use of each business participating in this plan and assuring the work of the contract.  Failed to meet contract award goals and has included good for provided participation as follows:  Disadvantaged Business Participation percent  The contract goals should be accordingly modified or waiv support of this request including good faith effort. Also a required by the Special Provision evidencing availability and | cumented participation as fort  2025, required by the Spectat each business will perfort aith effort documentation to the ed. Attached is all informattached are the signed participation. | cial Provision evicem a commercial meet the goals a cation required by articipation state | dencing availability and ly useful function in the and that my company has the Special Provision in the ments, forms SBE 2025, |
|           | business will perform a commercially useful function in the wo   |  |   |  |
| Bv        | Company  | The "as read" Low Bidder is re   |   | •  |
| •         |  | Submit only one utilization pla submitted in accordance with   |   |  |
| Title     |  | Bureau of Small Business Ent   | erprises  | Local Let Projects   |

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

2300 South Dirksen Parkway

Springfield, Illinois 62764

Submit forms to the

Local Agency



### **DBE Participation Statement**

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

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

## PROPOSAL ENVELOPE



## **PROPOSALS**

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

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

### Submitted By:

| lame:     |  |
|-----------|--|
| address:  |  |
|           |  |
|           |  |
| Phone No. |  |

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

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

### **NOTICE**

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

# CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

### **NOTICE**

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

Contract No. 61C67 LAKE County Section 14-F3000-04-BT Project TE-01D1(039) Route LYONS WOODS TRAIL District 1 Construction Funds



### **SUBCONTRACTOR DOCUMENTATION**

Public Acts 96-0795, 96-0920, and 97-0895 enacted substantial changes to the provisions of the Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors that entered into a contractual agreement with a total value of \$50,000 or more with a person or entity who has a contract subject to the Code and approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Illinois Department of Transportation's CPO upon request within 15 calendar days after execution of the subcontract.

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

## STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

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

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The CPO may terminate or void the contract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

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

### A. Bribery

Section 50-5. Bribery.

- (a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:
  - (1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or
  - (2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.
- (b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:
  - (1) the business has been finally adjudicated not guilty; or
  - (2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.
- (c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.
- (d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

### B. Felons

Section 50-10. Felons.

- (a) Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.
- (b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

### C. <u>Debt Delinquency</u>

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

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

#### D. Prohibited Bidders, Contractors and Subcontractors

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

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

### E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-14 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the CPO may declare the contract void if this certification is false.

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

Name of Subcontracting Company

Authorized Officer

Date

### SUBCONTRACTOR DISCLOSURES

#### I. DISCLOSURES

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

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

#### B. Financial Interests and Conflicts of Interest

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

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each individual making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each individual making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.

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

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

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. A separate Disclosure Form A must be submitted with the bid for each individual meeting the above requirements. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies and a total ownership certification.

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

### Form A Instructions for Financial Information & Potential Conflicts of Interest

If the subcontractor is a publicly traded entity subject to Federal 10K reporting, the 10K Report may be submitted to meet the requirements of Form A. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. If a subcontractor is not subject to Federal 10K reporting, the subcontractor must determine if any individuals are required by law to complete a financial disclosure form. To do this, the subcontractor should answer each of the following questions. A "YES" answer indicates Form A must be completed. If the answer to each of the following questions is "NO", then the NOT APPLICABLE STATEMENT on the second page of Form A must be signed and dated by an individual that is authorized to execute contracts for the subcontracting company. Note: These questions are for assistance only and are not required to be completed.

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

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

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

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

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

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

## ILLINOIS DEPARTMENT OF TRANSPORTATION

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

| Subcontractor Name |                 |                               |  |  |  |
|--------------------|-----------------|-------------------------------|--|--|--|
| Subcontractor Name |                 |                               |  |  |  |
|                    |                 |                               |  |  |  |
|                    |                 |                               |  |  |  |
| Legal Address      |                 |                               |  |  |  |
| Legal Address      |                 |                               |  |  |  |
|                    |                 |                               |  |  |  |
|                    |                 |                               |  |  |  |
| City, State, Zip   |                 |                               |  |  |  |
| Oity, State, Zip   |                 |                               |  |  |  |
|                    |                 |                               |  |  |  |
|                    |                 |                               |  |  |  |
| Telephone Number   | Email Address   | Fax Number (if available)     |  |  |  |
| relephone Number   | Liliali Addiess | i ax inuitibei (ii available) |  |  |  |
|                    |                 |                               |  |  |  |
|                    |                 |                               |  |  |  |

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

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

FOR INDIVIDUAL (type or print information)

### **DISCLOSURE OF FINANCIAL INFORMATION**

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

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

|     | 3.            | If you are currently appointed to or employed by any a salary exceeds 60% of the annual salary of the Govern (i) more than 7 1/2% of the total distributable incomporation, or (ii) an amount in excess of 100% of the  | nor, are you entitled to rece<br>e of your firm, partnershi   | eive<br>p, association or<br>ernor?                 |
|-----|---------------|---|---|---|
|     | 4.            | If you are currently appointed to or employed by any a salary exceeds 60% of the annual salary of the Governor minor children entitled to receive (i) more than 15 income of your firm, partnership, association or corpo the salary of the Governor?   | nor, are you and your spou<br>% in the aggregate of the   | use<br>e total distributable<br>excess of two times |
| (b) |               | employment of spouse, father, mother, son, or daughte previous 2 years.   | r, including contractual er   |   |
|     | If            | your answer is yes, please answer each of the following   |   | J <u> </u>  |
|     | 1.            | Is your spouse or any minor children currently an office Board or the Illinois State Toll Highway Authority?  | er or employee of the Cap<br>YesNo  |   |
|     |               | Is your spouse or any minor children currently appoint of Illinois? If your spouse or minor children is/are agency of the State of Illinois, and his/her annual annual salary of the Governor, provide the name of you of the State agency for which he/she is employed and                           | currently appointed to o<br>salary exceeds 60% of the<br>ir spouse and/or minor chi                   | r employed by any<br>ne<br>Idren, the name          |
|     | 3.            | If your spouse or any minor children is/are currently ap State of Illinois, and his/her annual salary exceeds 609 are you entitled to receive (i) more than 71/2% of the tifirm, partnership, association or corporation, or (ii) annual salary of the Governor?                                      | of the annual salary of the otal distributable income o   | ne Governor,<br>f your<br>of 100% of the            |
|     | 4.            | If your spouse or any minor children are currently app<br>State of Illinois, and his/her annual salary exceeds 60%<br>are you and your spouse or minor children entitled to<br>aggregate of the total distributable income of your firm<br>(ii) an amount in excess of two times the salary of the Co | o of the annual salary of the<br>receive (i) more than 15<br>n, partnership, association<br>Governor? | e Governor, % in the n or corporation, or           |
|     | - ·           |   | YesN  |   |
| (C) | unit of       | ve status; the holding of elective office of the State of Illi local government authorized by the Constitution of the currently or in the previous 3 years.   |   | utes of the State of                                |
| (d) |               | onship to anyone holding elective office currently or in the r daughter.  | ne previous 2 years; spous<br>YesN  |   |
| (e) | Americ of the | ntive office; the holding of any appointive government of<br>ca, or any unit of local government authorized by the Co<br>State of Illinois, which office entitles the holder to comp<br>scharge of that office currently or in the previous 3 years   | nstitution of the State of I ensation in excess of the  | llinois or the statutes<br>expenses incurred in     |
|     |               | onship to anyone holding appointive office currently or in daughter.  | the previous 2 years; spo<br>YesN   |   |
| (g) | Emplo         | syment, currently or in the previous 3 years, as or by any  | registered lobbyist of the YesN   | _   |

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

3

**4. Suspension or 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: suspension or debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract.

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

# ILLINOIS DEPARTMENT OF TRANSPORTATION

# Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

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

# Illinois Department of Transportation

### **NOTICE TO BIDDERS**

- 1. TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 a.mJanuary 20, 2017. 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. 61C67 LAKE County Section 14-F3000-04-BT Project TE-01D1(039) Route LYONS WOODS TRAIL District 1 Construction Funds

This project consists of constructing a pedestrian path, construction of pedestrian truss structure and pedestrian traffic signals, located within the Commonwealth Edison Right-of-Way from Green Bay Road east for 1.93 miles to the Robert McClory pedestrian path in the City of Waukegan.

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

By Order of the Illinois Department of Transportation

Randall S. Blankenhorn, Secretary

### CONTRACT 61C67

# INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

### Adopted January 1, 2017

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 4-1-16) (Revised 1-1-17)

### **SUPPLEMENTAL SPECIFICATIONS**

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### CHECK SHEET FOR RECURRING SPECIAL PROVISIONS

### Adopted January 1, 2017

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

### RECURRING SPECIAL PROVISIONS

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# CHECK SHEET FOR LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

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

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| LR #<br>LR SD12<br>LR SD13<br>LR 107-2<br>LR 107-4<br>LR 108                 | <u>Pg #</u> | Special Provision Title Slab Movement Detection Device Required Cold Milled Surface Texture Railroad Protective Liability Insurance for Local Lettings Insurance Combination Bids   | Effective<br>Nov. 11, 1984<br>Nov. 1, 1987<br>Mar. 1, 2005<br>Feb. 1, 2007<br>Jan. 1, 1994    | Revised Jan. 1, 2007 Jan. 1, 2007 Jan. 1, 2006 Aug. 1, 2007 Mar. 1, 2005     |
|--|-------------|---|---|--|
| LR 109<br>LR 212<br>LR 355-1<br>LR 355-2<br>LR 400-1<br>LR 400-2<br>LR 400-3 |             | Equipment Rental Rates Shaping Roadway Bituminous Stabilized Base Course, Road Mix or Traveling Plant Mix Bituminous Stabilized Base Course, Plant Mix Bituminous Treated Earth Surface Bituminous Surface Plant Mix (Class B)  | Jan. 1, 2012<br>Aug. 1, 1969<br>Oct. 1, 1973<br>Feb. 20, 1963<br>Jan. 1, 2007<br>Jan. 1, 2008 | Jan. 1, 2002<br>Jan. 1, 2007<br>Jan. 1, 2007<br>Apr. 1, 2012                 |
| LR 400-3<br>LR 400-4<br>LR 400-5<br>LR 400-6<br>LR 400-7<br>LR 402           |             | Hot In-Place Recycling (HIR) – Surface Recycling Full-Depth Reclamation (FDR) with Emulsified Asphalt Cold In-Place Recycling (CIR) With Emulsified Asphalt Cold In Place Recycling (CIR) with Foamed Asphalt Full-Depth Reclamation (FDR) with Foamed Asphalt Salt Stabilized Surface Course | Jan. 1, 2012<br>Apr. 1, 2012<br>Apr. 1, 2012<br>June 1, 2012<br>June 1, 2012<br>Feb. 20, 1963 | Jun. 1, 2012<br>Jun. 1, 2012<br>Jan. 1, 2007                                 |
| LR 403-1   |             | Surface Profile Milling of Existing, Recycled or Reclaimed Flexible Pavement  | Apr. 1, 2012  | Jun. 1, 2012   |
| LR 403-2<br>LR 403-3   |             | Bituminous Hot Mix Sand Seal Coat<br>Preventive Maintenance - Bituminous Surface Treatment<br>(A-1)   | Aug. 1, 1969<br>July 1, 2016  | Jan. 1, 2007   |
| LR 406<br>LR 420<br>LR 442<br>LR 451<br>LR 503-1                             |             | Filling HMA Core Holes with Non-Shrink Grout PCC Pavement (Special) Bituminous Patching Mixtures for Maintenance Use Crack Filling Bituminous Pavement with Fiber-Asphalt Furnishing Class SI Concrete  | Jan. 1, 2008<br>May 12, 1964<br>Jan. 1, 2004<br>Oct. 1, 1991<br>Oct. 1, 1973                  | Jan. 2, 2007<br>Jun. 1, 2007<br>Jan. 1, 2007<br>Jan. 1, 2002                 |
| LR 503-2<br>LR 542<br>LR 663<br>LR 702<br>LR 1000-1                          |             | Furnishing Class SI Concrete (Short Load) Pipe Culverts, Type (Furnished) Calcium Chloride Applied Construction and Maintenance Signs Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR)  | Jan. 1, 1989<br>Sep. 1, 1964<br>Jun. 1, 1958<br>Jan. 1, 2004<br>Apr. 1, 2012                  | Jan. 1, 2002<br>Jan. 1, 2007<br>Jan. 1, 2007<br>Jun. 1, 2007<br>Jun. 1, 2012 |
| LR 1000-2  |             | with Emulsified Asphalt Mix Design Procedures Cold In-Place Recycling (CIR) and Full Depth Reclamation (FDR)  | June 1, 2012  | 0011. I; 2012  |
| LR 1004<br>LR 1030<br>LR 1032-1<br>LR 1102<br>LR 80029-1                     |             | with Foamed Asphalt Mix Design Procedures Coarse Aggregate for Bituminous Surface Treatment Growth Curve Emulsified Asphalts Road Mix or Traveling Plan Mix Equipment Disadvantaged Business Enterprise Participation for Local Lettings  | Jan. 1, 2002<br>Mar. 1, 2008<br>Jan. 1, 2007<br>Jan. 1, 2007<br>Aug. 26, 2016                 | Jan. 1, 2007<br>Jan. 1, 2010<br>Feb. 7, 2008                                 |

### **BDE SPECIAL PROVISIONS**

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

| <u>File</u><br>Name               | <u>Pg.</u>        | Special Provision Title  | <u>Effective</u>   | Revised   |
|-----------------------------------|-------------------|--|--|---|
| 80099                             |                   | Accessible Pedestrian Signals (APS)  | April 1, 2003  | Jan. 1, 2014  |
| 80274                             |                   | Aggregate Subgrade Improvement   | April 1, 2012  | April 1, 2016   |
| 80192                             |                   | Automated Flagger Assistance Device  | Jan. 1, 2008   | , ,   |
| 80173                             | 136               | X Bituminous Materials Cost Adjustments  | Nov. 2, 2006   | July 1, 2015  |
| 80241                             |                   | Bridge Demolition Debris   | July 1, 2009   | • •   |
| 50261                             |                   | Building Removal-Case I (Non-Friable and Friable Asbestos)                           | Sept. 1, 1990  | April 1, 2010   |
| 50481                             |                   | Building Removal-Case II (Non-Friable Asbestos)                                      | Sept. 1, 1990  | April 1, 2010   |
| 50491                             |                   | Building Removal-Case III (Friable Asbestos)   | Sept. 1, 1990  | April 1, 2010   |
| 50531                             |                   | Building Removal-Case IV (No Asbestos)   | Sept. 1, 1990  | April 1, 2010   |
| 80366                             |                   | Butt Joints  | July 1, 2016   | ,   |
| 80198                             |                   | Completion Date (via calendar days)  | April 1, 2008  |   |
| 80199                             |                   | Completion Date (via calendar days) Plus Working Days                                | April 1, 2008  |   |
| 80293                             |                   | Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet              | April 1, 2012  | July 1, 2016  |
| 80311                             |                   | Concrete End Sections for Pipe Culverts  | Jan. 1, 2013   | April 1, 2016   |
| 80277                             |                   | Concrete Mix Design – Department Provided  | Jan. 1, 2012   | April 1, 2016   |
| 80261                             | 139               | X Construction Air Quality – Diesel Retrofit   | June 1, 2010   | Nov. 1, 2014  |
| 80029                             | 142               | X Disadvantaged Business Enterprise Participation                                    | Sept. 1, 2000  | July 2, 2016  |
| * 80378                           |                   | Dowel Bar Inserter   | Jan. 1, 2017   |   |
| 80229                             |                   | Fuel Cost Adjustment   | April 1, 2009  | July 1, 2015  |
| 80304                             |                   | Grooving for Recessed Pavement Markings  | Nov. 1, 2012   | Aug. 1, 2014  |
| 80246                             | 153               | X Hot-Mix Asphalt – Density Testing of Longitudinal Joints                           | Jan. 1, 2010   | April 1, 2016   |
| 80347                             |                   | Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling | Nov. 1, 2014   | April 1, 2016   |
| 80376                             | 154               | X Hot-Mix Asphalt – Tack Coat  | Nov. 1, 2016   |   |
| 80367                             |                   | Light Poles  | July 1, 2016   |   |
| 80368                             |                   | Light Tower  | July 1, 2016   |   |
| 80336                             |                   | Longitudinal Joint and Crack Patching  | April 1, 2014  | April 1, 2016   |
| 80369                             |                   | Mast Arm Assembly and Pole   | July 1, 2016   |   |
| 80045                             |                   | Material Transfer Device   | June 15, 1999  | Aug. 1, 2014  |
| 80165                             |                   | Moisture Cured Urethane Paint System   | Nov. 1, 2006   | Jan. 1, 2010  |
| 80349                             |                   | Pavement Marking Blackout Tape   | Nov. 1, 2014   | April 1, 2016   |
| 80371                             | 155               | X Pavement Marking Removal   | July 1, 2016   | ,   |
| 80298                             |                   | Pavement Marking Tape Type IV  | April 1, 2012  | April 1, 2016   |
| 80377                             | 156               | X Portable Changeable Message Signs  | Nov. 1, 2016   | , ,   |
| * 80359                           | 57703400          | Portland Cement Concrete Bridge Deck Curing  | April 1, 2015  | Jan. 1, 2017  |
| 80338                             |                   | Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching                      | April 1, 2014  | April 1, 2016   |
| 80300                             |                   | Preformed Plastic Pavement Marking Type D - Inlaid                                   | April 1, 2012  | April 1, 2016   |
| 80328                             | 157               | X Progress Payments  | Nov. 2, 2013   | •   |
| 34261                             |                   | Railroad Protective Liability Insurance  | Dec. 1, 1986   | Jan. 1, 2006  |
| 80157                             |                   | Railroad Protective Liability Insurance (5 and 10)                                   | Jan. 1, 2006   | •   |
| 80306                             |                   | Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt                               | Nov. 1, 2012   | April 1, 2016   |
| bilanning inn war an truster were | gertettes         | Shingles (RAS)   | All menol stategies or find polythologies and desire application beautiful | re in the Albertane annual benchman and delicity of the Albertane and the Albertane and Albertane and Albertane |
| * 80340                           |                   | Speed Display Trailer  | April 2, 2014  | Jan. 1, 2017  |
| 80127                             | 927088799         | Steel Cost Adjustment  | April 2, 2004  | July 1, 2015  |
| * 80379                           |                   | Steel Plate Beam Guardrail   | Jan. 1, 2017   | A !! 4 . CC 1 C   |
| 80317                             | 450               | Surface Testing of Hot-Mix Asphalt Overlays  | Jan. 1, 2013   | April 1, 2016   |
| 20338                             | 158               | X Training Special Provisions  | Oct. 15, 1975  | A   |
| 80318                             | negawi de est men | Traversable Pipe Grate   | Jan. 1, 2013   | April 1, 2014   |
| * 80381                           |                   | Traffic Barrier Terminal, Type 1 Special   | Jan. 1, 2017   |   |

| <u>File</u> | <u>Pg.</u>            |   | Special Provision Title                       | <b>Effective</b> | Revised  |
|-------------|-----------------------|---|---|------------------|--|
| <u>Name</u> | over a partitude of a |   |   |                  | and the state of t |
| * 80380     | 166 658 167           |   | Tubular Markers                               | Jan. 1, 2017     |  |
| 80288       | 161                   | Х | Warm Mix Asphalt                              | Jan. 1, 2012     | April 1, 2016  |
| 80302       | 163                   | Х | Weekly DBE Trucking Reports                   | June 2, 2012     | April 2, 2015  |
| 80289       |                       |   | Wet Reflective Thermoplastic Pavement Marking | Jan. 1, 2012     |  |
| 80071       | 164                   | Χ | Working Days                                  | Jan. 1, 2002     |  |

The following special provisions are in the 2017 Supplemental Specifications and Recurring Special Provisions.

| <u>File</u> | Special Provision Title                                       | New Location                                | <b>Effective</b> | Revised       |
|-------------|---|---|------------------|---------------|
| <u>Name</u> |   | <del></del>                                 |                  |               |
| 80360       | Coarse Aggregate Quality                                      | Article 1004.01                             | July 1, 2015     |               |
| 80363       | Engineer's Field Office                                       | Article 670.07                              | April 1, 2016    |               |
| 80358       | Equal Employment Opportunity                                  | Recurring CS #1 and #5                      | April 1, 2015    |               |
| 80364       | Errata for the 2016 Standard Specifications                   | Supplemental                                | April 1, 2016    |               |
| 80342       | Mechanical Side Tie Bar Inserter                              | Articles 420.03, 420.05, and 1103.19        | Aug. 1, 2014     | April 1, 2016 |
| 80370       | Mechanical Splicers   | Article 1006.10                             | July 1, 2016     |               |
| 80361       | Overhead Sign Structures Certification of Metal<br>Fabricator | Article 106.08                              | Nov. 1, 2015     | April 1, 2016 |
| 80365       | Pedestrian Push-Button  | Article 888.03                              | April 1, 2016    |               |
| 80353       | Portland Cement Concrete Inlay or Overlay                     | Recurring CS #34                            | Jan. 1, 2015     | April 1, 2016 |
| 80372       | Preventive Maintenance – Bituminous Surface Treatment (A-1)   | Recurring CS #28                            | Jan. 1, 2009     | July 1, 2016  |
| 80373       | Preventive Maintenance – Cape Seal                            | Recurring CS #29                            | Jan. 1, 2009     | July 1, 2016  |
| 80374       | Preventive Maintenance – Micro Surfacing                      | Recurring CS #30                            | Jan. 1, 2009     | July 1, 2016  |
| 80375       | Preventive Maintenance – Slurry Seal                          | Recurring CS #31                            | Jan. 1, 2009     | July 1, 2016  |
| 80362       | Steel Slag in Trench Backfill                                 | Articles 1003.01 and 1003.04                | Jan. 1, 2016     |               |
| 80355       | Temporary Concrete Barrier                                    | Articles 704.02, 704.04, 704.05, and 704.06 | Jan. 1, 2015     | July 1, 2015  |

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

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

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

### GUIDE BRIDGE SPECIAL PROVISION INDEX/CHECK SHEET

Effective as of the: January 20, 2017 Letting

| <u>Pg</u><br># | 7 | File Name | <u>Title</u>   | <u>Effective</u> | Revised      |
|----------------|---|-----------|--|------------------|--------------|
|                |   | GBSP 4    | Polymer Modified Portland Cement Mortar                                  | June 7, 1994     | Apr 1, 2016  |
|                |   | GBSP 12   | Drainage System  | June 10, 1994    | Jun 24, 2015 |
|                |   | GBSP 13   | High-Load Multi-Rotational Bearings                                      | Oct 13, 1988     | Apr 1, 2016  |
|                |   | GBSP 14   | Jack and Remove Existing Bearings  | April 20, 1994   | Jan 1, 2007  |
|                |   | GBSP 15   | Three Sided Precast Concrete Structure                                   | July 12, 1994    | Dec 29, 2014 |
|                |   | GBSP 16   | Jacking Existing Superstructure  | Jan 11, 1993     | Jan 1, 2007  |
|                |   | GBSP 17   | Bonded Preformed Joint Seal  | July 12, 1994    | Jan 1, 2007  |
|                |   | GBSP 18   | Modular Expansion Joint  | May 19, 1994     | Dec 29, 2014 |
|                |   | GBSP 21   | Cleaning and Painting Contact Surface Areas of Existing Steel Structures | June 30, 2003    | May 18, 2011 |
|                |   | GBSP 25   | Cleaning and Painting Existing Steel Structures                          | Oct 2, 2001      | Apr 22, 2016 |
|                |   | GBSP 26   | Containment and Disposal of Lead Paint Cleaning Residues                 | Oct 2, 2001      | Apr 22, 2016 |
|                |   | GBSP 28   | Deck Slab Repair   | May 15, 1995     | Oct 15, 2011 |
|                |   | GBSP 29   | Bridge Deck Microsilica Concrete Overlay                                 | May 15, 1995     | Apr 1, 2016  |
|                |   | GBSP 30   | Bridge Deck Latex Concrete Overlay                                       | May 15, 1995     | Jun 24, 2015 |
|                |   | GBSP 31   | Bridge Deck High-Reactivity Metakaolin (HRM) Conc Overlay                | Jan 21, 2000     | Apr 1, 2016  |
| 165            | Х | GBSP 33   | Pedestrian Truss Superstructure  | Jan 13, 1998     | Dec 29, 2014 |
|                |   | GBSP 34   | Concrete Wearing Surface   | June 23, 1994    | Oct 4, 2016  |
|                |   | GBSP 35   | Silicone Bridge Joint Sealer   | Aug 1, 1995      | Oct 15, 2011 |
|                |   | GBSP 45   | Bridge Deck Thin Polymer Overlay   | May 7, 1997      | Feb 6, 2013  |
| 167            | X | GBSP 51   | Pipe Underdrain for Structures   | May 17, 2000     | Jan 22, 2010 |
|                |   | GBSP 53   | Structural Repair of Concrete  | Mar 15, 2006     | Apr 1, 2016  |
|                |   | GBSP 55   | Erection of Curved Steel Structures                                      | June 1, 2007     |              |
|                |   | GBSP 56   | Setting Piles in Rock  | Nov 14, 1996     | Apr 1, 2016  |
|                |   | GBSP 59   | Diamond Grinding and Surface Testing Bridge Sections                     | Dec 6, 2004      | Jan 3, 2014  |
|                |   | GBSP 60   | Containment and Disposal of Non-Lead Paint Cleaning Residues             | Nov 25, 2004     | Apr 22, 2016 |
|                |   | GBSP 61   | Slipform Parapet   | June 1, 2007     | Apr 22, 2016 |
|                |   | GBSP 67   | Structural Assessment Reports for Contractor's Means and Methods         | Mar 6, 2009      | Oct 5, 2015  |
|                |   | GBSP 71   | Aggregate Column Ground Improvement                                      | Jan 15, 2009     | Oct 15, 2011 |
|                |   | GBSP 72   | Bridge Deck Fly Ash or GGBF Slag Concrete Overlay                        | Jan 18, 2011     | Jun 24, 2015 |
|                |   | GBSP 75   | Bond Breaker for Prestressed Concrete Bulb-T Beams                       | April 19, 2012   |              |
|                |   | GBSP 77   | Weep Hole Drains for Abutments, Wingwalls, Retaining Walls And Culverts  | April 19, 2012   | Oct 22, 2013 |
|                |   | GBSP 78   | Bridge Deck Construction   | Oct 22, 2013     | Oct 4, 2016  |
|                |   | GBSP 79   | Bridge Deck Grooving (Longitudinal)                                      | Dec 29, 2014     | Apr 1, 2016  |
|                |   | GBSP 81   | Membrane Waterproofing for Buried Structures                             | Oct 4, 2016      |              |
|                |   | GBSP 82   | Metallizing of Structural Steel  | Oct 4, 2016      |              |
|                |   | GBSP 83   | Hot Dip Galvanizing for Structural Steel                                 | Oct 4, 2016      |              |
|                |   | GBSP 85   | Micropiles   | Apr 19, 1996     | Oct 5, 2015  |
|                |   | GBSP 86   | Drilled Shafts   | Oct 5, 2015      | Oct 4, 2016  |
|                |   | GBSP 87   | Lightweight Cellular Concrete Fill                                       | Nov 11, 2011     | Apr 1, 2016  |
|                |   | GBSP 88   | Corrugated Structural Plate Structures                                   | Apr 22, 2016     |              |
|                |   | GBSP 89   | Preformed Pavement Joint Seal  | Oct 4, 2016      |              |

LIST ANY ADDITIONAL SPECIAL PROVISIONS BELOW

The following Guide Bridge Special Provisions have been incorporated into the 2016 Standard Specifications:

| File   | Title   | Std Spec  |
|--------|---|-----------|
| Name   |   | Location  |
| GBSP32 | Temporary Sheet Piling                                  | 522       |
| GBSP38 | Mechanically Stabilized Earth Retaining Walls           | 522       |
| GBSP42 | Drilled Soldier Pile Retaining Wall                     | 522       |
| GBSP43 | Driven Soldier Pile Retaining Wall                      | 522       |
| GBSP44 | Temporary Soil Retention System                         | 522       |
| GBSP46 | Geotextile Retaining Walls                              | 522       |
| GBSP57 | Temporary Mechanically Stabilized Earth Retaining Walls | 522       |
| GBSP62 | Concrete Deck Beams                                     | 504       |
| GBSP64 | Segmental Concrete Block Wall                           | 522       |
| GBSP65 | Precast Modular Retaining Wall                          | 522       |
| GBSP73 | Cofferdams  | 2017 Supp |
| GBSP74 | Permanent Steel Sheet Piling (LRFD)                     | 522       |
| GBSP76 | Granular Backfill for Structures                        | 2017 Supp |
| GBSP80 | Fabric Reinforced Elastomeric                           | 1028      |
| GBSP84 | Precast, Prestressed Concrete Beams                     | 2017 Supp |

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

| File<br>Name | Title             | Disposition:         |
|--------------|-------------------|----------------------|
| GBSP70       | Braced Excavation | Use TSRS per Sec 522 |
|              |                   |                      |
|              |                   |                      |
|              |                   |                      |

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### **STATE OF ILLINOIS**

### SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction" adopted April 1, 2016, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures of Materials" in effect on the date of invitation of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of Lyons Woods Trail, Section: 14-F3000-04-BT, Lake County, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

Route: Lyons Woods Trail Section No.: 14-F3000-04-BT Project No.: TE-01D1(039) Job No.: C-91-165-16

Contract: 61C67

### **LOCATION OF PROJECT**

This project is located within the Commonwealth Edison Right-of-Way beginning at station 1+19.04, a point approximately 119 feet east of IL Rte 43 (Green Bay Road) and extending east approximately 10,193 feet to station 103+12.13 Robert McClory Bike Path. The project is located in the City of Waukegan, Lake County. Total Gross and Net Length of project is 10,193.09 feet (1.93 miles).

### **DESCRIPTION OF PROJECT**

The work consists of 10-foot-wide HMA Bike Path, earth excavation, aggregate base course, aggregate shoulders, final restoration pedestrian traffic signals, signage, traffic control along with all incidental and collateral work necessary to complete the project as shown on the plans

### MAINTENANCE OF ROADWAYS

Effective: September 30, 1985 Revised November 1, 1996

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

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

### TRAFFIC CONTROL PLAN

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

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

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

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

<u>STANDARDS</u>: 701001-02, 701006-05, 701011-04, 701101-05, 701106-02, 701301-04, 701427-05, 701501-06, 701602-08, 701801-06, 701901-06

### **DETAILS**:

TC-05 Standard Traffic Signal Design Details

TC-10 Traffic Control and Protection for Side Roads, Intersections, and Driveways

TC-13 District One Typical Pavement Marking

TC-22 Arterial Road Information Sign

### SPECIAL PROVISIONS:

Maintenance of Roadways Traffic Control and Protection (Arterials) Temporary Information Signing Public Convenience and Safety (Dist 1)

### TRAFFIC CONTROL AND PROTECTION (ARTERIALS)

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

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

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

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

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

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

### **TEMPORARY INFORMATION SIGNING**

Effective: November 13, 1996 Revised: January 2, 2007

### Description.

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

### Materials.

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

|     | Item                    | Article/Section |
|-----|-------------------------|-----------------|
| a.) | Sign Base (Notes 1 & 2) | 1090            |
| b.) | Sign Face (Note 3)      | 1091            |
| c.) | Sign Legends            | 1092            |
| d.) | Sign Supports           | 1093            |
| e.) | Overlay Panels (Note 4) | 1090.02         |

- Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.
- Note 2. Type A sheeting can be used on the plywood base.
- Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.
- Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

### GENERAL CONSTRUCTION REQUIRMENTS

Installation.

The sign sizes and legend sizes shall be verified by the Contractor prior to fabrication.

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1

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m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

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

Signs which are placed on overhead bridge structures shall be fastened to the handrail with stainless steel bands. These signs shall rest on the concrete parapet where possible. The Contractor shall furnish mounting details for approval by the Engineer.

### Method of Measurement.

This work shall be measured for payment in square feet (square meters) edge to edge (horizontally and vertically).

All hardware, posts or skids, supports, bases for ground mounted signs, connections, which are required for mounting these signs will be included as part of this pay item.

### Basis of Payment.

This work shall be paid for at the contract unit price per square foot (square meter) for TEMPORARY INFORMATION SIGNING.

### **PUBLIC CONVENIENCE AND SAFETY (Dist 1)**

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

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

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

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

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

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

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

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### **STATUS OF UTILITIES (D-1)**

Effective: June 1, 2016

Utility companies and/or municipal owners located within the construction limits of this project have provided the following information in regard to their facilities and the proposed improvements. The tables below contain a description of specific conflicts to be resolved and/or facilities which will require some action on the part of the Department's contractor to proceed with work. Each table entry includes an identification of the action necessary and, if applicable, the estimated duration required for the resolution.

### **UTILTIES TO BE ADJUSTED**

Conflicts noted below have been identified by following the suggested staging plan included in the contract. The company has been notified of all conflicts and will be required to obtain the necessary permits to complete their work; in some instances resolution will be a function of the construction staging. The responsible agency must relocate or complete new installations as noted in the action column; this work has been deemed necessary to be complete for the Department's contractor to then work in the stage under which the item has been listed.

No conflicts to be resolved (or if there are conflicts they are to be listed as noted above)

The following contact information is what was used during the preparation of the plans as provided by the Agency/Company responsible for resolution of the conflict.

### <u>UTILITIES TO BE WATCHED AND PROTECTED</u>

The areas of concern noted below have been identified by following the suggested staging plan included for the contract. The information provided is not a comprehensive list of all remaining utilities, but those which during coordination were identified as ones which might require the Department's contractor to take into consideration when making the determination of the means and methods that would be required to construct the proposed improvement. In some instances the contractor will be responsible to notify the owner in advance of the work to take place so necessary staffing on the owners part can be secured.

| STAGE /<br>LOCATION                                     | TYPE                          | DESCRIPTION  | OWNER | ACTION |
|---|-------------------------------|--|-------|--------|
| McAree Rd (Sta.<br>45+50) and Lewis<br>Ave (Sta. 76+75) | Overhead communication lines. | The contractor is alerted that there are existing overhead communication lines located along the west side of McAree and the east side of Lewis. | АТ&Т  | None   |
| Entire length of project.                               | Overhead<br>Electric          | The contractor is alerted that there are existing overhead electrical lines that run the entire length of the project.                           | ComEd | None   |

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| McAree Rd (Sta. 45+50) and Lewis Ave (Sta. 76+75)  McAree Rd (Sta. Underground and overhead Cable TV.  The contractor is alerted that there are existing overhead communication lines located along the west side of McAree and the east side of Lewis.  Comcast |                                | Comcast   | None                |  |
|--|--------------------------------|---|---------------------|--|
| McAree Rd (Sta.<br>45+50) and Lewis<br>Ave (Sta. 76+75)  | Gas Main                       | The contractor is alerted that there is an existing gas main that runs on the west side of McAree and the east side of Lewis.   | Northshore Gas      | Use care when excavating for mast arm foundations. |
| McAree Rd (Sta. 45+50, 46+00),<br>Crossing Path at<br>Sta. 66+50, Lewis<br>Ave (STa. 76+30),<br>and Butrick St<br>(Sta. 97+50)   | Water Main &<br>Sanitary Sewer | The contractor is alerted that there are existing water main, sanitary sewer or storm sewer on the east and west side of McAree, Sta. 66+50 of the path, the west side of Lewis, and the centerline of Butrick. | City of<br>Waukegan | Use care when excavating for mast arm foundations. |

The following contact information is what was used during the preparation of the plans as provided by the owner of the facility.

| Agency/Company<br>Responsible to<br>Resolve Conflict | Name of contact  | Address  | Phone              | e-mail address                 |
|--|------------------|--|--------------------|--------------------------------|
| AT&T   | Jeff Zielinski   | 1000 Commerce<br>Dr.<br>Oakbrook, IL<br>60523                    | (630) 573-<br>5450 | JZ2813@att.net                 |
| ComEd  | Terri Bleck      | 1500 Franklin<br>Blvd.<br>Libertyville, IL<br>60048              | (847) 816-<br>5239 | terri.bleck@comed.com          |
| Comcast  | Ted Wyman        | 688 Industrial Dr.<br>Elmhurst, IL<br>60126                      | (630) 600-<br>6349 | Ted.wyman@cable.comcast.com    |
| Northshore Gas                                       | John Wysocki     | 3001 Grand Ave<br>Waukegan, IL<br>60085                          | (847) 263-<br>4668 | northshoregasdelivery.com      |
| City of Waukegan                                     | Scot Prindiville | 100 N. Martin<br>Luther King Jr<br>Ave.<br>Waukegan, IL<br>60085 | (847) 625-<br>6858 | scotprindiville@waukeganil.gov |

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The above represents the best information available to the Department and is included for the convenience of the bidder. The days required for conflict resolution should be taken into account in the bid as this information has also been factored into the timeline identified for the project when setting the completion date. The applicable portions of the Standard Specifications for Road and Bridge Construction shall apply.

Estimated duration of time provided in the action column for the first conflicts identified will begin on the date of the executed contract regardless of the status of the utility relocations. The responsible agencies will be working toward resolving subsequent conflicts in conjunction with contractor activities in the number of days noted.

The estimated relocation dates must be part of the progress schedule submitted by the contractor. A utility kickoff meeting will be scheduled between the Department, the Department's contractor and the utility companies. The Department's contractor is responsible for contacting J.U.L.I.E. prior to any and all excavation work.

### **FRICTION AGGREGATE (D-1)**

Effective: January 1, 2011 Revised: April 29, 2016

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

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

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

| Use     | Mixture       | Aggregates Allowed   |
|---------|---------------|--|
| Class A | Seal or Cover | Allowed Alone or in Combination 5/:  |
|         |               | Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag |
| 27      |               | Crushed Concrete   |

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| Use                          | Mixture   | Aggregates Allowed  |  |
|------------------------------|---|---|--|
| HMA<br>Low ESAL              | Stabilized<br>Subbase or<br>Shoulders   | Allowed Alone or in Combination <sup>5/</sup> :  Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete                      |  |
| HMA<br>High ESAL<br>Low ESAL | Binder<br>IL-19.0<br>or IL-19.0L<br>SMA Binder  | Allowed Alone or in Combination 5/ 6/:  Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete 3/  |  |
| HMA<br>High ESAL<br>Low ESAL | C Surface and<br>Leveling Binder<br>IL-9.5 or IL-9.5L<br>SMA<br>Ndesign 50<br>Surface | Allowed Alone or in Combination <sup>5/</sup> :  Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup> |  |
| HMA<br>High ESAL             | D Surface and<br>Leveling Binder<br>IL-9.5<br>SMA<br>Ndesign 50<br>Surface            | Allowed Alone or in Combination 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/                       |  |
|                              |   | Other Combinations Allowed:  Up to  With  25% Limestone Dolomite  |  |

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| Use              | Mixture                      | Aggregates Allowed   |   |  |
|------------------|------------------------------|--|---|--|
|                  |                              | 50% Limestone  | Any Mixture D<br>aggregate other<br>than Dolomite   |  |
|                  |                              | 75% Limestone  | Crushed Slag<br>(ACBF) or Crushed<br>Sandstone  |  |
| HMA<br>High ESAL | E Surface<br>IL-9.5          | Allowed Alone or in Combination 5/ 6/:   |   |  |
|                  | SMA<br>Ndesign 80<br>Surface | Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.   |   |  |
| :                |                              | Other Combinations Allowed:  Up to  With   |   |  |
|                  |                              |  |   |  |
|                  | 50% Dolomite <sup>2/</sup>   |  | Any Mixture E aggregate   |  |
|                  |                              | 75% Dolomite <sup>2/</sup>   | Crushed Sandstone,<br>Crushed Slag<br>(ACBF), Crushed<br>Steel Slag, or<br>Crystalline Crushed<br>Stone |  |
|                  |                              | 75% Crushed Gravel <sup>2/</sup> or Crushed Concrete <sup>3/</sup> Crushed Sandstor Crystalline Crushed Stone, Crushed S (ACBF), or Crushed Steel Slag |   |  |
| НМА              | F Surface                    |  |   |  |
| High ESAL        | SMA<br>Ndesign 80<br>Surface | Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.   |   |  |
|                  |                              | Other Combinations A   | <u>lllowed</u> :  |  |

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| Use | Mixture | Aggregates Allowed   |   |
|-----|---------|--|---|
|     |         | Up to  | With  |
|     |         | 50% Crushed<br>Gravel <sup>2/</sup> , Crushed<br>Concrete <sup>3/</sup> , or<br>Dolomite <sup>2/</sup> | Crushed Sandstone,<br>Crushed Slag<br>(ACBF), Crushed<br>Steel Slag, or<br>Crystalline Crushed<br>Stone |

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone (limestone) and/or crushed gravel shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."
- 6/ Combining different types of aggregate will not be permitted in SMA Ndesign 80."

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

Effective: June 26, 2006 Revised: April 1, 2016

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

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

| Test   | Asphalt Grade<br>GTR 70-28 | Asphalt Grade<br>GTR 64-28 |
|--|----------------------------|----------------------------|
| Flash Point (C.O.C.),<br>AASHTO T 48, °F (°C), min.                      | 450 (232)                  | 450 (232)                  |
| Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa·s, max. | 30 (3)                     | 30 (3)                     |
| Softening Point, AASHTO T 53, °F (°C), min.                              | 135 (57)                   | 130 (54)                   |

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| cut immediately, %, min. | Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately. %, min. | 65 | 65 |
|--------------------------|--|----|----|
|--------------------------|--|----|----|

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

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

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

"A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of  $\pm$  0.40 percent."

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

"(c) RAP Materials (Note 5) ......1031"

Add the following note to 1030.02 of the Standard Specifications:

Note 5. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

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

Effective: November 1, 2012

Revise: April 2, 2016

Revise Section 1031 of the Standard Specifications to read:

# "SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

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

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

(a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).

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(1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.

- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

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

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of Type 1 RAS with Type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS

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with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

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

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

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

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

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
  - (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be

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in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

(2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

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

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

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

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

| Parameter       | FRAP                 |  |
|-----------------|----------------------|--|
| No. 4 (4.75 mm) | ± 6 %                |  |
| No. 8 (2.36 mm) | ± 5 %                |  |
| No. 30 (600 μm) | ±5%                  |  |
| No. 200 (75 μm) | ± 2.0 %              |  |
| Asphalt Binder  | ± 0.3 %              |  |
| G <sub>mm</sub> | ± 0.03 <sup>1/</sup> |  |

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

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

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

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

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

| Parameter              | RAS     |
|------------------------|---------|
| No. 8 (2.36 mm)        | ±5%     |
| No. 16 (1.18 mm)       | ±5%     |
| No. 30 (600 µm)        | ± 4 %   |
| No. 200 (75 μm)        | ± 2.5 % |
| Asphalt Binder Content | ± 2.0 % |

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

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

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

The Engineer will notify the Contractor of observed deficiencies.

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

| Test Parameter | Acceptable Lim | its of Precision                        |
|----------------|----------------|---|
| % Passing:1/   | FRAP           | RAS                                     |
| 1/2 in.        | 5.0%           |   |
| No. 4          | 5.0%           | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
| No. 8          | 3.0%           | 4.0%                                    |
| No. 30         | 2.0%           | 3.0%                                    |
| No. 200        | 2.2%           | 2.5%                                    |

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| Asphalt Binder Content | 0.3%  | 1.0% |
|------------------------|-------|------|
| G <sub>mm</sub>        | 0.030 |      |

1/ Based on washed extraction.

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

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

### 1031.05 Quality Designation of Aggregate in RAP and FRAP.

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

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

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

- (a) FRAP. The use of FRAP in HMA shall be as follows.
  - (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
  - (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.
  - (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
  - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.
  - (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.
- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.

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

Max Asphalt Binder Replacement for FRAP with RAS Combination

| HMA Mixtures 1/2/4/ | Ma                        | ximum % ABF | ₹                      |
|---------------------|---------------------------|-------------|------------------------|
| Ndesign             | Binder/Leveling<br>Binder | Surface     | Polymer<br>Modified 3/ |
| 30L                 | 50                        | 40          | 30                     |
| 50                  | 40                        | 35          | 30                     |
| 70                  | 40                        | 30          | 30                     |

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| 90           | 40 | 30 | 30 |
|--------------|----|----|----|
| 4.75 mm N-50 |    |    | 40 |
| SMA N-80     |    |    | 30 |

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

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

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

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

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

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

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(a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.

- (b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.
  - (1) Dryer Drum Plants.
    - a. Date, month, year, and time to the nearest minute for each print.
    - b. HMA mix number assigned by the Department.
    - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
    - d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
    - e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
    - f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
    - g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
    - h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
    - When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
    - j. Accumulated mixture tonnage.
    - k. Dust Removed (accumulated to the nearest 0.1 ton (0.1 metric ton))
  - (2) Batch Plants.
    - a. Date, month, year, and time to the nearest minute for each print.

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- b. HMA mix number assigned by the Department.
- c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
- d. Mineral filler weight to the nearest pound (kilogram).
- f. RAS and FRAP weight to the nearest pound (kilogram).
- g. Virgin asphalt binder weight to the nearest pound (kilogram).
- h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

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

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75 µm) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

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#### **HMA MIXTURE DESIGN REQUIREMENTS (D-1)**

Effective: January 1, 2013 Revised: April 1, 2016

## 1) Design Composition and Volumetric Requirements

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

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

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

| "Use              | Size/Application     | Gradation No.              |
|-------------------|----------------------|----------------------------|
| Class A-1, 2, & 3 | 3/8 in. (10 mm) Seal | CA 16                      |
| Class A-1         | 1/2 in. (13 mm) Seal | CA 15                      |
| Class A-2 & 3     | Cover                | CA 14                      |
| HMA High ESAL     | IL-19.0              | CA 11 <sup>1/</sup>        |
|                   | IL-9.5               | CA 16, CA 13 <sup>3/</sup> |
| HMA Low ESAL      | IL-19.0L             | CA 11 <sup>1/</sup>        |
|                   | IL-9.5L              | CA 16                      |
|                   | Stabilized Subbase   |                            |
|                   | or Shoulders         |                            |
| SMA <sup>2/</sup> | 1/2 in. (12.5mm)     | CA133/, CA14 or CA16       |
|                   | Binder & Surface     |                            |
|                   | IL 9.5               | CA16, CA 13 <sup>3/</sup>  |
|                   | Surface              |                            |

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

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

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

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Revise the last paragraph of Article 1102.01 (a) (5) of the Standard Specifications to read:

"IL-4.75 and Stone Matrix Asphalt (SMA) mixtures which contain aggregate having absorptions greater than or equal to 2.0 percent, or which contain steal slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours."

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

| "High ESAL | IL-19.0 binder;<br>IL-9.5 surface; IL-4.75; SMA-12.5<br>SMA-9.5  |  |
|------------|--|--|
| Low ESAL   | IL-19.0L binder; IL-9.5L surface;<br>Stabilized Subbase (HMA) <sup>1/</sup> ;<br>HMA Shoulders <sup>2/</sup> |  |

- 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, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.
- Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included

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meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type I or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

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

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

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

| High ESAL, MIXTURE COMPOSITION (% PASSING) 17 |        |      |                      |        |     |                   |                  |                  |            |      |
|---|--------|------|----------------------|--------|-----|-------------------|------------------|------------------|------------|------|
| Sieve<br>Size                                 | IL-19. | 0 mm | SMA 4/<br>IL-12.5 mm |        |     |                   | IL-9.5 mm        |                  | IL-4.75 mm |      |
|   | min    | max  | min                  | max    | min | max               | min              | max              | min        | max  |
| 1 1/2 in<br>(37.5 mm)                         |        |      |                      |        |     |                   |                  |                  |            |      |
| 1 in.<br>(25 mm)                              |        | 100  |                      |        |     |                   |                  |                  |            |      |
| 3/4 in.<br>(19 mm)                            | 90     | 100  |                      | 100    |     |                   |                  |                  |            |      |
| 1/2 in.<br>(12.5 mm)                          | 75     | 89   | 80                   | 100    |     | 100               |                  | 100              |            | 100  |
| 3/8 in,<br>(9.5 mm)                           |        |      |                      | 65     | 90  | 100               | 90               | 100              |            | 100  |
| #4<br>(4.75 mm)                               | 40     | 60   | 20                   | 30     | 36  | 50                | 34               | 69               | 90         | 100  |
| #8<br>(2.36 mm)                               | 20     | 42   | 16                   | 24 5/  | 16  | 325/              | 34 <sup>6/</sup> | 52 <sup>2/</sup> | 70         | 90   |
| #16<br>(1.18 mm)                              | 15     | 30   |                      |        |     |                   | 10               | 32               | 50         | 65   |
| #30<br>(600 µm)                               |        |      | 12                   | 16     | 12  | 18                |                  |                  |            |      |
| #50<br>(300 μm)                               | 6      | 15   |                      |        |     |                   | 4                | 15               | 15         | 30   |
| #100<br>(150 μm)                              | 4      | 9    |                      |        |     |                   | 3                | 10               | 10         | 18   |
| #200<br>(75 μm)                               | 3      | 6    | 7.0                  | 9.0 3/ | 7.5 | 9.5 <sup>3/</sup> | 4                | 6                | 7          | 9 3/ |
| Ratio<br>Dust/Asphalt<br>Binder               |        | 1.0  |                      | 1.5    |     | 1.5               |                  | 1.0              |            | 1.0  |

- 1/ Based on percent of total aggregate weight.
- 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  $\mu$ m) sieve shall be  $\leq$  3 percent.

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- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
- When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

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

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

|  | VOLUI   | METRIC REQUI<br>High ESAL | REMENTS               |                       |  |
|--|---------|---------------------------|-----------------------|-----------------------|--|
| Voids in the Mineral Aggregate Voids F (VMA), with Asp % minimum Binde |         |                           |                       |                       |  |
| Ndesign  | IL-19.0 | IL-9.5                    | IL-4.75 <sup>1/</sup> | (VFA),<br>%           |  |
| 50   |         |                           | 18.5                  | 65 – 78 <sup>2/</sup> |  |
| 70   | 13.5    | 65 - 75                   |                       |                       |  |
| 90   |         | 15.0                      |                       | 00-75                 |  |

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

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

"(3) SMA Mixtures.

|                   | Volumetric R<br>SM           |  |         |
|-------------------|------------------------------|--|---------|
| Ndesign           | Design Air Voids<br>Target % | Voids in the Mineral Aggregate (VMA), % min.  Voids Fill with Asph |         |
| 80 <sup>4</sup> / | 3.5                          | 17.0 <sup>2/</sup><br>16.0 <sup>3/</sup>                           | 75 - 83 |

1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.

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- 2/ Applies when specific gravity of coarse aggregate is ≥ 2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted. For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

Add to the end of Article 1030.05 (d) (2) a. of the Standard Specifications:

"During production, the Contractor shall test SMA mixtures for draindown according to AASHTO T305 at a frequency of 1 per day of production."

Delete last sentence of the second paragraph of Article 1102.01(a) (4) b. 2.

Add to the end of Article 1102.01 (a) (4) b. 2.:

"As an option, collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following:

- (a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.
- (b.) A mix design was prepared based on collected dust (baghouse).

## 2) Design Verification and Production

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

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

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

(1)Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut

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depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements 1/

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

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

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

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

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

<u>Production Testing</u>. Revise first paragraph of Article 1030.06(a) of the Standard Specifications to read:

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

Add the following after the sixth paragraph in Article 1030.06 (a) of the Standard Specifications:

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

If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

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### Method of Measurement:

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

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's G<sub>mb</sub>."

### Basis of Payment.

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

"Stone matrix asphalt will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; and POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified."

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

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

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

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

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

## ADJUSTMENTS AND RECONSTRUCTS

Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

**"602.04** Concrete. Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-1

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concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020."

Revise the third, fourth and fifth sentences of the second paragraph of Article 602.11(c) to read:

"Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.05 to read:

"603.05 Replacement of Existing Flexible Pavement. After the castings have been adjusted, the surrounding space shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.06 to read:

"603.06 Replacement of Existing Rigid Pavement. After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-1 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.

The surface of the Class PP concrete shall be constructed flush with the adjacent surface."

Revise the first sentence of Article 603.07 to read:

"603.07 Protection Under Traffic. After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b."

#### TRAFFIC CONTROL AND PROTECTION (SPECIAL)

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

Article 701.01 Description shall be replaced with the following:

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

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Article 701.02 Materials shall be modified by adding the following paragraph:

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

Article 701.04 General shall be modified by adding the following as the first paragraph:

Traffic Control and Protection (Special) shall be provided as shown on the plans and applicable Highway Standards; as required in these special provisions and the applicable sections of the "Standard Specifications"; and/or as directed by the Engineer.

Article 701.04 General shall be modified by adding the following to the fourth paragraph:

The Contractor shall dispatch men, materials, and equipment to correct any such deficiencies. The Contractor shall respond to any call from LCDOT concerning any request for improving or correcting traffic control devices and begin making the requested repairs within two hours from the time of notification.

Article 701.10 Surveillance shall be replaced with the following:

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

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

Article 701.13 Flaggers (a) shall be modified by revising the second paragraph of subparagraph (a) by adding the following:

The Engineer will determine when a side road or entrance shall be closed to traffic. The flagger shall be positioned as shown on the plans or as directed by the Engineer.

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Article 701.14 Signs (a) Road Construction Ahead Signs shall be modified by changing the following in the paragraph:

"ROAD WORK AHEAD" signs shall be required in lieu of "ROAD CONSTRUCTION AHEAD" SIGNS

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

(b) Work Zone Speed Limit Signs. The Lake County Division of Transportation will specify whether a project meets the criteria for a Work Zone Speed Limit. When specified, the work zone speed limit signs shall be installed as shown on the LCDOT Work Zone Speed Limit Signing Diagram, LC7203, at a maximum of 20 feet lateral distance of the locations shown on the plans. Failure to install and maintain the required amount of signs at the proper sign spacing shall result in an immediate traffic control deficiency.

All permanent "SPEED LIMIT" signs located within the work zone shall be removed or covered. If the speed limit sign is to be covered, it shall be done in a manner that no part of the legend shall be visible in any lighting condition. This work shall be completed by the Contractor after the method of covering the speed limit signs has been approved by the Engineer.

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

The work zone speed limit signs will be removed when roadway conditions return to normal or when the construction project is suspended for more than 30 days.

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

(c) Temporary Construction Information Signs. When indicated in the traffic control plan or as directed by the Engineer the Contractor shall furnish, install, maintain, relocate, and remove for various stages of construction Temporary Construction Information Signs.

Temporary Construction Information Signs may include:

Driveway White Legend on Green

Background

Caution - New Lanes Open Black Legend on Orange

Background

The signs, as shown on Lake County Detail LC7201, shall be installed according to the

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traffic control plan and/or as directed by the Engineer.

Article 701.15 Traffic Control Devices (b) Type I, II and III Barricades shall be deleted and replaced with the following:

Type II barricades shall be used at all locations that call for Type I, or Type II barricades.

Type II barricades are used to channelize traffic; to delineate unattended obstacles, patches, excavations, drop-offs, and other hazards; and as check barricades.

Any drop off greater than three inches, but less than six inches, located within eight feet of the pavement edge shall be protected by Type II barricades equipped with mono-directional steady burn lights. The barricades shall be placed at a spacing of 100 feet center to center. For any drop off within eight feet of the pavement edge that exceeds six inches, the Type II barricades equipped with mono-directional steady burn lights shall be placed at a spacing of 50 feet center to center. Barricades that must be placed in excavated areas shall have leg extensions installed so that the top of the barricade is in compliance with the height requirements of IDOT Standard 701901.

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

Type III barricades are used to close traffic lanes and to close roads.

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

The direction indicator barricades shall meet the requirements for Type II barricades as stated in this special provision. The top panel, which faces traffic, shall be as shown in IDOT Highway Standard 701901. The top panel, facing away from traffic shall have a 12 inch x 24 inch orange and white diagonal panel. The bottom panels shall be eight inches x 24 inches with orange and white diagonal sheeting, as shown in LCDOT's Special Detail LC7200.

Article 701.15 Traffic Control Devices (j) Portable Changeable Message Signs shall be modified by adding the following paragraphs:

The PCMS shall be compatible and fully functional with the LCDOT's

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Transportation Management Center PASSAGE PCMS Control Software. A list of approved PCMS's manufacturers and traffic control vendors is available upon request from the LCDOT. The PCMS shall be tested and approved by the LCDOT and can be sufficiently controlled by the LCDOT NTCIP compliant software. If the PCMS has not been tested or approved by either the Illinois State Toll Highway Authority or the LCDOT then the PCMS will need to be tested and certified by the Delcan Corporation at the Contractor's expense.

Lake County Division of Transportation (PASSAGE) Software Developer: Delcan 650 East Algonquin Road, Suite 101 Schaumburg, IL 60173

In case of a Traffic Incident Management (TIM) event or other County/State declared Emergency Management event, the use of the PCMS may be preempted from the Contractor's use by the Lake County Transportation Management Center for the duration of the incident. If the PCMS must be moved from the limits of the work site to an offsite location to better facilitate the use of the PCMS during the incident, the Contractor will be compensated for the labor and equipment to move the PCMS to the designated location and back, according to Article 109.04 (b) of the "Standard Specifications". In order to facilitate the movement of the PCMS in a timely manner, the LCDOT may use County Forces to move the PCMS to the designated location and/or back, at no additional cost to the Contractor.

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

Basis of Payment. Changeable message signs will be paid for at the contract unit price per calendar month for each sign as CHANGEABLE MESSAGE SIGN, as stated in Article 701.20 of this special provision.

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

(1) Prime Coat. "FRESH OIL" signs (W21-2) shall be used when the prime coat is applied to pavement that is open to traffic. The signs shall remain in place until tracking of the prime ceases. These signs shall be erected a minimum of 500 feet preceding the start of the prime and on all side roads within the posted area. The signs on the side roads shall be posted a minimum of 200 feet from the mainline pavement. These signs are excluded from the time requirements of Article 701.04 of the "Standard Specifications" as modified by this special provision (above). Noncompliance with the provisions of this section, by the Contractor, shall

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result in an immediate traffic control deficiency deduction. All signs shall have an amber flashing light attached.

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

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

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

(6) Area Reflective Crack Control Treatment Fabric. "SLIPPERY WHEN WET" signs (W8-5) shall be used when crack control fabric is applied to pavement that is open to traffic. These signs shall remain in place until the binder course is laid. The signs shall be erected a minimum of 500 feet preceding the start of the crack control treatment and on all side roads within the posted area. The signs on the side roads shall be posted a minimum of 200 feet from the mainline pavement. These signs are excluded from the time requirements of Article 701.04 of the "Standard Specifications" as modified by this special provision (above). Noncompliance with the provisions of this section, by the Contractor, shall result in an immediate traffic control deficiency deduction. All signs shall have an amber flashing light attached.

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

g. Detection. Microwave Vehicle Sensors shall be installed as directed by the Engineer. The LCDOT shall approve the proposed microwave vehicle sensor before the Contractor may furnish or install it. The Contractor shall install, wire and adjust the alignment of the sensor according to the manufacturer's recommendations and requirements. The Engineer shall approve the installation. An alternate method of detection may be used if it has been demonstrated and approved by the Department.

The microwave vehicle sensor shall meet the following requirements:

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

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

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

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

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

(I) IDOT standard 701331. When IDOT standard 701331 is specified on two-lane, two-way roadways, a "LANE SHIFT AHEAD" sign shall be added 500 feet in advance of W1-3 or W1-4 sign. The Road Work sign (W20-1) shall be extended to a total of 1500' from the start of the lane shift.

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

701.19 Method of Measurement.

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

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

701.20 Basis of Payment

This work will be paid for at the contract unit price per lump sum for

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

- 1) Temporary Bridge Traffic Signals
- 2) Temporary Rumble Strips [where each is defined as 25 feet]
- 3) Temporary Raised Pavement Markers
- 4) Sand module impact attenuators
- 5) Portable Changeable Message Signs
- 6) Temporary Concrete Barrier
- 7) Temporary Pavement Marking-Letters and Symbols
- 8) Temporary Pavement Marking-Line at width specified

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

Any delays or inconveniences incurred by the Contractor while complying with these requirements shall be considered as part of TRAFFIC CONTROL AND PROTECTION (SPECIAL) and no additional compensation will be allowed.

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

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

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

In the event the sum total of all work items for which traffic control and protection is required is increased or decreased by more than ten

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percent, the contract bid price for TRAFFIC CONTROL AND PROTECTION will be adjusted as follows:

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

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

Difference between original and final value of work for which traffic control and protection is required.

Original value of work for which traffic control and protection is required.

The value of the work items used in calculating the increase and decrease will include only items that have been added to or deducted from the contract under Article 104.02 of the "Standard Specifications" and only items that require the use of TRAFFIC CONTROL AND PROTECTION (SPECIAL).

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

## **FOLD DOWN BOLLARDS**

X =

This item shall consist of furnishing and installing the fold down bollards as specified herein and on the drawings at the locations shown on the plans. Item shall include the double post fold down bollard, foundation, hardware, and accessories in accordance with the manufacturer's specifications and Section 878 of the Standard Specifications with the following additions:

Material: The bollard shall be a 30-inch double post model with double locks and pin. The surface shall be primed with rust & corrosion resistant, zinc rich primer w/ 5,000-hour salt spray performance, and finished with a high visibility yellow polyester powdered coating (RAL1028).

All hardware, including padlocks, shall be provided by the contractor. The bollard hardware shall be stainless steel.

Bollard foundation shall be 4000 PSI concrete. The foundation shall include anchor bolts, nuts, washers, and rebar as recommended by the bollard manufacturer.

Installation: The bollard shall be installed in the center of the proposed trail on an 18-inch diameter concrete foundation. The foundation shall be 42 inches deep and poured flush with the pavement surface. The bollard shall be installed so it lies flat on pavement when opened and parallel to the edges of the trail.

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Basis of Payment: This work shall be measured and paid for at the contract unit price per Each for FOLD DOWN BOLLARDS, which price shall include all labor, materials, and equipment necessary to complete the work as shown on the plans or as directed by the Engineer.

#### **BOLLARD REMOVAL**

This work shall consist of removing existing bollards (concrete, steel, wood, etc.) and properly disposal in accordance with Article 202.03 of the Standard Specifications. The void created by the bollard removal shall be backfilled with trench backfill if located within the proposed paving area. All other locations shall be backfilled with suitable earth excavation material.

Basis of Payment: This work shall be measured and paid for at the contract unit price per Each for BOLLARD REMOVAL, which price shall include all labor, materials, and equipment necessary to complete the work as shown on the plans or as directed by the Engineer.

#### **EARTH EXCAVATION**

This work shall comply with the requirements of Section 202 of the Standard Specifications, except that additional placement, grading and restoration requirements will be required.

On-Site stockpiles, borrow and staging areas shall be limited to the locations shown on the plans and graded to not block or change existing drainage patterns, as directed by the Engineer. These areas shall be restored with a minimum of 4 inches of topsoil and be seeded with the native mixture as specified on construction plans and specifications.

The Contractor is required to secure the stock pile areas, as stated in the construction staging general notes, with a temporary 6-foot chain link fence and lockable security gate. This work shall be included in the Earth Excavation pay item.

No soil shall be removed from the existing landfill zone located within Callahan Park property per LCHD / IEPA documents.

Basis of Payment: This work shall be measured and paid for at the contract unit price per CUBIC YARD for EARTH EXCAVATION, which price shall include all labor, materials, and equipment necessary to complete the work as shown on the plans or as directed by the Engineer.

#### **CLEARING AND GRUBBING**

This work shall comply with the requirements of Sections 201 and 202 of the Standard Specifications, except that additional coordination with the Lake County Forest Preserve District will be required to identify plant material that will be preserved and plant material that will be removed.

Undesirable species and underbrush to be removed will be determined solely by the Engineer as coordinated with representatives from the Lake County Forest Preserve District, as will all trees and plant material to be protected and preserved. Selective clearing requirements may vary along the corridor.

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Selective clearing work may include removal of undesirable species, removal of underbrush, removal of dead limbs, and fallen tree debris, as well as other miscellaneous debris. Preservation efforts will be coordinated with the Lake County Forest Preserve District, and trees that remain will be "limbed up" and pruned to a minimum height of 8 feet above finished grade.

Limits of Construction: Limits of construction are as shown and described on the removal plan or as directed by the Engineer.

Basis of Payment: This work shall be measured and paid for at the contract unit price per LUMP SUM for CLEARING AND GRUBBING, which price shall include all labor, materials, and equipment necessary to complete the work as shown on the plans or as directed by the Engineer.

## FENCE REMOVAL (SPECIAL)

This work shall consist of removal of the existing fence, posts (including concrete foundation), rails and fittings at locations shown on the plans, or as directed by the Engineer, and disposal in accordance with Article 202.03 of the Standard Specifications.

Basis of Payment: This work shall be measured and paid for at the contract unit price per FOOT for FENCE REMOVAL (SPECIAL), which price shall include all labor, materials, and equipment necessary to complete the work as shown on the plans or as directed by the Engineer.

## SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE)

**Description:** This work shall consist of furnishing and installing the Rectangular Rapid Flashing Beacon (RRFB) Assembly complete with RRFB; solar power supply; traffic signal post; foundation; pedestrian push button; warning signs and plaques; controller and cabinet; and wireless communication equipment as shown on the plans and/or as specified by the Engineer. All equipment and hardware required to mount the RRFB and associated equipment to the assembly shall be included in the unit cost of this item.

**Materials:** All components shall be manufactured and assembled as a complete system and consist of the following:

Rectangular Rapid Flashing Beacon: Each RRFB assembly shall satisfy the FHWA Interim Approval for Optional Use of Rectangular Rapid Flashing Beacons (IA-11), dated July 16, 2008, and all subsequent FHWA Official Interpretation Letters and the 2009 edition of the Manual of Uniform Traffic Control Devices (MUTCD), including the unit size, mounting location, flash rate, and operational parameters unless modified herein by this special provision. The RRFB assembly shall be programmable to allow the IDOT Traffic Engineer to set the duration of the flashing beacon display based on the crossing time requirements established in the MUTCD. The Contractor shall furnish and install two direction RRFB units with far side indicator light mounted to the sign structure as indicated on the plans. The RRFB shall be rated for Class I light intensity output according to the Society of Automotive Engineers (SAE) Standard J595 with a 15-year life expectancy. The minimum size of the LED beacon shall be 7 inches x 3 inches. The RRFB shall

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be able to be seen at least 1,000 feet in advance of the crossing during the day. During the night time hours, the RRFB shall be equipped with an automatic dimming feature. The RRFB shall have an operating temperature meeting NEMA specifications.

**Power Supply:** The installation shall be solar powered power supply.

Solar Power Supply: The solar power supply shall be easy to install, fully self-contained weather, corrosion, and vandal-resistant, with a UV-resistant solar panel. The solar power supply shall be power autonomous without need of an external power supply. The batteries shall be sealed, maintenance free, and field-replaceable independently of other components. The battery pack shall have a minimum rated lifespan of three years. The power supply system shall have the capacity to operate the RRFB for 30 days at a normal use of 400 activations of 30 seconds per day without solar charging. The RRFB shall have an automatic light control to provide useful light during extreme conditions that prevent charging over an extended period of time. The manufacturer shall provide documentation for each installation consisting of solar power calculations to verify load, duty cycle and battery capacity based on location.

The solar panel shall be installed at the highest point on the assembly structure, or as directed by the Engineer, and away from the travelled way. The solar panel shall be installed at an angle specified by the manufacturer facing the equator (due south) with a full unobstructed solar exposure for optimum performance of the system, or as recommended by the manufacturer and directed by the Engineer. If batteries are to be installed in a separate cabinet, the cabinet shall be a minimum of seven feet above the ground and located on the post as to be not over the sidewalk, bike path or trail.

**Controller:** The RRFB controller shall meet the requirements of Section 858 of the "Standard Specifications" and as modified herein:

Power Options: The controller unit shall be solar-powered.

Controller to Controller Communication: At each location all installed RRFB assemblies shall communicate wirelessly using an unlicensed radio band so as to simultaneously commence operation of their alternating rapid flashing indications and cease operation simultaneously. The communication equipment shall comply with FCC requirements and the vendor representative shall field test the equipment prior to placing the units in operation to demonstrate the RRFBs ability to achieve proper operation under the requirements of FHWA Memorandum IA-11and all subsequent interpretation letters. Up to 10 optional RF channels shall be available to allow multiple RRFB Systems to operate within close proximity of each other.

C. Timing: The controller shall provide the full programmed timing upon all push button activations.

**Traffic Signal Post:** The traffic signal post shall meet the requirements of Section 875 of the "Standard Specifications" for traffic signal post or traffic signal post, special, as shown on the plans.

Foundation: The traffic signal post foundation may be either concrete or metal.

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Concrete Foundation: If used the concrete foundation shall meet the requirements of Section 878 of the "Standard Specifications".

Light Pole Foundation Metal: If used the metal foundation shall meet the requirements of Section 836 of the "Standard Specifications".

**Pedestrian Push Button:** The pedestrian push button shall meet the requirements of Section 888 of the "Standard Specifications".

**Signs:** Each RRFB assembly shall include two crossing signs (W11-1, W11-2, W11-15 or S1-1) 36 inch x 36 inch dimension, two diagonal downward pointing arrow (W16-7P) plaques 24 inch x 12 inch dimension, mounted back-to-back and a R10-25 9 inch x 12 inch dimension, mounted as part of or above the pedestrian push button. The W-series sign panels shall be manufactured with fluorescent yellow green type ZZ sheeting meeting the requirements of BDE Special Provision "RETROREFLECTIVE SHEETING FOR HIGHWAY SIGNS". The R-series signs shall be manufactured with type AP sheeting meeting the requirements of Section 1091 of the "Standard Specifications" and shall be vandal resistant. All signs shall meet the latest requirements of the MUTCD.

Warranty: See manufacturer's warranty.

**Installation:** The RRFB Assembly (Complete) shall be installed strictly according to the manufacturer's recommendations, the applicable portions of the "Standard Specifications", as shown on the plans, and/or as directed by the Engineer.

The final elevation and location of the beacons shall be approved by the Engineer prior to the Contractor beginning work.

**Basis of Payment:** This work shall be measured and paid for at the contract unit price for EACH for SOLAR-POWERED FLASHING BEACON ASSEMBLY (COMPLETE). The unit price shall include all labor, equipment, materials and documentation required to furnish and install the RRFB assembly complete with power supply; traffic signal post; foundation; pedestrian push button; warning signs and plaques; controller and cabinet; wireless communication equipment; and mounting hardware.

#### STABILIZED CONSTRUCTION ENTRANCE

Effective: April 1, 2011 Revised: April 14, 2016

**Description**: This work shall consist of constructing a stabilized construction entrance, including furnishing, installing, maintaining and removing a stabilized pad of aggregate underlain with filter fabric, as shown on the plans or directed by the Engineer.

Materials: The materials used shall meet the requirements of the following:

Aggregate: The aggregate shall be limited to IDOT Coarse Aggregate Gradations CA-1, CA-2, CA-3, or CA-4.

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Filter Fabric: The filter fabric shall be made of synthetic polymers composed of at least 85 percent by weight polypropylene, polyesters, polyamides, polyethylene, polyolefins, or polyvinylidene-chlorides. The geotextile shall be free of any chemical treatment or coating that significantly reduces its porosity. Fibers shall contain stabilizers and/or inhibitors to enhance resistance to ultraviolet lights.

**Construction Requirements:** The aggregate shall be at least six inches thick. The aggregate shall not be placed until the entrance area has been inspected and approved by the Engineer.

The aggregate shall be dumped and spread into place in approximately horizontal layers. The layer(s) shall not exceed three feet in thickness. The aggregate shall be placed in such a manner as to produce a reasonably homogeneous stable fill that contains no segregated pockets of larger or small fragments or large unfilled space caused by bridging of larger fragments. No compaction shall be required beyond that resulting from the placing and spreading operations.

The construction entrance shall have a minimum width of 14 feet and a minimum length of 50 feet.

All surface water flowing or diverted toward the construction entrance shall be piped across the entrance. Any pipe used for this will be considered included in the unit price for STABILIZED CONSTRUCTION ENTRANCE. The stabilized construction entrance shall have a positive drainage away from the roadway.

The entrance shall remain in place and be maintained until the disturbed area is stabilized. Any sediment spilled onto public right-of-way(s) shall be removed immediately. All removed materials shall be disposed of outside the limits of the right-of-way according to Article 202.03 of the "Standard Specifications" and/or as directed by the Engineer.

Construction entrances crossing curb and gutter, sidewalks, HMA shoulders, and/or other roadway appurtenances shall include protection for these items. The cost of such protection shall be included in the unit price for STABILIZED CONSTRUCTION ENTRANCE. If any of the appurtenances are damaged by the Contractor, they shall be repaired or replaced to the Engineer's satisfaction at the Contractor's cost.

**Method of Payment**: The Stabilized Construction Entrance will be measured in place and the area computed in square yards.

Basis of Payment: The work will be paid for at the contract unit price per square yard for STABILIZED CONSTRUCTION ENTRANCE. The unit price shall include all material, labor, equipment and any other items required to complete the construction entrance.

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#### STONE RIPRAP, CLASS 4A (SPECIAL)

#### General

Work includes all material, labor and equipment to furnish and place stone riprap at the locations and in the dimensions as shown on the construction drawings and details.

#### Material

Riprap shall be placed in accordance with Article 281 of the IDOT Standard Specifications with the following modifications:

- 1. The riprap shall be natural field stone cobbles and boulders reasonably graded from six (6) to twelve (12) inches in diameter
- 2. The cobbles shall be of mixed geologic origin primarily granite, as is typically found in the Fox River basin of northern Illinois in glacial deposits of central Wisconsin.
- Crushed limestone riprap is not acceptable and will not be approved.
- 4. Samples of the specified material shall be submitted for approval to the Owner prior to delivery and placement.
- 5. Riprap shall include appropriate geotextile fabric when specified on the construction plans.

#### Execution

- 1. The contractor shall excavate the location as noted on the construction drawings for stone riprap to a bedding depth as specified in the drawings.
- 2. The contractor shall take care to preserve the surrounding areas.
- 3. The contractor shall line bedding area with geotextile fabric as specified in the drawings.
- 4. The contractor shall place stone riprap in accordance with section 281 of the IDOT Standard Specifications

Basis of Payment: This work will be paid for at the contract unit price per SQUARE YARD for STONE RIPRAP, CLASS A4 (SPECIAL) of the class specified, which price shall include all labor, material including geotextile fabric, and equipment necessary to complete the work.

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## SEED MIXTURE ZONE A

#### General

Work includes all material, labor and equipment to furnish and place seeding at the locations as shown on the construction drawings and details.

#### SEED MIXTURE ZONE A (LCFP LOW MAINTENANCE MIX)

| SPECIES OR MIX    | RATE (LBS./A) | % +/- |
|-------------------|---------------|-------|
| Fine Fescue Mix   | 200           | 80%   |
| Perennial Rye Mix | 50            | 20%   |
| TOTAL             | 250           | 100%  |

- a. Fine Fescue Mix shall be a blend of creeping red, chewings, hard and sheep's fescue; acceptable commercial blends include Highlands Fescue Mix, Legend Fine Fescue Blend and Greenskeeper National Links Mixture.
- b. Perennial Rye Mix shall be a blend of at least three improved cultivars selected for disease resistance.

#### **Materials**

- A. Prior to delivery of any materials to the site, submit a complete list of all seed to be used during this portion of the work. Include complete data on source, quantity and quality. Seed shall not be delivered to project site until this submittal has been approved by the Engineer.
- B. The Contractor shall provide all seed in original unopened bags as mixed by the supplier. Each bag shall bear the supplier's guarantee of composition and percentage of purity and germination. Each bag shall list the botanical, common and cultivar names of each species, percentage of species mix, year of production and packaging, seed origin and net weight. Seed shall be protected against leakage, damage and moisture to insure viability and dormancy. No seed shall be sown until the Engineer has inspected and approved the unopened seed mix bags.
- C. Fertilizer for Seed Mixture Zone A (LCFP Low Maintenance Mix) shall have a balanced nitrogen-phosphorous-potassium composition (such as 20-20-20) with a minimum of 50% of the nitrogen component being slow release. Provide fertilizer in original unopened bags from the manufacturer showing complete analysis of nitrogen, phosphorous, potassium, minor elements and major element source types.

#### Execution

A. Seed bed preparation shall not begin until all other site work, topsoil spreading and finish grading have been completed.

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- B. All areas to be seeded shall be inspected and approved by the Engineer prior to the sowing of seed.
- C. Surfaces to be seeded shall be loose and friable to a minimum depth of 3 inches. Hard and compacted surfaces are not acceptable and must be tilled and raked to provide a suitable seed bed. Any rocks, soil cods or other debris greater than 1 ½" in diameter that is generated shall be removed and disposed. The prepared surface shall be free from crusting and caking.
- D. The specified fertilizer shall be applied a rate of 2 pounds of Nitrogen per 1000 square feet or 87 pounds of Nitrogen per acre using a calibrated drop spreader or other mechanical method that will result in uniform coverage. Application of the fertilizer by hand is not acceptable.
- E. Fertilizer shall be applied prior to seeding. No fertilizer shall be applied until the Engineer has inspected and approved the products. Fertilization shall be considered incidental to the seeding work and no additional compensation is due.
- F. Seed Mixture Zone A shall be sown in using of the following methods:
  - 1. Using mechanical equipment which places the seed in direct contact with the soil, covers or packs the seed and rolls the seed bed to a firm condition in one continuous operation. Seed shall be sown in two passes; the second pass oriented approximately 45 degrees from the first pass. In restricted width areas, seed shall be sown in two passes of approximately the same direction. All seeding equipment shall be approved by the Engineer prior to seeding. Use of any seeding equipment which does not include a roller or cultipacker attachment will require the Contractor to perform rolling or cultipacking of the seed bed in a separate operation. Seeding equipment shall be properly calibrated to the required seeding rates.
  - Using a broadcast seeding method where the seed shall be deposited using a dedicated broadcast spreader. Hand cast seeding shall not be acceptable. After all seed has been broadcast the contractor shall rake and roll the area to assure proper seeding depth and soil contact.
- G. Seeding of Seed Mix Zone A seed mix is recommended to be performed between April 1 and May 15 or from August 1 and September 15. The Contractor may elect to perform this seeding immediately after work progress allows; however, all responsibility for supplemental watering to stimulate germination and growth shall rest with the Contractor. Guaranty and maintenance requirements as specified herein are not changed or relieved by the timing of seeding.
- H. LCFP Turf Mixes: Maintain a mowed height of 3" until achieving the performance and guaranty criteria for seeded areas. Mow turf promptly when it reaches a height of 6" in height.

#### Guaranty

 Seed Beds: Upon completion of seeding operations, the Contractor shall become responsible for protecting the seeded areas from any damage resulting from foot

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or vehicle traffic, vandalism or weather. When possible, isolate and contain the completed areas with temporary fencing. Erosion or soil subsidence caused by rain shall be repaired to the original grade, prepared for seed, reseeded and the appropriate erosion control product reapplied. Any damage which occurs before achieving the performance and guaranty criteria shall be repaired to original specifications by the Contractor at no additional expense.

J. LCFP Turf Mixes: Seeded areas shall have a minimum of 90% ground coverage with active growth and no bare ground greater than two square feet before final acceptance. An initial inspection to determine ground coverage shall occur approximately 120 days after the original seeding, excluding the winter months of November through March, unless the acceptance conditions are met earlier. At that time the seeded areas shall be evaluated for coverage and condition and if not acceptable a remedial action shall be determined. These remedial actions shall be solely at the cost of the Contractor. If additional seeding is needed, the Contractor shall promptly remove any erosion control blanket or hydromulch and reseed the bare areas according to the specifications as necessary until the minimum coverage is achieved. When weed species interfere with proper turf establishment, the contractor shall apply an appropriate herbicide to reduce the competition. After each reseeding, the Contractor shall reinstall new erosion control blanket or reapply hydromulch as originally indicated on the plans

Basis of Payment: This work will be paid for at the contract unit price for ACRE for SEED MIXTURE ZONE A, which price shall include all labor, materials, and equipment necessary to complete the work as specified herein.

#### **SEED MIXTURE ZONE B**

#### General

Work includes all material, labor and equipment to furnish and place seeding at the locations as shown on the construction drawings and details.

## SEED MIXTURE ZONE B (LCFP BASIC PRAIRIE)

| COVER CROP             | (LBS/A  |
|------------------------|---------|
| Annual Rye             | 10      |
| Spring Oats            | 32      |
| SUBTOTAL               | 42      |
| NATIVE GRASSES         | (LBS/A) |
| Elymus canadesis       | 3.5     |
| Panicum virgatum       | 1.25    |
| Bouteloua curtipendula | 3       |
| Andropogon scoparius   | 1.25    |

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| Andropogon gerardii |          | .5     |          |
|---------------------|----------|--------|----------|
| Sorghastrum nutans  |          | .5     |          |
|                     | SUBTOTAL | 10 lbs | <u> </u> |

| NATIVE FORBS             | OZ./A        |
|--------------------------|--------------|
| Aster laevis             | 5            |
| Aster novae-angliae      | 1            |
| Desmodium canadense      | 10           |
| Echinacea pallida        | 14           |
| Eupatorium purpureum     | 2            |
| Liatris pycnostachya     | 6            |
| Monarda fistulosa        | 1.9          |
| Penstemon digitalis      | 1            |
| Petalostemum purpureum   | 8            |
| Pychanthemum virginianum | .5           |
| Ratibida pinnata         | 4            |
| Rudbeckia hirta          | 2            |
| Rudbeckia subtomentosa   | 4            |
| Solidago speciose        | 1            |
| Veronicastrum virginicum | .1           |
| SUBTOTAL                 | 60 (3.5 lbs) |

#### **Materials**

- A. All cover crop shall be delivered separate from the native seed I order to accommodate seeding times which require separate seeding times for native and cover crop seed. For seeding after August 1, substitute 15 additional pounds of annual rye (25 pounds total) for 32 pounds of spring oats as cover crop.
- B. All native seed shall be provided as Pure Live Seed (PLS). Any seed that is not available as PLS shall be tested for purity. Any seed that is provided at less than 100% purity must be increased in quantity to achieve the required PLS seed weight.
- C. All legume species shall be provided with the appropriate bacterium inoculants.
- D. All species except Elymus canadensis shall be de-fluffed, de-hulled or otherwise cleaned as close to the bare caryopsis as possible without damaging seed viability.

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E. Seed shall be provided unmixed or blended and packaged according to the desired segregation of seed sizes for use with the required seed drill equipment. A minimum of two seed size classes are generally required.

#### Execution

- A. Seed bed preparation shall not begin until all other site work, topsoil spreading and finish grading have been completed.
- B. All areas to be seeded shall be inspected and approved by the Engineer prior to the sowing of seed.
- C. Surfaces to be seeded shall be loose and friable to a minimum depth of 3 inches. Hard and compacted surfaces are not acceptable and must be tilled and raked to provide a suitable seed bed. Any rocks, soil cods or other debris greater than 1 ½" in diameter that is generated shall be removed and disposed. The prepared surface shall be free from crusting and caking.
- D. No fertilizer shall be applied in areas designated for Seed Mixture Zone B.
- E. Seed Mixture Zone B and other native seed mixes may be sown by broadcast method or with a mechanical drill seeder. When a broadcast seeding method is used the seed shall be deposited using only a dedicated broadcast spreader. Hand cast seeding shall not be acceptable. The seed shall be broadcast in two passes approximately 90\* from each other. The Engineer may require that the seed be segregated by size or species and broadcast in separate passes. A carrier material such as sand may be required to be mixed with very fine seeds to improve distribution. When seed is broadcast prior to October 1, after all seed has been broadcast the contractor shall rake and roll the area to assure proper seeding depth and soil contact. When mechanical drill seeders are used, they shall be of the type specifically designed for native seed installation (such as those by Truax, Tye or John Deere) which utilizes multiple seed boxes to segregate seed species by size and places the various seeds at the proper planting depth. The seeder shall be equipped with separate drop tubes for each seed size, discs to open the seed furrows and a packer assembly to compact the soil directly over the seed.
- F. Seeding of Seed Mixture Zone B with the included cover crop may be performed between March 1 and June 1. For seeding between June 1 and October 1, only the cover crop shall be sown, with the native grasses and forbs sown during a second drilling operation after October 1. For seeding after October 1, the cover crop shall be installed separately the following spring. The Contractor may elect to perform this seeding immediately after work progress allows; however, seeding out of season may result in inferior germination. Guaranty and maintenance requirements as specified herein are not changed or relieved by the timing of seeding.
- G. Upon completion of seeding operations, the Contractor shall become responsible for protecting the seeded areas from any damage resulting from foot or vehicle traffic, vandalism or weather. When possible, isolate and contain the completed areas with temporary fencing. Erosion or soil subsidence caused by rain shall be

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repaired to the original grade, prepared for seed, reseeded and the appropriate erosion control product reapplied. Any damage which occurs before achieving the performance and guaranty criteria shall be repaired to original specifications by the Contractor at no additional expense.

- H. Seed Mixture Zone B areas shall be mown to a height of 6" when cover crop species or weeds reach 10-12" in height until achieving the performance and guaranty criteria for seeded areas. All mowing shall be incidental to the project and no further payment is due.
- Cover crop species shall have a minimum of 70% ground coverage with active growth and no bare ground greater than twenty-five (25) square feet before final acceptance. This minimum ground coverage shall be achieved within 90 days of the original seeding. After 90 days the seeded areas shall be evaluated for coverage and if not acceptable, additional cover crop shall be installed to fill bare areas. This additional seeding shall be solely at the cost of the Contractor.
- An inspection for presence and coverage of native species shall be conducted depending on the time of original seeding. For seeding performed between October 1 and February 1, the inspection shall occur at the end of the first growing season. For seeding performed between February 1 and June 1, the inspection shall occur the following June. At the time of inspection, the minimum native seed germination shall be three (3) grass species and five (5) forb species and these species shall be present on a minimum of 50% of the site for final acceptance. If these germination and coverage requirements are not met, then a second seeding shall be performed with the original specified seed mix. This second seeding shall be performed between October 1 and February 1 following the inspection and shall be solely at the cost of the Contractor. No further guaranty shall be required after the second seeding.

Basis of Payment: This work will be paid for at the contract unit price for ACRE for SEED MIXTURE ZONE B, which price shall include all labor, materials, and equipment necessary to complete the work.

#### SEED MIXTURE ZONE C

#### General

Work includes all material, labor and equipment to furnish and place seeding at the locations as shown on the construction drawings and details.

## SEED MIXTURE ZONE C (WAUKEGAN PARK DISTRICT MIX)

#### Conserve FS Sunny Mix

- 90/85 Kentucky Bluegrass
- Fine perennial Rye Grass VNS
- Creeping Red Fescue VNS

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a. CONSERV FS SUNNY MIX shall be installed at rate of 8-10 lbs./1,000 SF per manufacturer's recommendation

#### **Materials**

- A. Prior to delivery of any materials to the site, submit a complete list of all seed to be used during this portion of the work. Include complete data on source, quantity and quality. Seed shall not be delivered to project site until this submittal has been approved by the Engineer.
- B. The Contractor shall provide all seed in original unopened bags as mixed by the supplier. Each bag shall bear the supplier's guarantee of composition and percentage of purity and germination. Each bag shall list the botanical, common and cultivar names of each species, percentage of species mix, year of production and packaging, seed origin and net weight. Seed shall be protected against leakage, damage and moisture to insure viability and dormancy. No seed shall be sown until the Engineer has inspected and approved the unopened seed mix bags.
- C. Fertilizer for Seed Mixture Zone C (LCFP Low Maintenance Mix) shall have a balanced nitrogen-phosphorous-potassium composition (such as 20-20-20) with a minimum of 50% of the nitrogen component being slow release. Provide fertilizer in original unopened bags from the manufacturer showing complete analysis of nitrogen, phosphorous, potassium, minor elements and major element source types.

#### Execution

- A. Seed bed preparation shall not begin until all other site work, topsoil spreading and finish grading have been completed.
- B. All areas to be seeded shall be inspected and approved by the Engineer prior to the sowing of seed.
- C. Surfaces to be seeded shall be loose and friable to a minimum depth of 3 inches. Hard and compacted surfaces are not acceptable and must be tilled and raked to provide a suitable seed bed. Any rocks, soil cods or other debris greater than 1 ½" in diameter that is generated shall be removed and disposed. The prepared surface shall be free from crusting and caking.
- D. The specified fertilizer shall be applied a rate of 2 pounds of Nitrogen per 1000 square feet or 87 pounds of Nitrogen per acre using a calibrated drop spreader or other mechanical method that will result in uniform coverage. Application of the fertilizer by hand is not acceptable.
- E. Fertilizer shall be applied prior to seeding. No fertilizer shall be applied until the Engineer has inspected and approved the products. Fertilization shall be considered incidental to the seeding work and no additional compensation is due.
- F. Seed Mixture Zone A shall be sown in using of the following methods:
  - Using mechanical equipment which places the seed in direct contact with the soil, covers or packs the seed and rolls the seed bed to a firm condition in one continuous operation. Seed shall be sown in two passes;

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the second pass oriented approximately 45 degrees from the first pass. In restricted width areas, seed shall be sown in two passes of approximately the same direction. All seeding equipment shall be approved by the Engineer prior to seeding. Use of any seeding equipment which does not include a roller or cultipacker attachment will require the Contractor to perform rolling or cultipacking of the seed bed in a separate operation. Seeding equipment shall be properly calibrated to the required seeding rates.

- 2. Using a broadcast seeding method where the seed shall be deposited using a dedicated broadcast spreader. Hand cast seeding shall not be acceptable. After all seed has been broadcast the contractor shall rake and roll the area to assure proper seeding depth and soil contact.
- G. Seeding of Seed Mix Zone A seed mix is recommended to be performed between April 1 and May 15 or from August 1 and September 15. The Contractor may elect to perform this seeding immediately after work progress allows; however, all responsibility for supplemental watering to stimulate germination and growth shall rest with the Contractor. Guaranty and maintenance requirements as specified herein are not changed or relieved by the timing of seeding.
- H. LCFP Turf Mixes: Maintain a mowed height of 3" until achieving the performance and guaranty criteria for seeded areas. Mow turf promptly when it reaches a height of 6" in height.

#### Guaranty

- I. Seed Beds: Upon completion of seeding operations, the Contractor shall become responsible for protecting the seeded areas from any damage resulting from foot or vehicle traffic, vandalism or weather. When possible, isolate and contain the completed areas with temporary fencing. Erosion or soil subsidence caused by rain shall be repaired to the original grade, prepared for seed, reseeded and the appropriate erosion control product reapplied. Any damage which occurs before achieving the performance and guaranty criteria shall be repaired to original specifications by the Contractor at no additional expense.
- J. LCFP Turf Mixes: Seeded areas shall have a minimum of 90% ground coverage with active growth and no bare ground greater than two square feet before final acceptance. An initial inspection to determine ground coverage shall occur approximately 120 days after the original seeding, excluding the winter months of November through March, unless the acceptance conditions are met earlier. At that time the seeded areas shall be evaluated for coverage and condition and if not acceptable a remedial action shall be determined. These remedial actions shall be solely at the cost of the Contractor. If additional seeding is needed, the Contractor shall promptly remove any erosion control blanket or hydromulch and reseed the bare areas according to the specifications as necessary until the minimum coverage is achieved. When weed species interfere with proper turf establishment, the contractor shall apply an appropriate herbicide to reduce the

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competition. After each reseeding, the Contractor shall reinstall new erosion control blanket or reapply hydromulch as originally indicated on the plans

Basis of Payment: This work will be paid for at the contract unit price for ACRE for SEED MIXTURE ZONE C, which price shall include all labor, materials, and equipment necessary to complete the work as specified herein.

## RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM

Effective: May 22, 2002 Revised: July 1, 2015

800.03TS

#### Description.

This work shall consist of re-optimizing a closed loop traffic signal system according to the following Levels of work.

LEVEL I applies when improvements are made to an existing signalized intersection within an existing closed loop traffic signal system. The purpose of this work is to integrate the improvements to the subject intersection into the signal system while minimizing the impacts to the existing system operation. This type of work would be commonly associated with the addition of signal phases, pedestrian phases, or improvements that do not affect the capacity at an intersection.

LEVEL II applies when improvements are made to an existing signalized intersection within an existing closed loop traffic signal system and detailed analysis of the intersection operation is desired by the engineer, or when a new signalized or existing signalized intersection is being added to an existing system, but optimization of the entire system is not required. The purpose of this work is to optimize the subject intersection, while integrating it into the existing signal system with limited impact to the system operations. This item also includes an evaluation of the overall system operation, including the traffic responsive program.

For the purposes of re-optimization work, an intersection shall include all traffic movements operated by the subject controller and cabinet.

After the signal improvements are completed, the signal shall be re-optimized as specified by an approved Consultant who has previous experience in optimizing Closed Loop Traffic Signal Systems for District One of the Illinois Department of Transportation. The Contractor shall contact the Traffic Signal Engineer at (847) 705-4424 for a listing of approved Consultants. Traffic signal system optimization work, including fine-tuning adjustments of the optimized system, shall follow the requirements stated in the most recent IDOT District 1 SCAT Guidelines, except as note herein.

A listing of existing signal equipment, interconnect information, phasing data, and timing patterns may be obtained from the Department, if available and as appropriate. The existing SCAT Report is available for review at the District One office and if the Consultant provides blank computer discs, copies of computer simulation files for the existing optimized system and a timing database will be made for the Consultant. The Consultant shall confer with the Traffic

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Signal Engineer prior to optimizing the system to determine if any extraordinary conditions exist that would affect traffic flows in the vicinity of the system, in which case, the Consultant may be instructed to wait until the conditions return to normal or to follow specific instructions regarding the optimization.

## (a) LEVEL I Re-Optimization

- 1. The following tasks are associated with LEVEL I Re-Optimization.
  - a. Appropriate signal timings shall be developed for the subject intersection and existing timings shall be utilized for the rest of the intersections in the system.
  - b. Proposed signal timing plan for the modified intersection(s) shall be forwarded to IDOT for review prior to implementation.
  - c. Consultant shall conduct on-site implementation of the timings at the turn-on and make fine-tuning adjustments to the timings of the subject intersection in the field to alleviate observed adverse operating conditions and to enhance operations. The consultant shall respond to IDOT comments and public complaints for a minimum period of 60 days from date of timing plan implementation.
- 2. The following deliverables shall be provided for LEVEL I Re-Optimization.
  - a. Consultant shall furnish to IDOT a cover letter describing the extent of the reoptimization work performed.
  - b. Consultant shall furnish an updated intersection graphic display for the subject intersection to IDOT and to IDOT's Traffic Signal Maintenance Contractor.

## (b) LEVEL II Re-Optimization

- 1. In addition to the requirements described in the LEVEL I Re-Optimization above, the following tasks are associated with LEVEL II Re-Optimization.
  - a. Traffic counts shall be taken at the subject intersection(s) after the traffic signals are approved for operation by the Area Traffic Signal Operations Engineer. 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 on a Saturday and/or Sunday, as directed by the Engineer, to account for special traffic generators such as shopping centers, educational institutes and special event facilities. The turning movement counts shall identify cars, and single-unit, multi-unit heavy vehicles, and transit buses.
  - As necessary, the intersection(s) shall be re-addressed and all system detectors reassigned in the master controller according to the current standard of District One.
  - c. 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.
- 2. The following deliverables shall be provided for LEVEL II Re-Optimization.
  - a. Consultant shall furnish to IDOT one (1) copy of a 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, approved optimization software file)

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- (3) Printed copies of the traffic counts conducted at the subject intersectionb. Consultant shall furnish to IDOT two (2) CDs 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 the new signal and the rest of the signals in the closed loop system
  - (3) Traffic counts conducted at the subject intersection(s)
  - (4) New or updated intersection(s) graphic display file for the subject intersection(s)
  - (5) The CD shall be labeled with the IDOT system number and master location, 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 and front.

<u>Basis of Payment.</u> This work shall be paid for at the contract unit price each for RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL I or RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM – LEVEL II, which price shall be payment in full for performing all work described herein per intersection. Following completion of the timings and submittal of specified deliverables, 100 percent of the bid price will be paid. Each intersection will be paid for separately.

## SERVICE INSTALLATION (TRAFFIC SIGNALS)

Effective: May 22, 2002 Revised: June 15, 2016

805.01TS

Revise Section 805 of the Standard Specifications to read:

#### Description.

This work shall consist of all materials and labor required to install, modify, or extend the electric service installation. All installations shall meet the requirements of the "District One Standard Traffic Signal Design Details".

#### General.

The electric service installation shall be the electric service disconnecting means and it shall be identified as suitable for use as service equipment.

The electric utility contact information is noted on the plans and represents the current information at the time of contract preparation. The Contractor must request in writing for service and/or service modification within 10 days of contract award and must follow-up with the electric utility to assure all necessary documents and payment are received by the utility. The Contractor shall forward copies of all correspondence between the contractor and utility company to the Engineer and Area Traffic Signal Maintenance and Operations Engineer. The service agreement and sketch shall be submitted for signature to the IDOT's Traffic Operations Programs Engineer.

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#### Materials.

a. General. The completed control panel shall be constructed in accordance with UL Std. 508A, Industrial Control Panel, and carry the UL label. Wire terminations shall be UL listed.

#### b. Enclosures.

- 1. Pole Mounted Cabinet. The cabinet shall be UL 50, NEMA Type 4X, unfinished single door design, fabricated from minimum 0.080-inch (2.03 mm) thick Type 5052 H-32 aluminum. Seams shall be continuous welded and ground smooth. Stainless steel screws and clamps shall secure the cover and assure a watertight seal. The cover shall be removable by pulling the continuous stainless steel hinge pin. The cabinet shall have an oil-resistant gasket and a lock kit shall be provided with an internal O-ring in the locking mechanism assuring a watertight and dust-tight seal. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 14-inches (350 mm) high, 9-inches (225 mm) wide and 8-inches (200 mm) in depth is required. The cabinet shall be channel mounted to a wooden utility pole using assemblies recommended by the vendor.
- 2. Ground Mounted Cabinet. The cabinet shall be UL 50, NEMA Type 3R unfinished single door design with back panel. The cabinet shall be fabricated from Type 5052 H-32 aluminum with the frame and door 0.125-inch (3.175 mm) thick, the top 0.250-inch (6.350 mm) thick and the bottom 0.500-inch (12.70 mm) thick. Seams shall be continuous welded and ground smooth. The door and door opening shall be double flanged. The door shall be approximately 80% of the front surface, with a full length tamperproof stainless steel .075-inch (1.91 mm) thick hinge bolted to the cabinet with stainless steel carriage bolts and nylocks nuts. The locking mechanism shall be slam-latch type with a keyhole cover. The cabinet shall be sized to adequately house all required components with extra space for arrangement and termination of wiring. A minimum size of 40-inches (1000 mm) high, 16-inches (400 mm) wide and 15-inches (375 mm) in depth is required. The cabinet shall be mounted upon a square Type A concrete foundation as indicated on the plans. The foundation is paid for separately.
- 3. All enclosures shall include a green external power indicator LED light with circuitry as shown in the Electrical Service-Panel Diagram detail sheet. For pole mounted service enclosures, the power indicator light shall be mounted as shown in the detail. For ground mounted enclosures, the power indicator light shall be mounted on the side of the enclosure most visible from the major roadway.
- c. Electric Utility Meter Housing and Riser. The electric meter housing and meter socket shall be supplied and installed by the contractor. The contractor is to coordinate the work to be performed and the materials required with the utility company to make the final connection at the power source. Electric utility required

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risers, weather/service head and any other materials necessary for connection shall also be included in the pay item. Materials shall be in accordance with the electric utility's requirements. For ground-mounted service, the electric utility meter housing shall be mounted to the enclosure. The meter shall be supplied by the utility company. Metered service shall not be used unless specified in the plans.

- d. Surge Protector. Overvoltage protection, with LED indicator, shall be provided for the 120 volt load circuit by the means MOV and thermal fusing technology. The response time shall be <5n seconds and operate within a range of –40C to +85C. The surge protector shall be UL 1449 Listed.
- e. Circuit Breakers. Circuit breakers shall be standard UL listed molded case, thermal-magnetic bolt-on type circuit breakers with trip free indicating handles. 120 volt circuit breakers shall have an interrupting rating of not less than 65,000 rms symmetrical amperes. Unless otherwise indicated, the main disconnect circuit breaker for the traffic signal controller shall be rated 60 amperes, 120 V and the auxiliary circuit breakers shall be rated 10 amperes, 120 V.
- f. Fuses, Fuseholders and Power Indicating Light. Fuses shall be small-dimensional cylindrical fuses of the dual element time-delay type. The fuses shall be rated for 600 V AC and shall have a UL listed interrupting rating of not less than 10,000 rms symmetrical amperes at rated voltage. The power indicating light shall be LED type with a green colored lens and shall be energized when electric utility power is present.
- g. Ground and Neutral Bus Bars. A single copper ground and neutral bus bar, mounted on the equipment panel shall be provided. Ground and neutral conductors shall be separated on the bus bar. Compression lugs, plus 2 spare lugs, shall be sized to accommodate the cables with the heads of the connector screws painted green for ground connections and white for neutral connections.
- h. Utility Services Connection. The Contractor shall notify the Utility Company marketing representative a minimum of 30 working days prior to the anticipated date of hook-up. This 30 day advance notification will begin only after the Utility Company marketing representative has received service charge payments from the Contractor. Prior to contacting the Utility Company marketing representative for service connection, the service installation controller cabinet and cable must be installed for inspection by the Utility Company.
- Ground Rod. Ground rods shall be copper-clad steel, a minimum of 10 feet (3.0m) in length, and 3/4 inch (20mm) in diameter. Ground rod resistance measurements to ground shall be 25 ohms or less. If necessary additional rods shall be installed to meet resistance requirements at no additional cost to the contract.

#### Installation.

a. General. The Contractor shall confirm the orientation of the traffic service installation and its door side with the engineer, prior to installation. All conduit entrances into the service installation shall be sealed with a pliable waterproof material.

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b. Pole Mounted. Brackets designed for pole mounting shall be used. All mounting hardware shall be stainless steel. Mounting height shall be as noted on the plans or as directed by the Engineer.

c. Ground Mounted. The service installation shall be mounted plumb and level on the foundation and fastened to the anchor bolts with hot-dipped galvanized or stainless steel nuts and washers. The space between the bottom of the enclosure and the top of the foundation shall be caulked at the base with silicone.

#### Basis of Payment.

The service installation shall be paid for at the contract unit price each for SERVICE INSTALLATION of the type specified which shall be payment in full for furnishing and installing the service installation complete. The CONCRETE FOUNDATION, TYPE A, which includes the ground rod, shall be paid for separately. SERVICE INSTALLATION, POLE MOUNTED shall include the 3/4 inch (20mm) grounding conduit, ground rod, and pole mount assembly. Any charges by the utility companies shall be approved by the engineer and paid for as an addition to the contract according to Article 109.05 of the Standard Specifications.

## **GROUNDING OF TRAFFIC SIGNAL SYSTEMS**

Effective: May 22, 2002 Revised: July 1, 2015

806.01TS

Revise Section 806 of the Standard Specifications to read:

#### General.

All traffic signal systems, equipment and appurtenances shall be properly grounded in strict conformance with the NEC. This work shall be in accordance with IDOT's District One Traffic Signal Design Details.

The grounding electrode system shall include a ground rod installed with each traffic signal controller concrete foundation and all mast arm and post concrete foundations. An additional ground rod will be required at locations were measured resistance exceeds 25 ohms. Ground rods are included in the applicable concrete foundation or service installation pay item and will not be paid for separately.

Testing shall be according to Article 801.13 (a) (4) and (5).

- a) The grounded conductor (neutral conductor) shall be white color coded. This conductor shall be bonded to the equipment grounding conductor only at the Electric Service Installation. All power cables shall include one neutral conductor of the same size.
- b) The equipment grounding conductor shall be green color coded. The following is in addition to Article 801.04 of the Standard Specifications.

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 Equipment grounding conductors shall be bonded to the grounded conductor (neutral conductor) only at the Electric Service Installation. The equipment grounding conductor is paid for separately and shall be continuous. The Earth shall not be used as the equipment grounding conductor.

- 2) Equipment grounding conductors shall be bonded, using a UL Listed grounding connector, to all traffic signal mast arm poles, traffic signal posts, pedestrian posts, pull boxes, handhole frames and covers, conduits, and other metallic enclosures throughout the traffic signal wiring system, except where noted herein. Bonding shall be made with a splice and pigtail connection, using a sized compression type copper sleeve, sealant tape, and heat-shrinkable cap. A UL listed electrical joint compound shall be applied to all conductors' terminations, connector threads and contact points. Conduit grounding bushings shall be installed at all conduit terminations including spare or empty conduits.
- 3) All metallic and non-metallic raceways shall have a continuous equipment grounding conductor, except raceways containing only detector loop lead-in circuits, circuits under 50 volts and/or fiber optic cable will not be required to include an equipment grounding conductor.
- 4. Individual conductor splices in handholes shall be soldered and sealed with heat shrink. When necessary to maintain effective equipment grounding, a full cable heat shrink shall be provided over individual conductor heat shrinks.
- c) The grounding electrode conductor shall be similar to the equipment grounding conductor in color coding (green) and size. The grounding electrode conductor is used to connect the ground rod to the equipment grounding conductor and is bonded to ground rods via exothermic welding, UL listed pressure connectors, and UL listed clamps.

#### UNDERGROUND RACEWAYS

Effective: May 22, 2002 Revised: July 1, 2015

810.02TS

Revise Article 810.04 of the Standard Specifications to read:

"Installation. All underground conduits shall have a minimum depth of 30-inches (700 mm) below the finished grade."

Add the following to Article 810.04 of the Standard Specifications:

"All metal conduit installed underground shall be Rigid Steel Conduit unless otherwise indicated on the plans."

Add the following to Article 810.04 of the Standard Specifications:

"All raceways which extend outside of a structure or duct bank but are not terminated in a cabinet, junction box, pull box, handhole, post, pole, or pedestal

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shall extend a minimum or 300 mm (12") or the length shown on the plans beyond the structure or duct bank. The end of this extension shall be capped and sealed with a cap designed for the conduit to be capped.

The ends of rigid metal conduit to be capped shall be threaded, the threads protected with full galvanizing, and capped with a threaded galvanized steel cap.

The ends of rigid nonmetallic conduit and coilable nonmetallic conduit shall be capped with a rigid PVC cap of not less than 3 mm (0.125") thick. The cap shall be sealed to the conduit using a room-temperature-vulcanizing (RTV) sealant compatible with the material of both the cap and the conduit. A washer or similar metal ring shall be glued to the inside center of the cap with epoxy, and the pull cord shall be tied to this ring."

#### **ROD AND CLEAN EXISTING CONDUIT**

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

810.03TS

#### Description.

This work shall consist of inserting a duct rod or electrical fish rod or tape of sufficient length and rigidity into an electrical conduit opening in one electrical handhole, and pushing the said rod through the conduit to emerge at the next or subsequent handhole in the conduit system at the location(s) shown on the plans. The duct rod may be inserted and removed by any standard construction method which causes no damage to the conduit. The size of the conduit may vary, but there shall be no differentiation in cost for the size of the conduit.

The conduit which is to be rodded and cleaned may exist with various amounts of standing water in the handholes to drain the conduit and to afford compatible working conditions for the installation of the duct rods and/or cables. Pumping of handholes shall be included with the work of rodding and cleaning of the conduit.

Any handhole which, in the opinion of the Engineer contains excessive debris, dirt or other materials to the extent that conduit rodding and cleaning is not feasible, shall be cleaned at the Engineer's order and payment approval as a separate pay item.

Prior to removal of the duct rod, a duct cleaning attachment such as a properly sized wire brush or cleaning mandrel shall be attached to the duct rod, which by removal of the duct rod shall be pulled through the conduit to remove sand, grit, or other light obstructions from the duct to provide a clean, clear passage for the installation of cable. Whenever the installation of cables is not performed as an adjunct to or immediately following the cleaning of the duct, a light weight pulling line such as a 1/8" polyethylene line or conduit measuring tape shall be placed and shall remain in the conduit to facilitate future work. When great difficulty of either inserting the duct rod or removal of the cleaning mandrel is encountered, the duct may require further cleaning by use of a compressed air gun, or a low pressure water hose. In the case of a broken conduit, the conduit must be excavated and repaired. The existence and location of breaks in the conduit

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may be determined by rodding, but the excavation and repair work required will be paid for separately.

This work shall be measured per lineal foot for each conduit cleaned. Measurements shall be made from point to point horizontally. No vertical rises shall count in the measurement.

#### Basis of Payment.

This work shall be paid for at the contract unit price per lineal foot for ROD AND CLEAN EXISTING CONDUIT for the installation of new electric cables in existing conduits. Such price shall include the furnishing of all necessary tools, equipment, and materials required to prepare a conduit for the installation of cable.

#### **HANDHOLES**

Effective: January 01, 2002 Revised: July 1, 2015

814.01TS

#### Description.

Add the following to Section 814 of the Standard Specifications:

All conduits shall enter the handhole at a depth of 30 inches (762 mm) except for the conduits for detector loops when the handhole is less than 5 feet (1.52 m) from the detector loop. All conduit ends should be sealed with a waterproof sealant to prevent the entrance of contaminants into the handhole.

Steel cable hooks shall be coated with hot-dipped galvanization in accordance with AASHTO Specification M111. Hooks shall be a minimum of 1/2 inch (13 mm) diameter with two 90 degree bends and extend into the handhole at least 6 inches (152 mm). Hooks shall be placed a minimum of 12 inches (305 mm) below the lid or lower if additional space is required.

Precast round handholes shall not be used unless called out on the plans.

The cover of the handhole frame shall be labeled "Traffic Signals" with legible raised letters.

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, or precast concrete units. Heavy duty handholes shall be either cast-in-place or precast concrete 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."

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#### Cast-In-Place Handholes.

All cast-in-place handholes shall be concrete, with inside dimensions of 21-1/2 inches (546 mm) minimum. Frames and lid openings shall match this dimension.

For grounding purposes the handhole frame shall have provisions for a 7/16 inch (11 mm) diameter stainless steel bolt cast into the frame. The covers shall have a stainless steel threaded stint extended from the eye hook assembly for the purpose of attaching the grounding conductor to the handhole cover.

The minimum wall thickness for heavy duty hand holes shall be 12 inches (305mm).

#### Precast Round Handholes.

All precast handholes shall be concrete, with inside dimensions of 30 inches (762mm) diameter. Frames and covers shall have a minimum opening of 26 inches (660mm) and no larger than the inside diameter of the handhole.

For grounding purposes the handhole frame shall have provisions for a 7/16 inch (11 mm) diameter stainless steel bolt cast into the frame. For the purpose of attaching the grounding conductor to the handhole cover, the covers shall either have a 7/16 inch (11 mm) diameter stainless steel bolt cast into the cover or a stainless steel threaded stint extended from an eye hook assembly. A hole may be drilled for the bolt if one cannot be cast into the frame or cover. The head of the bolt shall be flush or lower than the top surface of the cover.

The minimum wall thickness for precast heavy duty hand holes shall be 6 inches (152 mm).

Precast round handholes shall be only produced by an approved precast vendor.

#### Materials.

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)."

#### **GROUNDING CABLE**

Effective: May 22, 2002 Revised: July 1, 2015

817.01TS

The cable shall meet the requirements of Section 817 of the "Standard Specifications," except for the following:

Add the following to Article 817.02 (b) of the Standard Specifications:

Unless otherwise noted on the Plans, traffic signal grounding conductor shall be one conductor, #6 gauge copper, with a green color coded XLP jacket.

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The traffic signal grounding conductor shall be bonded, using a UL Listed grounding connector to all proposed and existing traffic signal mast arm poles and traffic/pedestrian signal posts, including push button posts. The grounding conductor shall be bonded to all proposed and existing pull boxes, handhole frames and covers and other metallic enclosures throughout the traffic signal wiring system and noted herein and detailed on the plans. The grounding conductor shall be bonded to conduit terminations using rated grounding bushings. Bonding to existing handhole frames and covers shall be paid for separately.

Add the following to Article 817.05 of the Standard Specifications:

<u>Basis of Payment</u>. Grounding cable shall be measured in place for payment in foot (meter). Payment shall be at the contract unit price for ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C, which price includes all associated labor and material including grounding clamps, splicing, exothermic welds, grounding connectors, conduit grounding bushings, and other hardware.

## FIBER OPTIC TRACER CABLE

Effective: May 22, 2002 Revised: July 1, 2015

817.02TS

The cable shall meet the requirements of Section 817 of the Standard Specifications, except for the following:

Add the following to Article 817.03 of the Standard Specifications:

In order to trace the fiber optic cable after installation, the tracer cable shall be installed in the same conduit as the fiber optic cable in locations shown on the plans. The tracer cable shall be continuous, extended into the controller cabinet and terminated on a barrier type terminal strip mounted on the side wall of the controller cabinet. The barrier type terminal strip and tracer cable shall be clearly marked and identified. All tracer cable splices shall be kept to a minimum and shall incorporate maximum lengths of cable supplied by the manufacturer. The tracer cable will be allowed to be spliced at handholes only. The tracer cable splice shall use a Western Union Splice soldered with resin core flux and shall be soldered using a soldering iron. Blow torches or other devices which oxidize copper cable shall not be allowed for soldering operations. All exposed surfaces of the solder shall be smooth. The splice shall be covered with a black shrink tube meeting UL 224 guidelines, Type V and rated 600V, minimum length 4 inches (100 mm) and with a minimum 1 inch (25 mm) coverage over the XLP insulation, underwater grade.

Add the following to Article 817.05 of the Standard Specifications:

#### Basis of Payment.

The tracer cable shall be paid for separately as ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C per foot (meter), which price shall include all associated labor and material for installation.

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#### UNINTERRUPTABLE POWER SUPPLY, SPECIAL

Effective: January 1, 2013 Revised: May 19, 2016

862.01TS

This work shall be in accordance with section 862 of the Standard Specification except as modified herein

Add the following to Article 862.01 of the Standard Specifications:

The UPS shall have the power capacity to provide normal operation of a signalized intersection that utilizes all LED type signal head optics, for a minimum of 6 (six) hours.

Add the following to Article 862.02 of the Standard Specifications:

Materials shall be according to Article 1074.04 as modified in UNINTERRUPTABLE POWER SUPPLY, SPECIAL.

Add the following to Article 862.03 of the Standard Specifications:

The UPS shall additionally include, but not be limited to, a battery cabinet, where applicable. For Super-P (Type IV) and Super-R (Type V) cabinets, the battery cabinet is integrated to the traffic signal cabinet, and shall be included in the cost for the traffic signal cabinet of the size and type indicated on the plans.

The UPS shall provide reliable emergency power to the traffic signals in the event of a power failure or interruption.

Revise Article 862.04 of the Standard Specifications to read:

#### Installation.

When a UPS is installed at an existing traffic signal cabinet, the UPS cabinet shall partially rest on the lip of the existing controller cabinet foundation and be secured to the existing controller cabinet by means of at least four (4) stainless steel bolts. The UPS cabinet shall be completely enclosed with the bottom and back constructed of the same material as the cabinet.

When a UPS is installed at a new signal cabinet and foundation, it shall be mounted as shown on the plans.

At locations where UPS is installed and an Emergency Vehicle Priority System is in use, any existing incandescent confirmation beacons shall be replaced with LED lamps in accordance with the District One Emergency Vehicle Priority System specification at no additional cost to the contract. A concrete apron shall be provided and be in accordance with Articles 424 and 202 of the Standard Specifications. The concrete apron shall also, follow the District 1 Standard Traffic Signal Design Detail, Type D for Ground Mounted Controller Cabinet and UPS Battery Cabinet.

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This item shall include any required modifications to an existing traffic signal controller as a result of the addition of the UPS including the addition of alarms.

#### Materials.

Revise Article 1074.04(a)(1) of the Standard Specifications to read:

The UPS shall be line interactive or double conversion and provide voltage regulation and power conditioning when utilizing utility power. The UPS shall be sized appropriately for the intersection(s) normal traffic signal operating load. The UPS must be able to maintain the intersection's normal operating load plus 20 percent (20%) of the intersection's normal operating load. When installed at a railroad-interconnected intersection the UPS must maintain the railroad pre-emption load, plus 20 percent (20%) of the railroad pre-emption-operating load. The total connected traffic signal load shall not exceed the published ratings for the UPS.

The UPS shall provide a minimum of 6 (six) hours of normal operation run-time for signalized intersections with LED type signal head optics at 77 °F (25 °C) (minimum 1000 W active output capacity, with 86 percent minimum inverter efficiency).

Revise the first paragraph of Article 1074.04(a)(3) of the Standard Specifications to read:

The UPS shall have a minimum of four (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 or locking circular connectors, rated at a minimum 120 V/1 A, and labeled so as to identify each contact according to the plans.

Revise Article 1074.04(a)(10) of the Standard Specifications to read:

The UPS shall be compatible with the District's approved traffic controller assemblies utilizing NEMA TS 1 or NEMA TS 2 controllers and cabinet components for full time operation.

Revise Article 1074.04(a)(17) of the Standard Specifications to read:

When the intersection is in battery backup mode, the UPS shall bypass all internal cabinet lights, ventilation fans, cabinet heaters, service receptacles, luminaires, any lighted street name signs, any automated enforcement equipment and any other devices directed by the Engineer.

Revise Article 1074.04(b)(2)b of the Standard Specifications to read:

Batteries, inverter/charger and power transfer relay shall be housed in a separate NEMA Type 3R cabinet. The cabinet shall be Aluminum alloy, 5052-H32, 0.125-inch thick and have a natural mill finish.

Revise Article 1074.04(b)(2)c of the Standard Specifications to read:

No more than three batteries shall be mounted on individual shelves for a cabinet housing six batteries and no more than four batteries per shelf for a cabinet housing eight batteries.

Revise Article 1074.04(b)(2)e of the Standard Specifications to read:

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The battery cabinet housing shall have the following nominal outside dimensions: a width of 25 in. (785 mm), a depth of 16 in. (440 mm), and a height of 41 to 48 in. (1.1 to 1.3 m). Clearance between shelves shall be a minimum of 10 in. (250 mm).

End of paragraph 1074.04(b)(2)e

The door shall be equipped with a two position doorstop, one a 90° and one at 120°.

Revise Article 1074.04(b)(2)g of the Standard Specifications to read:

The door shall open to the entire cabinet, have a neoprene gasket, an Aluminum continuous piano hinge with stainless steel pin, and a three point locking system. The cabinet shall be provided with a main door lock which shall operate with a traffic industry conventional No. 2 key. Provisions for padlocking the door shall be provided.

Add the following to Article 1074.04(b)(2) of the Standard Specifications:

j. The battery cabinet shall have provisions for an external generator connection.

Add the following to Article 1074.04(c) of the Standard Specifications:

- (8) The UPS shall include a tip or kill switch installed in the battery cabinet, which shall completely disconnect power from the UPS when the switch is manually activated.
- (9) The UPS shall include standard RS-232 and internal Ethernet interface.
- (10) The UPS shall incorporate a flanged electric generator inlet for charging the batteries and operating the UPS. The generator connector shall be male type, twist-lock, rated as 15A, 125VAC with a NEMA L5-15P configuration and weatherproof lift cover plate. Access to the generator inlet shall be from a secured weatherproof lift cover plate or behind a locked battery cabinet police panel.
- (11) The bypass switch shall include an internal power transfer relay that allows removal of the battery back-up unit, while the traffic signal is connected to utility power, without impacting normal traffic signal operation.

Revise Article 1074.04(d)(3) of the Standard Specifications to read:

All batteries supplied in the UPS shall be either gel cell or AGM type, deep cycle, completely sealed, prismatic lead calcium based, silver alloy, valve regulated lead acid (VRLA) requiring no maintenance. All batteries in a UPS installation shall be the same type; mixing of gel cell and AGM types within a UPS installation is not permitted.

Revise Article 1074.04(d)(4) of the Standard Specifications to read:

Batteries shall be certified by the manufacturer to operate over a temperature range of -13 to 160 °F (-25 to + 71 °C) for gel cell batteries and -40 to 140 °F (-40 to + 60 °C) for AGM type batteries.

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Add the following to Article 1074.04(d) of the Standard Specifications:

- (9) The UPS shall consist of an even number of batteries that are capable of maintaining normal operation of the signalized intersection for a minimum of 6 (six) hours. Calculations shall be provided showing the number of batteries of the type supplied that are needed to satisfy this requirement. A minimum of four batteries shall be provided.
- (10) Battery Heater mats shall be provided, when gel cell type batteries are supplied.

Add the following to the Article 1074.04 of the Standard Specifications:

- (e) Warranty. The warranty for an uninterruptable power supply (UPS) and batteries (full replacement) shall cover a minimum of 5 years from date the equipment is placed in operation.
- (f) Installation. Bypass switch shall completely disconnect the traffic signal cabinet from the utility provider.
- (g) The UPS shall be set-up to run the traffic signal continuously, without going to a red flashing condition, when switched to battery power unless otherwise directed by the Engineer. The Contractor shall confirm set-up with the Engineer. The continuous operation mode when switched to battery may require modification to unit connections and these modifications are included in the unit price for this item.

Revise Article 862.05 of the Standard Specifications to read:

#### Basis of Payment.

This work will be paid for at the contract unit price per each for UNINTERRUPTABLE POWER SUPPLY, SPECIAL or UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL. Replacement of Emergency Vehicle Priority System confirmation beacons and any required modifications to the traffic signal controller shall be included in the cost of the UNINTERRUPTABLE POWER SUPPLY, SPECIAL or UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL item. The concrete apron and earth excavation required shall be included in the cost of the UNINTERRUPTABLE POWER SUPPLY AND CABINET, SPECIAL item.

## EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C

Effective: January 1, 2013 Revised: July 1, 2015

873.03TS

This work shall consist of furnishing and installing lead-in cable for light detectors installed at existing and/or proposed traffic signal installations as part of an emergency vehicle priority system. The work includes installation of the lead-in cables in existing and/or new conduit. The electric cable shall be shielded and have (3) stranded conductors, colored blue, orange, and yellow with a stranded tinned copper drain wire. The cable shall meet the requirements of the

vendor of the Emergency Vehicle Priority System Equipment.

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#### Basis of Payment.

This work will be paid for at the contract unit price per foot for EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C, which price shall be payment in full for furnishing, installing and making all electrical connections necessary for proper operations.

# LIGHT EMITTING DIODE (LED) SIGNAL HEAD AND OPTICALLY PROGRAMMED LED SIGNAL HEAD

Effective: May 22, 2002 Revised: July 1, 2015

880.01TS

#### Materials.

Add the following to Section 1078 of the Standard Specifications:

- LED modules proposed for use and not previously approved by IDOT District One will require independent testing for compliance to current VTCSH-ITE standards for the product and be Intertek ETL Verified. This would include modules from new vendors and new models from IDOT District One approved vendors.
- 2. The proposed independent testing facility shall be approved by IDOT District One. Independent testing must include a minimum of two (2) randomly selected modules of each type of module (i.e. ball, arrow, pedestrian, etc.) used in the District and include as a minimum Luminous Intensity and Chromaticity tests. However, complete module performance verification testing may be required by the Engineer to assure the accuracy of the vendor's published data and previous test results. An IDOT representative will select sample modules from the local warehouse and mark the modules for testing. Independent test results shall meet current ITE standards and vendor's published data. Any module failures shall require retesting of the module type. All costs associated with the selection of sample modules, testing, reporting, and retesting, if applicable, shall be the responsibility of the LED module vendor and not be a cost to this contract.
- 3. All signal heads shall provide 12" (300 mm) displays with glossy yellow or black polycarbonate housings. All head housings shall be the same color (yellow or black) at the intersection. For new signalized intersections and existing signalized intersections where all signals heads are being replaced, the proposed head housings shall be black. Where only selected heads are being replaced, the proposed head housing color (yellow or black) shall match existing head housings. Connecting hardware and mounting brackets shall be polycarbonate (black). A corrosion resistant anti-seize lubricant shall be applied to all metallic mounting bracket joints, and shall be visible to the inspector at the signal turn-on. Post top mounting collars are required on all posts, and shall be constructed of the same material as the brackets.
- 4. The LED signal modules shall be replaced or repaired if an LED signal module fails to function as intended due to workmanship or material defects within the first 7 years from the date of traffic signal TURN-ON. LED signal modules which exhibit luminous intensities less than the minimum values specified in Table 1 of the ITE Vehicle Traffic

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Control Signal Heads: Light Emitting Diode (LED) Circular Signal Supplement (June 27, 2005) [VTSCH], or applicable successor ITE specifications, or show signs of entrance of moisture or contaminants within the first <u>7 years</u> of the date of traffic signal TURN-ON shall be replaced or repaired. The vendor's written warranty for the LED signal modules shall be dated, signed by a vendor's representative and included in the product submittal to the State.

## (a) Physical and Mechanical Requirements

- 1. Modules can be manufactured under this specification for the following faces:
  - a. 12 inch (300 mm) circular, multi-section
  - b. 12 inch (300 mm) arrow, multi-section
- 2. The maximum weight of a module shall be 4 lbs. (1.8 kg).
- 3. Each module shall be a sealed unit to include all parts necessary for operation (a printed circuit board, power supply, a lens and gasket, etc.), and shall be weather proof after installation and connection.
- 5. The lens of the module shall be tinted with a wavelength-matched color to reduce sun phantom effect and enhance on/off contrast. The tinting shall be uniform across the lens face. Polymeric lens shall provide a surface coating or chemical surface treatment applied to provide abrasion resistance. The lens of the module shall be integral to the unit, convex with a smooth outer surface and made of plastic. The lens shall have a textured surface to reduce glare.
- 6. The use of tinting or other materials to enhance ON/OFF contrasts shall not affect chromaticity and shall be uniform across the face of the lens.
- 7. Each module shall have a symbol of the type of module (i.e. circle, arrow, etc.) in the color of the module. The symbol shall be 1 inch (25.4 mm) in diameter. Additionally, the color shall be written out in 1/2 inch (12.7mm) letters next to the symbol.

#### (b) Photometric Requirements

4. The LEDs utilized in the modules shall be AllnGaP technology for red and InGaN for green and amber indications, and shall be the ultra bright type rated for 100,000 hours of continuous operation from -40 °C to +74 °C.

#### (c) Electrical

- Maximum power consumption for LED modules is per Table 2.
- 2. Operating voltage of the modules shall be 120 VAC. All parameters shall be measured at this voltage.

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3. The modules shall be operationally compatible with currently used controller assemblies (solid state load switches, flashers, and conflict monitors).

- 4. When a current of 20 mA AC (or less) is applied to the unit, the voltage read across the two leads shall be 15 VAC or less.
- 5. The LED modules shall provide constant light output under power. Modules with dimming capabilities shall have the option disabled or set on a non-dimming operation.
- 6. LED arrows shall be wired such that a catastrophic loss or the failure of one or more LED will not result in the loss of the entire module.

#### (d) Retrofit Traffic Signal Module

- 1. The following specification requirements apply to the Retrofit module only. All general specifications apply unless specifically superseded in this section.
- 2. Retrofit modules can be manufactured under this specification for the following faces:
  - a. 12 inch (300 mm) circular, multi-section
  - b. 12 inch (300 mm) arrow, multi-section
- 3. Each Retrofit module shall be designed to be installed in the doorframe of a standard traffic signal housing. The Retrofit module shall be sealed in the doorframe with a one-piece EPDM (ethylene propylene rubber) gasket.
- 4. The maximum weight of a Retrofit module shall be 4 lbs. (1.8 kg).
- Each Retrofit module shall be a sealed unit to include all parts necessary for operation (a printed circuit board, power supply, a lens and gasket, etc.), and shall be weather proof after installation and connection.
- 6. Electrical conductors for modules, including Retrofit modules, shall be 39.4 inches (1m) in length, with quick disconnect terminals attached.
- 7. The lens of the Retrofit module shall be integral to the unit, shall be convex with a smooth outer surface and made of plastic or of glass.
- (e) The following specification requirements apply to the 12 inch (300 mm) arrow module only. All general specifications apply unless specifically superseded in this section.
  - The arrow module shall meet specifications stated in Section 9.01 of the Equipment and Material Standards of the Institute of Transportation Engineers (November 1998) [ITE Standards], Chapter 2 (Vehicle Traffic Control Signal Heads) or applicable successor ITE specifications for arrow indications.
  - 2. The LEDs arrow indication shall be a solid display with a minimum of three (3) outlining rows of LEDs and at least one (1) fill row of LEDs.

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(f) The following specification requirement applies to the 12 inch (300 mm) programmed visibility (PV) module only. All general specifications apply unless specifically superseded in this section.

1. The LED module shall be a module designed and constructed to be installed in a programmed visibility (PV) signal housing without modification to the housing.

#### Basis of Payment.

Add the following to the first paragraph of Article 880.04 of the Standard Specifications:

The price shall include furnishing the equipment described above, all mounting hardware and installing them in satisfactory operating condition.

Revise the second paragraph of Article 880.04 of the Standard Specifications to read:

If the work consists of retrofitting an existing polycarbonate traffic signal head with light emitting diodes (LEDs), it will be paid for as a SIGNAL HEAD, LED, RETROFIT, of the type specified, and of the particular kind of material, when specified. Price shall be payment in full for removal of the existing module, furnishing the equipment described above including LED modules, all mounting hardware, and installing them in satisfactory operating condition. The type specified will indicate the number of signal faces, the number of signal sections in each signal face and the method of mounting.

## LIGHT EMITTING DIODE (LED) PEDESTRIAN SIGNAL HEAD

Effective: May 22, 2002 Revised: July 1, 2015

881.01TS

Add the following to the third paragraph of Article 881.03 of the Standard Specifications:

No mixing of different types of pedestrian traffic signals or displays will be permitted.

Add the following to Article 881.03 of the Standard Specifications:

- (a) Pedestrian Countdown Signal Heads.
  - (1) Pedestrian Countdown Signal Heads shall not be installed at signalized intersections where traffic signals and railroad warning devices are interconnected.
  - (2) Pedestrian Countdown Signal Heads shall be 16 inch (406mm) x 18 inch (457mm), for single units with glossy yellow or black polycarbonate housings. All pedestrian head housings shall be the same color (yellow or black) at the intersection. For new signalized intersections and existing signalized intersections where all pedestrian heads are being replaced, the proposed head housings shall be black. Where only selected heads are being replaced, the proposed head housing color (yellow or black) shall match existing head housings. Connecting hardware and mounting brackets shall be

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polycarbonate (black). A corrosion resistant anti-seize lubricant shall be applied to all metallic mounting bracket joints, and shall be visible to the inspector at the signal turnon.

(3) Each pedestrian signal LED module shall be fully MUTCD compliant and shall consist of double overlay message combining full LED symbols of an Upraised Hand and a Walking Person. "Egg Crate" type sun shields are not permitted. Numerals shall measure 9 inches (229mm) in height and easily identified from a distance of 120 feet (36.6m).

#### Materials.

Add the following to Article 1078.02 of the Standard Specifications:

#### General.

- 1. The module shall operate in one mode: Clearance Cycle Countdown Mode Only. The countdown module shall display actual controller programmed clearance cycle and shall start counting when the flashing clearance signal turns on and shall countdown to "0" and turn off when the steady Upraised Hand (symbolizing Don't Walk) signal turns on. Module shall not have user accessible switches or controls for modification of cycle.
- 2. At power on, the module shall enter a single automatic learning cycle. During the automatic learning cycle, the countdown display shall remain dark.
- 3. The module shall re-program itself if it detects any increase or decrease of Pedestrian Timing. The counting unit will go blank once a change is detected and then take one complete pedestrian cycle (with no counter during this cycle) to adjust its buffer timer.
- 4. If the controller preempts during the Walking Person (symbolizing Walk), the countdown will follow the controller's directions and will adjust from Walking Person to flashing Upraised Hand. It will start to count down during the flashing Upraised Hand.
- 5. If the controller preempts during the flashing Upraised Hand, the countdown will continue to count down without interruption.
- 6. The next cycle, following the preemption event, shall use the correct, initially programmed values.
- 7. If the controller output displays Upraised Hand steady condition and the unit has not arrived to zero or if both the Upraised Hand and Walking Person are dark for some reason, the unit suspends any timing and the digits will go dark.
- 8. The digits will go dark for one pedestrian cycle after loss of power of more than 1.5 seconds.
- 9. The countdown numerals shall be two (2) "7 segment" digits forming the time display utilizing two rows of LEDs.

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10. The LED module shall meet the requirements of the Institute of Transportation Engineers (ITE) LED purchase specification, "Pedestrian Traffic Control Signal Indications - Part 2: LED Pedestrian Traffic Signal Modules," or applicable successor ITE specifications, except as modified herein.

- 11. The LED modules shall provide constant light output under power. Modules with dimming capabilities shall have the option disabled or set on a non-dimming operation.
- 12. In the event of a power outage, light output from the LED modules shall cease instantaneously.
- 13. The LEDs utilized in the modules shall be AllnGaP technology for Portland Orange (Countdown Numerals and Upraised Hand) and GaN technology for Lunar White (Walking Person) indications.
- 14. The individual LEDs shall be wired such that a catastrophic loss or the failure of one or more LED will not result in the loss of the entire module.

#### Basis of Payment.

Add the following to the first paragraph of Article 881.04 of the Standard Specifications:

The price shall include furnishing the equipment described above, all mounting hardware and installing them in satisfactory operating condition.

Add the following to Article 881.04 of the Standard Specifications:

If the work consists of retrofitting an existing polycarbonate pedestrian signal head and pedestrian countdown signal head with light emitting diodes (LEDs), it will be paid for as a PEDESTRIAN SIGNAL HEAD, LED, RETROFIT, of the type specified, and of the particular kind of material, when specified. Price shall be payment in full for furnishing the equipment described above including LED modules, all mounting hardware, and installing them in satisfactory operating condition.

## TRAFFIC SIGNAL BACKPLATE

Effective: May 22, 2002 Revised: July 1, 2015

882.01TS

Delete 1st sentence of Article 1078.03 of the Standard Specifications and add "All backplates shall be louvered, formed ABS plastic".

Add the following to the third paragraph of Article 1078.03 of the Standard Specifications. The retroreflective backplate shall not contain louvers.

Delete second sentence of the fourth paragraph of Article 1078.03 the Standard Specifications.

Add the following to the fourth paragraph of Article 1078.03 of the Standard Specifications:

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When retro reflective sheeting is specified, it shall be Type ZZ sheeting according to Article 1091.03 and applied in preferred orientation for the maximum angularity according to the vendor's recommendations. The retroreflective sheeting shall be installed under a controlled environment at the vendor/equipment supplier before shipment to the contractor. The formed plastic backplate shall be prepared and cleaned, following recommendations of the retroreflective sheeting manufacturer.

#### **EMERGENCY VEHICLE PRIORITY SYSTEM**

Effective: May 22, 2002 Revised: July 1, 2015

887.01TS

Revise Section 887 of the Standard Specifications to read:

It shall be the Contractor's responsibility to contact the municipality or fire district to verify the brand of emergency vehicle pre-emption equipment to be installed prior to the contract bidding. The equipment must be completely compatible with all components of the equipment currently in use by the Agency.

All new installations shall be equipped with Confirmation Beacons as shown on the "District One Standard Traffic Signal Design Details." The Confirmation Beacon shall consist of a 6 watt Par 38 LED flood lamp with a 30 degree light spread, or a 7 watt Par 30 LED flood lamp with a 15 degree or greater spread, maximum 7 watt energy consumption at 120V, and a 2,000 hour warranty for each direction of pre-emption. The lamp shall have an adjustable mount with a weatherproof enclosure for cable splicing. All hardware shall be cast aluminum or stainless steel. Holes drilled into signal poles, mast arms, or posts shall require rubber grommets. In order to maintain uniformity between communities, the confirmation beacons shall indicate when the control equipment receives the pre-emption signal. The pre-emption movement shall be signalized by a flashing indication at the rate specified by Section 4L.01 of the "Manual on Uniform Traffic Control Devices," and other applicable sections of future editions. The stopped pre-empted movements shall be signalized by a continuous indication.

All light operated systems shall include security and transit preemption software and operate at a uniform rate of 14.035 Hz ±0.002, or as otherwise required by the Engineer, and provide compatible operation with other light systems currently being operated in the District.

This item shall include any required modifications to an existing traffic signal controller as a result of the addition of the EMERGENCY VEHICLE PRIORITY SYSTEM.

#### Basis of Payment.

The work shall be paid for at the contract unit price each for furnishing and installing LIGHT DETECTOR and LIGHT DETECTOR AMPLIFIER. Furnishing and installing the confirmation beacon shall be included in the cost of the Light Detector. Any required modifications to the traffic signal controller shall be included in the cost of the LIGHT DETECTOR AMPLIFIER. The preemption detector amplifier shall be paid for on a basis of (1) one each per intersection

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controller and shall provide operation for all movements required in the pre-emption phase sequence.

## PEDESTRIAN PUSH-BUTTON

Effective: May 22, 2002 Revised: July 1, 2015

888.01TS

#### Description.

Revise Article 888.01 of the Standard Specifications to read:

This work shall consist of furnishing and installing a latching (single call) or non-latching (dual call) pedestrian push-button and a regulatory pedestrian instruction sign according to MUTCD, sign series R10-3e 9" x 15" sign with arrow(s) for a count-down pedestrian signal. The pedestrian station sign size without count-down pedestrian signals shall accommodate a MUTCD sign series R10-3b or R10-3d 9" x 12" sign with arrow(s).

#### Installation.

Add the following to Article 888.03 of the Standard Specifications:

A mounting bracket and/or extension shall be used to assure proper orientation when two pedestrian push buttons are required for one post. The price of the bracket and/or extension shall be included in the cost of the pedestrian push button. The contractor is not allowed to install a push-button assembly with the sign below the push-button in order to meet mounting requirements.

#### Materials.

Revise Article 1074.02(a) of the Standard Specifications to read:

The pedestrian push-button housing shall be constructed of aluminum alloy according to ASTM B 308 6061-T6 and powder coated yellow, unless otherwise noted on the plans. The housing shall be furnished with suitable mounting hardware.

Revise Article 1074.02(e) of the Standard Specifications to read:

Stations shall be designed to be mounted to a post, mast arm pole or wood pole. The station shall be aluminum and shall accept a 3 inch (75mm) round push-button assembly and a regulatory pedestrian instruction sign according to MUTCD, sign series R10-3e 9" x 15" sign with arrow(s) for a count-down pedestrian signal. The pedestrian station size without count-down pedestrian signals shall accommodate a MUTCD sign series R10-3b or R10-3d 9" x 12" sign with arrow(s).

Add the following to Article 1074.02 of the Standard Specifications:

(f) Location. Pedestrian push-buttons and stations shall be mounted to a post, mast arm pole or wood pole as shown on the plans and shall be fully ADA accessible from a

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paved or concrete surface. See the District's Detail sheets for orientation and mounting details.

#### Basis of Payment.

Revise Article 888.04 of the Standard Specifications to read:

This work will be paid for at the contract unit price per each for PEDESTRIAN PUSH-BUTTON or PEDESTRIAN PUSH-BUTTON, NON-LATCHING.

## **CONCRETE FOUNDATIONS**

Add the following to Article 878.03 of the "Standard Specifications":

All anchor bolts shall be according to Article 1006.09, except all anchor bolts shall be hot dipped galvanized the full length of the anchor bolt including the hook.

Concrete Foundations, Type A for Traffic Signal Posts shall provide anchor bolts with the bolt pattern specified within the "IDOT District 1 Standards Traffic Signal Design Details". All Type A foundations shall be a minimum depth of forty-eight (48) inches.

Concrete Foundations, Type C (Special) for Traffic Signal Cabinets with Uninterruptable Power Supply (UPS / Battery Back-Up) cabinet installations shall be according to the latest edition of IDOT Standard 878001, except as modified herein. The foundation shall be constructed a minimum of forty-eight (48) inches long by thirty-one (31) inches wide, and shall have a minimum depth of forty-eight (48) inches. An integral concrete pad foundation for the UPS cabinet shall be constructed a minimum of thirty-one (31) inches long by twenty (20) inches wide by ten (10) inches deep. The UPS cabinet pad foundation shall be integral to the side of the signal cabinet foundation, and shall be constructed on the same side as the signal cabinet Anchor bolts shall be provided and spaced according to the cabinet power panel. manufacturer's specifications. The conduits shall be the number and size as shown in the plans and placed at minimum depth of thirty (30) inches. An L-Shaped concrete apron shall be constructed along the entire front of the signal cabinet foundation, the entire side of the UPS cabinet foundation, and the entire front of the UPS cabinet foundation. This concrete apron shall be a minimum of thirty-six (36) inches wide by five (5) inches deep. Perpendicular grooves shall be installed in each direction in the concrete apron according to Article 424.06 of the Standard Specifications, beginning at the interior corner of the L shaped apron.

Concrete Foundations, Type D for Traffic Signal Cabinets shall be according to the latest edition of IDOT Standard 878001, except as modified herein. The foundation shall be constructed a minimum of forty-eight (48) inches long by thirty-one (31) inches wide, and shall have a minimum depth of forty-eight (48) inches. Anchor bolts shall be provided and spaced according to the cabinet manufacturer's specifications. The conduits shall be the number and size as shown in the plans and placed at minimum depth of thirty (30) inches. The concrete apron at the signal cabinet shall be constructed a minimum of thirty-six (36) inches wide by forty-eight (48) inches long by five (5) inches deep.

Concrete Foundations, Type E for Mast Arm and Combination Mast Arm Poles shall be 15 ft.

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minimum depth and in accordance with the latest edition of IDOT Standard 878001.

The Resident Engineer shall approve the foundation excavation prior to placing any concrete.

#### **ELECTRIC CABLE**

Delete "or stranded, and No. 12 or" from the last sentence of Article 1076.04 (a) of the "Standard Specifications".

Add the following to the Article 1076.04(d) of the Standard Specifications:

Service cable may be single or multiple conductor cable.

The electric service cable shall have an XLP jacket. All other cable jackets shall be polyvinyl chloride, meeting the requirements of IMSA 19-1 or IMSA 20-1. The jacket color for signal cable shall be black. The jacket color for lead-in and communications cable shall be gray. All cabling between the signal cabinet and the signal heads shall be solid copper, not multistranded. Heat shrink splices shall be used according to the IDOT District 1 "Standard Traffic Signal Design Details".

#### FIBER OPTIC CABLE

Add the following to Section 871 and Section 1076.02 of the "Standard Specifications":

This work shall consist of furnishing and installing Fiber optic cable in conduit with all accessories and connectors. The cable shall be of the type, size, and the number of fibers specified with a maximum of twelve fibers per buffer tube. The work includes making all fiber splices and terminations to the proposed fiber optic cable as indicated on the plans or as directed by the Engineer.

The distribution enclosure shall be wall-mountable with capacity for four (4) closet connector housing panels per enclosure and up to eight (8) 0.2-inch or four (4) 0.4-inch reduced length splice trays. The enclosure dimensions shall not exceed 13.5"x8.5"x4.5". The enclosure shall be capable of accommodating the required number of fibers. The distribution enclosure shall be included in the cost of FIBER OPTIC CABLE, including connections to any existing cables, and shall not be paid for separately.

All fibers being terminated shall be connected to the distribution enclosure and labeled at the connector and also at the enclosure bulkhead. The label shall include the direction and also the fiber number (e.g. S1, S2, N11, N12).

All splices and terminations on the installed fiber optic cable shall be included in the cost of the fiber optic cable, including the splicing of the installed fiber optic cable to any existing fiber optic cable. Splice trays and connector bulkheads required for the installed fiber optic cable shall be included in the cost of FIBER OPTIC CABLE and shall not be paid for separately.

All terminations and splices required only on existing fiber optic cable shall be paid for separately in accordance with the pay item TERMINATE FIBER IN CABINET or SPLICE FIBER IN CABINET.

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A minimum of 13 feet of slack cable shall be provided for the controller cabinet. The controller cabinet slack cable shall be stored as directed by the Engineer.

Fiber Optic cable may be gel filled or have an approved water blocking tape.

The quality of the fiber optic cable, including all splices and terminations, shall be verified by testing and documentation in accordance with Article 801.13(d) of the "Standard Specifications", to the satisfaction of the Engineer.

**Multimode:** When multimode fiber is required, the contractor shall coordinate with the equipment vendor, and shall terminate as many multimode fibers as are necessary to establish proper communications between new and/or existing signal controllers and/or video transmission equipment. In addition, the contractor shall terminate four unused multimode fibers and attach them to the distribution enclosure. All multimode terminations shall be ST compatible connectors with ceramic ferrules.

**Singlemode:** The contractor shall splice and/or terminate the number of singlemode fibers shown on the project plans, if any, according to the following requirements.

Singlemode Fiber Terminations. All singlemode fiber terminations shall utilize pre-fabricated, factory-terminated (SC compatible with ceramic ferrules) pigtails fusion spliced to bare fibers. The pre-fabricated pigtails shall have all of their fibers color coded to match the singlemode fibers in the fiber optic cable. All fusion splices shall be secured on aluminum splice trays capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The tray dimensions shall not exceed 7.5"x4.1"x0.45" and shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. All individual splice trays shall be labelled. Connector bulkheads shall be the proper type for the fiber enclosure at the location, and shall be properly secured to the enclosure.

<u>Singlemode Fiber Splices.</u> All splices shall be made using a fusion splicer that automatically positions the fibers using a system of light injection and detection. The Contractor shall provide all equipment and consumable supplies.

Splices shall be secured in fiber optic splice trays within fiber optic distribution enclosures. All fusion splices shall be secured on aluminum splice trays capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The tray dimensions shall not exceed 7.5"x4.1"x0.45" and shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. All individual splice trays shall be labelled.

All optical fibers shall be spliced to provide continuous runs. Splices shall only be allowed in equipment cabinets except where otherwise shown on the Plans.

Basis of Payment. The work shall be paid for at the contract unit price per foot for <u>FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, 24 FIBER (12 MULTIMODE AND 12 SINGLEMODE)</u>, <u>FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, 36 FIBER (12 MULTIMODE AND 24 SINGLEMODE)</u>, and <u>FIBER OPTIC CABLE IN CONDUIT, 24</u>

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<u>SINGLEMODE</u> or as specified in plans for the cable in place, including distribution enclosure(s), all connectors, pigtails, splice trays, connector bulkheads, testing and documentation, and the required number of fiber splices and terminations described in the plans. Additional fiber terminations and/or splices required by the Engineer, (not included in this item), shall be paid for as TERMINATE FIBER IN CABINET and/or SPLICE FIBER IN CABINET.

## FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL

This item shall comply with Sections 857 and 863 of the "Standard Specifications" for Road and Bridge Construction, and shall also comply with the following requirements:

The controller shall meet the requirements for NEMA-TS2 standards for a Type 1 Cabinet. The controller shall be the latest model available that is compatible with "Centracs" software or "Aries" software, currently in use by LCDOT. Controller software compatibility requirements are based upon the controller's location in the communication system, and shall be as shown on the plans. The controller shall have the latest version of NTCIP software installed, and be equipped with an Ethernet port and a removable data key to save the controller database.

Add the following to Article 1074.03 of the "Standard Specifications":

Cabinets shall be designed for NEMA TS2 Type 1 operation. All cabinets shall be pre-wired for a minimum of eight (8) phases of vehicular, four (4) phases of pedestrian, and four (4) phases of overlap operation. Individual load switches shall be provided for each vehicle, pedestrian and right turn overlap phase.

- Cabinets Controller cabinets shall have a footprint of approximately 44 inches wide by 26 inches deep. Type IV cabinets shall be 65 inches high, and shall provide a third shelf for mounting additional equipment. Cabinets shall be fabricated of 1/8" thick unpainted aluminum alloy 5052-H32. The surface shall be smooth, free of marks and scratches. All external hardware shall be stainless steel.
- Cabinet Doors Provide front and rear doors of NEMA type 3R construction with cellular neoprene gasket that is rain tight. Door hinges shall be continuous 14-gauge stainless steel and shall be secured with 1/2-20 stainless steel carriage bolts. Standard equipment shall include a three-point locking system that secures the door at the top, bottom and center. A corbin lock with two keys shall also be furnished. The door shall be equipped with a two-position doorstop, one at 90° and one at 120°.
- Controller Harness Provide a TS2 Type 2 "A" harness in addition to the TS2 Type 1 harness.
- Surge Protection Shall be a 120VAC Single phase Modular filter Plug-in type, supplied from an approved vendor.BIU – Containment screw required.
- Switch Guards All switches shall be guarded.
- Back Panel The back panel wiring shall be securely covered with a piece of plexiglass, minimum thickness 1/8-inch.
- Heating One (1) 200-watt, thermostatically-controlled, electric heater.
- Lighting Four (4) LED light assemblies shall be included along the top and sides of the cabinet. The LED panels shall be controlled by a door switch. The LED Panels shall be provided from an approved vendor.

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- Plan & Wiring Diagrams 12" x 15" moisture sealed container attached to door.
- The cabinet shall be equipped with a pull-out drawer/shelf assembly. A 1 ½ inch deep drawer shall be provided in the cabinet, mounted directly beneath the controller support shelf. The drawer shall have a hinged top cover and shall be capable of accommodating one (1) complete set of cabinet prints and manuals. This drawer shall support 50 lbs. in weight when fully extended. The drawer shall open and close smoothly. Drawer dimensions shall make maximum use of available depth offered by the controller shelf and be a minimum of 24 inches wide.
- Detector Racks Full-size rack fully wired to support one BIU, sixteen channels of vehicle detection, and four channels of EVP.
- Field Wiring Labels All field wiring shall be labeled.
- Field Wiring Termination Approved channel lugs required.
- Power Supply Provide a nonconductive shield.
- Circuit Breaker The signal circuit breaker shall be sized for the proposed load, but shall not be rated less than thirty (30) amps.
- Police Door Provide wiring and termination for plug-in manual phase advance switch.
- Railroad Pre-Emption Test Switch Shall be provided from an approved vendor.
- MMU 16 Channel, LCD display, IP addressable (Ethernet) Malfunction Management Unit.
  The MMU shall be connected to the Ethernet switch with a CAT 5e cable, and configured for proper communication.
- Door Alarm The front and rear doors shall be equipped with switches wired to the traffic signal controller alarm 1 input for logging and reporting of a door open condition.

Basis of payment. This item will be paid for at the contract unit price each for FULL-ACTUATED CONTROLLER AND TYPE IV CABINET, SPECIAL which price shall be payment in full for furnishing and installing the cabinet and controller, complete with necessary connections and equipment for proper operation, at a location designated by the Engineer.

## LAKE COUNTY DOT TRAFFIC SIGNAL GENERAL REQUIREMENTS

All work and equipment performed and installed under this Contract shall be governed by and shall comply with:

| SPECIFICATION   | ADOPTED/DATED  |
|---|----------------|
| The State of Illinois "Standard Specifications for Road and Bridge Construction" referred to as "Standard Specifications" | Latest Edition |
| The State of Illinois "Manual on Uniform Traffic Control Devices for Streets and Highways," referred to as "MUTCD"        | Latest Edition |
| The National Electrical Code referred to as "NEC"   | Latest Edition |
| The National Electrical Manufacturers Association (All publications for traffic control items) referred to as "NEMA"      | Latest Edition |

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| The International Municipal Signal Association ("Official Wire & Cable Specifications Manual,") referred to as "IMSA"                                   | Latest Edition |
|---|----------------|
| The Institute of Transportation Engineers Technical Report No. 1, (A Standard for Adjustable Face Vehicular Traffic Control Heads) referred to as "ITE" | Latest Edition |
| AASHTO "Standard Specifications" Structural Supports for Highway Signs, Luminaires, and Traffic Signals   | Latest Edition |
| Supplemental Specifications and Recurring Special Provisions  | Latest Edition |

The following Traffic Signal Special Provisions supplement the above specifications, manuals, and codes. In case of conflict with any part or parts of said documents, these Special Provisions shall take precedence and shall govern.

The following terms and acronyms are used:

IDOT Illinois Department of Transportation

District 1 IDOT District 1

LCDOT The Lake County Division of Transportation

Engineer The Resident Engineer

Traffic Engineer The LCDOT Traffic Engineer or designee

The intent of these Special Provisions is to prescribe the materials and construction methods commonly used in traffic signal installations. All material furnished shall be new. The locations and the details of all installations shall be indicated on the plans or as directed by the Engineer.

All traffic signal work related to the traffic signal cabinet shall be performed with at least one electrician holding a current IMSA Traffic Signal Technician Level 2 certification present on site and actively overseeing and directing the work, unless approved in advance by the Engineer.

The work performed under this contract shall consist of furnishing and installing all traffic signal work as specified on the plans and as specified herein in a manner acceptable and approved by the Engineer.

## Definitions of Terms.

Add the following to Section 101 of the Standard Specifications:

101.56 Vendor. Company that sells a particular type of product directly to the contractor or the Equipment Supplier.

101.57 Equipment supplier. Company that supplies, represents, and provides technical support for IDOT District One approved traffic signal controllers and other related equipment. The Equipment Supplier shall be located within IDOT District One and shall:

• Be full service with on-site facilities to assemble, test and trouble-shoot traffic signal

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controllers and cabinet assemblies.

- Maintain an inventory of IDOT District One approved controllers and cabinets.
- Be staffed with permanent sales and technical personnel able to provide traffic signal controller and cabinet expertise and support.
- Technical staff shall hold current IMSA Traffic Signal Technician Level III certification and shall attend traffic signal turn-ons and inspections with a minimum 14 calendar day notice.

#### SUBMITTALS.

Revise Article 801.05 of the Standard Specifications to read:

All material approval requests shall be submitted electronically according to the LCDOT Construction Department's current submittal procedures.

#### General requirements include:

- a. All material approval requests shall be submitted at the preconstruction meeting. Traffic signal materials and equipment shall bear the U.L. label whenever such labeling is available.
- b. Product data and shop drawings shall be assembled by pay item. Only the top sheet of each pay item submittal will be stamped by the LCDOT Traffic Department with the review status, except shop drawings for mast arm pole assemblies will be stamped with the review status on each sheet. Pages of the submittal should be numbered.
- c. When hard copy submittals are necessary for another agency, four complete copies of the manufacturer's descriptive literatures and technical data for the traffic signal materials, in addition to the electronic copy required above. If the literature contains more than one item, the Contractor shall indicate which item or items will be furnished.
- d. When hard copy submittals are necessary for structural elements, four complete copies of the shop drawings for the mast arm assemblies and poles, and the combination mast arm assemblies and poles showing, in detail, the fabrication thereof and the certified mill analyses of the materials used in the fabrication, anchor rods, and reinforcing materials, in addition to the electronic copy required above.
- e. Partial or incomplete submittals will be returned without review.
- f. Certain non-standard mast arm poles and structures will require additional review from IDOT's Bureau of Bridges and Structures. Examples include special mast arms and nonstandard length mast arm pole assemblies. The contractor shall account for the additional review time in their schedule.
- g. The contract number or permit number, project location/limits and corresponding pay code number must be on each sheet of correspondence, catalog cuts and mast arm poles and assemblies drawings.

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h. Where certifications and/or warranties are specified, the information submitted for approval shall include certifications and warranties. Certifications involving inspections, and/or tests of material shall be complete with all test data, dates, and times.

- The Contractor shall secure approved materials in a timely manner to assure construction schedules are not delayed.
- j. After the Engineer reviews the submittals for conformance with the design concept of the project, the Engineer will stamp the drawings indicating their status as 'APPROVED', 'APPROVED AS CORRECTED', 'NOT APPROVED', or 'RESUBMIT'. Since the Engineer's review is for conformance with the design concept only, it is the Contractor's responsibility to coordinate the various items into a working system as specified. The Contractor shall not be relieved from responsibility for errors or omissions in the shop, working, layout drawings, or other documents by the Engineer's approval thereof. The Contractor must still be in full compliance with contract and specification requirements.
- k. All submitted items reviewed and marked 'APPROVED AS CORRECTED', 'NOT APPROVED', or 'RESUBMIT' are to be resubmitted in their entirety, unless otherwise indicated within the submittal comments, with a disposition of previous comments to verify contract compliance at no additional cost to the contract.
- It is the Contractor's responsibility to note any deviations from Contract requirements at the time of submittal and to make any requests for deviations in writing to the Engineer. In general, substitutions will not be acceptable. Requests for substitutions must demonstrate that the proposed substitution is superior to the material or equipment required by the Contract Documents. No exceptions, deviations or substitutions will be permitted without the approval of the Engineer.
- m. Contractor shall not order major equipment such as mast arm assemblies prior to Traffic Engineer approval of the Contractor marked proposed traffic signal equipment locations to assure proper placement of contract required traffic signal displays, push buttons and other facilities. Field adjustments may require changes in proposed mast arm length and other coordination.

## MARKING PROPOSED LOCATIONS

Revise "Marking Proposed Locations for Highway Lighting System" of Article 801.09 to read "Marking Proposed Locations for Highway Lighting System and Traffic Signals."

Add the following to Article 801.09 of the Standard Specifications:

It shall be the contractor's responsibility to verify all dimensions and conditions existing in the field prior to ordering materials and beginning construction. This shall include locating the mast arm foundations and verifying the mast arms lengths.

#### **INSPECTION OF ELECTRICAL SYSTEMS**

Add the following to Article 801.10 of the "Standard Specifications":

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All cabinets, including temporary traffic signal cabinets, shall be assembled by an approved equipment supplier in IDOT District 1. LCDOT reserves the right to request that any controller and cabinet be tested at an IDOT District 1 approved equipment supplier's facility prior to field installation. Such testing will be at no extra cost to the contract. All permanent or temporary "railroad interconnected" controllers and cabinets, shall be new, built, tested and approved by the controller equipment vendor, in the vendor's IDOT District 1 approved facility, prior to field installation. The vendor shall provide the technical equipment and assistance as required by the Engineer to fully test this equipment.

#### MAINTENANCE AND RESPONSIBILITY

Revise Article 801.11 of the "Standard Specifications" to read:

- Existing traffic signal installations and/or any electrical facilities at locations included in this contract may be altered or reconstructed totally or partially as part of the work on this contract. The Contractor is hereby advised that all traffic control equipment presently installed at these locations may be the property of the County of Lake, State of Illinois, Department of Transportation, Division of Highways, County, Transit Agency, Private Developer, or the Municipality in which it is located. Once the Contractor has begun any work on any portion of the project, all traffic signals within the limits of this contract or those which have the pay item MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION. **TEMPORARY TRAFFIC** SIGNAL INSTALLATION. MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION, shall become the full responsibility of the Contractor. The Contractor shall supply the Engineer and the County's Traffic Signal Maintenance Contractor one 24-hour emergency contact name and telephone number. The Contractor shall provide sufficient qualified personnel to respond to all notifications of malfunctions on a round-the-clock basis (24 hours a day, 7 days a week). The Contractor is required to keep a time and date log of all maintenance items, including the time of the initial report, the response time, and the time of final permanent repair. The Contractor shall provide this information to the Engineer, upon request.
- When the project has a pay item for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION. TEMPORARY TRAFFIC SIGNAL INSTALLATION. and/or MAINTENANCE OF EXISTING FLASHING BEACON INSTALLATION, the Contractor must notify the Traffic Engineer at (847) 377-7000 of their intent to begin any physical construction work on the project or any portion thereof. This notification must be a minimum of ten (10) calendar days prior to the start of construction to allow sufficient time for an inspection of the existing traffic signal installation(s) and the transfer of maintenance to the Contractor. If work is started prior to the inspection, maintenance of the traffic signal installation(s) will be immediately transferred to the Contractor without an inspection. The Contractor shall then become responsible for repairing or replacing all equipment that is not operating properly or is damaged at no cost to the owner of the traffic signal. Final repairs to or the replacement of damaged equipment must meet the approval of the Engineer at the time of final inspection or the traffic signal installation will not be accepted.
- c. Automatic Traffic Enforcement equipment such as red lighting running and railroad crossing camera systems are owned and operated by others and the Contractor shall not be responsible for maintaining this equipment.

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d. Regional transit, Illinois Department of Transportation, and other agencies may also have equipment connected to existing traffic signal or peripheral equipment such as PTZ cameras, switches, transit signal priority (TSP and BRT) servers and other devices that shall be included with traffic signal maintenance at no additional cost to the contract.

- e. Contracts that do not include traffic signal installations or modifications, but do include pay items for milling or pavement patching which may result in the destruction of traffic signal loops, do not require maintenance transfer. These contracts do require a notification of intent to work and an inspection. A minimum of ten (10) calendar days days prior to the loop removal, the Contractor shall notify the Traffic Engineer at (847) 377-7000, at which time arrangements will be made to adjust the traffic controller timing to compensate for the absence of detection.
- f. The Contractor is advised that the existing and/or temporary traffic signal installation must remain in operation during all construction stages, except for the most unavoidable down time. Any plan to shutdown the traffic signal installation for a period exceeding fifteen (15) minutes must receive prior approval from the Engineer. Approval to shutdown the traffic signal installation will only be granted during the hours of 9:00 A.M. to 3:00 P.M. on weekdays. Shutdowns will not be allowed during inclement weather, weekends or holiday periods.
- g. The Contractor shall be fully responsible for the safe and efficient operation of the traffic signals. Any inquiry, complaint or request by the Division, the County's Traffic Signal Maintenance Contractor or the public, shall be investigated and repairs started. The Contractor shall restore service and complete permanent repairs in accordance with the following Repair Timetable. Failure to provide this service will result in liquidated damages of \$500 per day per occurrence. The Traffic Engineer reserves the right to assign any work not completed within this timeframe to the County's Traffic Signal Maintenance Contractor. All costs associated to repair this uncompleted work shall be the responsibility of the Contractor. Failure to pay these costs to the Traffic Signal Maintenance Contractor within one month after the incident will result in additional liquidated damages of \$500 per month per occurrence. Unpaid bills will be deducted from the cost of the Contract. County personnel, the County's Traffic Signal Maintenance Contractor, and the County's Network Integration Consultant may inspect any signalizing device on the Division's highway system at any time without notification.
- h. Any proposed activity in the vicinity of a highway-rail grade crossing must adhere to the guidelines set forth in the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) regarding work in temporary traffic control zones in the vicinity of highway-rail grade crossings which states that lane restrictions, flagging, or other operations shall not create conditions where vehicles can be queued across the railroad tracks. If the queuing of vehicles across the tracks cannot be avoided, a uniformed law enforcement officer or flagger shall be provided at the crossing to prevent vehicles from stopping on the tracks, even if automatic warning devices are in place.
- i. At signals where the Contractor is responsible for maintenance, including temporary traffic signals and newly constructed traffic signals that are not yet accepted by the County, the Contractor shall be responsible to clear snow, ice, dirt, debris or other condition that obstructs visibility of any traffic signal display or access to traffic signal equipment in compliance with the REPAIR TIMETABLE. Two clearly visible signal

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indications of all colors and arrows are required to be maintained at all time.

j. In the event of power loss at locations where the Contractor is responsible for maintenance, including temporary traffic signals and newly constructed traffic signals that are not yet accepted by the County, the Contractor will be responsible for working with Lake County personnel to make connections of portable County-supplied generators at the maintained location, as directed by the Engineer.

Immediately after performing any work related to a signal maintenance item (troubleshooting, temporary repair, permanent repair, etc.) the Contractor shall contact the Lake County PASSAGE Transportation Management Center (TMC) at **(847) 377-7000**.

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Unless specifically stated to the contrary, all items shall be repaired within the time frame described in the Repair Timetable. The times listed are noncumulative. Any repairs not specifically covered in the Repair Timetable, or described elsewhere, shall be completed within a time frame matching the most similar line item in the Repair Timetable.

#### **REPAIR TIMETABLE**

(non cumulative)

| <u>ITEM</u>  | RESPONSE  | SERVICE                                  | PERMANENT  |
|--|---|--|--|
| KNOCKDOWNS/FAILURE/DAMAGE:   | TIME  | RESTORATION                              | REPAIRS  |
| Cabinet Controller (Local or Master) Adaptive Control Hardware Detector Loop/Magnetometer Loop Detector/Amplifier  | 1 hr  | 24hrs                                    | 2 wks  |
|  | 1 hr  | 24hrs                                    | 2 wks  |
|  | 1 hr  | 24 hrs                                   | 3 wks  |
|  | 1 hr  | n.a.                                     | 3 wks  |
|  | 1 hr  | 4 hrs                                    | 2 wks  |
| Video Detection Camera PTZ Camera Detector Interface Card/Mini Hub Modem Load Switch   | 1 hr<br>2 hrs<br>1 hr<br>2 hrs<br>1 hr              | 4 hrs<br>48 hrs<br>4 hrs<br>NWD<br>2 hrs | 2 wks<br>2 wks<br>2 wks<br>2 wks                         |
| Signal Head/Lenses Pole/Mast Arm Cabling/Conduit Interconnect/Communication Graffiti/Advertising Telemetry, Electrical Ethernet Switches/Video Encoders  | 1 hr<br>1 hr<br>1 hr<br>1 hr<br>NWD<br>1 hr<br>1 hr | 2 hrs 2 hrs 4 hrs NWD NWD 2 hrs 48 hrs   | 2 hrs<br>NWD<br>ENG<br>ENG<br>ENG<br>NWD<br>NWD<br>2 wks |
| Highway Advisory Radio (HAR) Indicators/switches/LEDs/displays Snow/Ice/Debris/Other Obstructions Outages not covered elsewhere Filter/Cleanliness/fans/thermostat Misalignment (conflicting) Misalignment (non-conflicting) | 1 hr  | 48 hrs                                   | 2 wks  |
|  | NWD   | n.a.                                     | 2 wks  |
|  | 1 hr  | 2 hrs                                    | NBD  |
|  | 1 hr  | 2 hrs                                    | NWD  |
|  | NWD   | NWD                                      | n.a.   |
|  | 1 hr  | 2 hrs                                    | NWD  |
|  | 2 hrs   | 4 hrs                                    | NWD  |
| COMPLAINTS/CALLS/ALARMS: Timing/Phasing/Programming Coordination Alarm/Cycle Fail Controller Alarm/Status Change Detector Alarm/Status change UPS CMU Flash/Local Flash Door Open/Maint. Req.                                | 1 hr  | 2 hrs                                    | ENG  |
|  | NWD   | ENG                                      | ENG  |
|  | 1 hr  | NWD                                      | 1 wk   |
|  | NWD   | NWD                                      | ENG  |
|  | 1 hr  | 2 hrs                                    | 2 wks  |
|  | 1 hr  | 2 hrs                                    | 1 wk   |
|  | 2 hrs   | 4 hrs                                    | NWD  |

**LEGEND:** hr=hour, hrs=hours, NWD=next week day, wk=week, wks=weeks, ENG=acceptable to Engineer, days=calendar days, n.a.=not applicable

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## LIQUIDATED DAMAGES FOR UNTIMELY WORK

A primary concern of LCDOT is to maintain a safe and efficient roadway for the public. Therefore, the Contractor shall proceed with the traffic signal work as soon as conditions and project staging permit. If in the opinion of the Engineer construction conditions are suitable for traffic signal work, and the Contractor has not yet begun the traffic signal work, the Engineer shall notify the Contractor to proceed. The Contractor shall begin the traffic signal work within seven (7) calendar days after notification to proceed. The Contractor shall continue to prosecute the traffic signal work until completion, or until he can no longer proceed due to conditions beyond their control. The Contractor shall notify the Engineer of any conditions impeding and/or delaying their prosecution of the work. Failure by the Contractor to proceed with the traffic signal work as specified herein shall result in liquidated damages of \$500.00 per calendar day per occurrence.

For projects involving detector loop installations or replacement, the following additional conditions apply. If in the opinion of the Engineer construction conditions are suitable for loop installation(s), the Engineer shall notify the Contractor to proceed. The detector loops shall be installed and fully operational within fourteen (14) calendar days following notification to proceed by the Engineer. This 14-day period shall be in effect throughout the entire year, including the off season, regardless of the Contractor's working day status. Failure by the Contractor to complete the loop installation(s) within the specified timeframe shall result in liquidated damages in the amount of \$500.00 per calendar day, per occurrence.

## MODIFICATION OF IDOT SPECIAL PROVISION REQUIREMENTS

When IDOT Special Provisions for traffic signal items are included in an LCODT Contract or Permit project, the following modifications shall apply to the noted Special Provisions.

Contact Information: Revise the contact information contained in the following IDOT Special Provisions:

800.02TS Optimize Signal System

800.03TS Re-Optimize Signal System

805.01TS Electric Service Installation

886.01TS Detector Loop

890.01TS Temporary Traffic Signal Installation

890.02TS Temporary Traffic Signal Timing

895.02TS Remove Existing Traffic Signal Equipment

The Contractor shall utilize the Lake County Division of Transportation contact information for Lake County Division of Transportation projects in place of the personnel, phone numbers, and directives provided in the following IDOT District 1 Special Provisions when they are included in the Contract:

All references in the above referenced special provisions to Traffic Signal Engineer, Area Traffic Signal Engineer, Area Traffic Signal Maintenance and Operations Engineer, Bureau of Traffic Operations, Traffic Operations Engineer, State, State's Traffic Signal Maintenance Contractor, and State's Electrical Maintenance Contractor shall be replaced with the LCDOT Traffic Signal Engineer and the phone number shall be 847-377-7000. Submittals, requests for reviews, scheduling of appointments, and requests for materials and information shall be

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directed to the LCDOT Traffic Engineer instead of IDOT, District 1, or the State's Maintenance Contractor.

Traffic Signal Timing Consultant Requirements: Add the following requirements to the following IDOT Special Provisions:

800.02TS Optimize Signal System 800.03TS Re-Optimize Signal System

890.02TS Temporary Traffic Signal Timing

All work shall be based upon the LCDOT Countywide Synchro model. The Consultant shall contact the Traffic Signal Engineer at 847-377-7000 to acquire the required portion of the countywide model to be updated for the particular project. Upon completion of the project, the Consultant shall provide LCDOT with the revised and updated files for inclusion into the Countywide Synchro Model. Graphics displays for LCDOT's traffic signal systems do not need to be furnished to LCDOT.

Pedestrian Pushbutton Station Requirements: Add the following requirements to the following IDOT Special Provision:

888.01 TS Pedestrian Push Button

The pedestrian push button signs shall be retroreflective R10-3, 9"x12" signs displaying the "Push Button For" legend with the Walking Man symbol and arrow, unless shown otherwise in the plans. The pedestrian push button station shall be natural, unfinished aluminum with rounded corners sized to accommodate the 9"x12" sign.

#### DAMAGE TO TRAFFIC SIGNAL SYSTEM

Revise Article 801.12(b) of the "Standard Specifications" to read:

Any traffic control equipment damaged or not operating properly from any cause whatsoever shall be repaired and/or replaced. All inoperable components must be replaced with new equipment meeting the special provisions or the current LCDOT requirements and provided by the Contractor at no additional cost to the Contract and/or owner of the traffic signal system. Final repairs or replacement of damaged equipment must meet the approval of the Engineer prior to or at the time of final inspection; otherwise the traffic signal installation will not be accepted. Cable splices outside the controller cabinet shall not be allowed, unless approved by the Traffic Engineer.

Temporary replacement of damaged or knockdown of a mast arm pole assembly shall require construction of a full or partial span wire signal installation or other method approved by the Engineer.

Automatic Traffic Enforcement equipment, such as Red Light Enforcement cameras, detectors, and peripheral equipment, damaged or not operating properly from any cause whatsoever, shall be the responsibility of the municipality or the Automatic Traffic Enforcement company per Permit agreement. This equipment shall be de-activated while the traffic signal is on Contractor maintenance.

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## **ELECTRIC CABLE REQUIREMENTS**

Add the following to Article 1076.04(d) of the "Standard Specifications":

The electric service cable and tracer cable shall have an XLP jacket. All other cable jackets shall be polyvinyl chloride, meeting the requirements of IMSA 19-1 or IMSA 20-1, except as noted. The jacket color for signal cable and tracer cable shall be black. The jacket color for lead-in and communications cable shall be gray. All cabling between the signal cabinet and the signal heads shall be solid copper, not multi-stranded. Heat shrink splices shall be used according to the IDOT District 1 "Standard Traffic Signal Design Details".

## **VIDEO AND NETWORK SYSTEM REQUIREMENTS**

For all projects including installation or relocation of video and/or network equipment, the Contractor shall contact the TMC at 847-377-7000 to confirm proper operation of the equipment within the PASSAGE system. This includes confirming that the camera horizon is properly adjusted, camera lens is clear, network settings are correct and all devices are communicating correctly with the TMC. For equipment requiring an IP address or other LCDOT assigned parameters, the Contractor should request the information from the TMC a minimum of one (1) week in advance of the traffic signal "turn-on." The Contractor will be responsible for making any changes necessary to the camera mounting, aiming, and/or equipment programming to meet the PASSAGE requirements and operate the equipment to the satisfaction of the Engineer. Contacting the TMC for confirmation of equipment operation does not constitute an installation review and does not relieve the Contractor of the responsibility to correct deficiencies identified at the turn-on. The cost of meeting these requirements shall be included in the associated pay item and no additional compensation shall be made. Calls to the TMC shall be according to the PASSAGE System Support section of this special provision.

## TRAFFIC SIGNAL INSPECTION (TURN-ON)

Revise Article 801.15(b) of the "Standard Specifications" to read:

It is LCDOT's intent to have all electric work completed and the equipment field-tested by the Equipment Supplier, prior to LCDOT's "turn-on" field inspection. The Contractor must have all traffic signal work completed and the electrical service installation connected by the utility company prior to requesting an inspection and "turn-on" of the traffic signal installation. In the event the Traffic Engineer determines that the work is not complete and that the inspection will require more than two (2) hours to complete, the inspection may be canceled and the Contractor will be required to reschedule at another date.

The Contractor may request a "turn-on" and inspection of the completed traffic signal installation at each separate location. This request must be made to the Traffic Engineer at (847) 377-7000 a minimum of ten (10) calendar days prior to the time of the requested inspection. When the contract includes the item RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM, OPTIMIZE TRAFFIC SIGNAL SYSTEM, or TEMPORARY TRAFFIC SIGNAL TIMINGS, the Contractor must notify the SCAT Consultant of the turn-on/detour implementation schedule, as well as stage changes and phase changes during construction. The SCAT Consultant must be in attendance at each temporary and permanent traffic signal turn-on.

The Contractor shall provide a representative from the control equipment vendor's office to attend the traffic signal inspection for both permanent and temporary traffic signal "turn-ons". Signal indications being tested shall match the lane configurations and markings at the

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intersection. If any conflicting signal indications are visible to motorist or pedestrians while testing, the Contractor shall be responsible to provide police officer(s) to direct traffic.

Upon demonstration that the signals are operating properly in accordance with the contract and to the satisfaction of the Traffic Engineer, the Traffic Engineer will allow the signals to be placed in continuous operation. The Traffic Engineer will inspect the traffic signal installation, with the assistance of the Contractor, and provide a written "punch list" of deficient items requiring completion. The Contractor shall complete all "punch list" work within 30 calendar days of notification. If this work is not completed within thirty days, LCDOT reserves the right to have the work completed by others at the Contractor's expense. This cost will be in addition to Liquidated Damages for Untimely Work.

The Contractor shall furnish all equipment and/or parts to keep the traffic signal installation operating. The Contractor shall be responsible for all traffic signal equipment and associated maintenance thereof until LCDOT acceptance is granted.

When the Contractor has completed the "punch-list" work, he shall contact the Traffic Engineer to schedule a follow-up inspection of the traffic signal installation. If the Traffic Engineer determines that any "punch-list" items have not been completed, he may cancel the inspection, and the Contractor will need to reschedule.

It is possible that during any follow-up inspections of the traffic signal installation, deficient items may be identified that were not identified at the "turn-on" inspection, or included in the initial "punch-list". The Traffic Engineer shall advise the Contractor of any such items, and it shall be the Contractor's responsibility to complete these items prior to acceptance of the traffic signal.

Acceptance of the traffic signal by LCDOT shall be based on the inspection results and successful operation during a minimum 72 hour "burn-in" period following activation of the traffic signal. If approved, traffic signal acceptance shall be verbal at the "turn on" inspection followed by written correspondence from the Engineer. If approved, the traffic signal acceptance shall be given verbally at the inspection, followed by written correspondence from the Traffic Engineer. The Agency that is responsible for the maintenance of each traffic signal installation will assume the traffic signal maintenance upon acceptance by the Traffic Engineer.

The Lake County Division of Transportation requires the following Final Project Documentation from the Contractor prior to acceptance of the traffic signal, provided in hard copy and electronic format as indicated below.

- 1. One (1) copy (11"x17") and one (1) electronic PDF file of as-built signal plans with field revisions marked in red.
- 2. One (1) copy of the operation and service manuals for the signal controller and the associated control equipment.
- 3. Five (5) copies (11"x17") and one (1) electronic PDF file of the cabinet wiring diagrams.
- 4. Five (5) copies and one (1) electronic PDF file of the traffic signal installation cable log.

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5. All manufacturer and contractor warrantees and guarantees required by Article 801.14.

All cost of work and materials required to comply with the above requirements shall be included in the pay item bid prices, under which the subject materials and signal equipment are paid, and no additional compensation will be allowed. Materials and signal equipment not complying with the above requirements will be subject to removal and disposal at the Contractor's expense.

#### **LOCATING UNDERGROUND FACILITIES**

Revise Section 803 of the "Standard Specifications" to read:

Once the Contractor has taken maintenance of an existing County facility or has constructed underground facilities, they are responsible for locating the facilities according the J.U.L.I.E. requirements at no additional cost to the Contract.

Contractor requests for equipment locates will be granted only once prior to the start of construction. Additional requests shall be at the expense of the Contractor. The location of underground traffic facilities does not relieve the Contractor of their responsibility to repair any item(s) damaged during the construction, at his/her own expense.

Locate requests should be directed to LCDOT's Traffic Signal Maintenance Contractor or to the LCDOT Traffic Engineering Department at (847) 377-7000.

The exact location of all utilities shall be field verified by the Contractor before the installation of any components of the traffic signal system. For locations of utilities call J.U.L.I.E. at 1-800-892-0123. For the locations of some utilities, other Agencies or Municipalities may need to be contacted.

The Contractor should note that IDOT does not participate in J.U.L.I.E. Underground work that is proposed to take place within IDOT right-of-way requires the Contractor to contact IDOT for the procedures involved in locating their facilities.

#### **RESTORATION OF WORK AREA**

Add to Section 801 of the "Standard Specifications":

Restoration of the traffic signal work area shall be included in the related pay item such as foundation, conduit, handhole, trench and backfill, etc. and no extra compensation shall be allowed. All roadway surfaces such as shoulders, medians, sidewalks, pavement, etc. shall be restored to match the previously existing conditions. All damage to mowed lawns shall be replaced with an approved sod, and all damage to unmowed fields shall be seeded, in accordance with Section 250 and 252 of the "Standard Specifications" respectively, except that Phosphorus fertilizer nutrient shall not be used on Lake County Highways or within Lake County right-of-way. The traffic signal work area includes any area where the Contractor or their subcontractors perform work to install repair, or maintain County owned traffic, lighting, or PASSAGE equipment, regardless of the presence of an actual traffic signal.

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#### **CABINET NEATNESS & WIRING**

The Contractor shall assure that all wiring and peripheral equipment in any new traffic signal cabinet is in a neat and orderly fashion that is acceptable to the Engineer. This applies to controller cabinets, master cabinets, railroad cabinets, communication cabinets, electrical service cabinets, or any other new cabinet called for in the project plans.

All conduit entrances into the cabinet shall be sealed with a pliable waterproof material. Electrical cables inside the cabinet shall be neatly trained along the base and back of the cabinet. Each conductor shall be connected individually to the proper terminal, and the spare conductors shall be bound into a neat bundle. All cables, including those for signals, vehicle detection, pushbuttons, emergency vehicle preemption, video transmission, and communication shall be neatly arranged and bundled within the cabinet to the satisfaction of the Engineer. Each cable shall be marked with an identification number which corresponds to the number and description on the cabinet cable log.

In the case of an existing cabinet that is being modernized or modified, the new cables being installed shall be trained, bundled and labeled to the satisfaction of the Engineer. When working inside an existing cabinet, the Contractor shall minimize disturbance to existing cables and cabinet wiring. Any existing cables and cabinet wiring disturbed by the Contractor shall be retrained, bundled, and/or labeled to the satisfaction of the Engineer.

Unless indicated elsewhere in the plans and specs, all equipment in the cabinet should be wired through the UPS except lighted street name signs and luminaires.

Components with Ethernet capabilities shall be connected to the Switch or other communications equipment in the cabinet as directed by the Engineer. All necessary labor, hardware, and accessories, including Ethernet patch cables, to ensure proper cabinet neatness and wiring to the satisfaction of the Engineer shall be included in the applicable pay item for FULL ACTUATED CONTROLLER AND TYPE IV CABINET SPECIAL, FULL-ACTUATED CONTROLLER IN EXISTING CABINET, and/or MODIFY EXISTING CONTROLLER.

The County shall not accept maintenance of the traffic signal installations until the requirements of this specification are satisfied.

## **EQUIPMENT SUPPLIER AND VENDOR REPRESENTATION**

Under this provision, the Engineer reserves the right to request a representative of the Equipment Supplier and/or Vendor be present at the activation of new traffic equipment. Equipment covered under this provision includes signal heads, cabinets, controllers, amplifiers, preemption, detection, monitoring, communication/transmission, fiber-optic/telemetry, radio, microwave, infrared, illuminated signs, streetlights, push buttons, lighted crosswalks, uninterruptable power supplies, adaptive, counters, and any other new equipment being installed and activated. The representative shall be a qualified technician trained in the proper installation and operation of the equipment being installed under the contract or permit.

The Traffic Engineer reserves the right to cancel the turn-on, transfer, or other scheduled activity if, in their opinion, knowledgeable personnel from the Equipment Supplier or Vendor are not present. Rescheduling, and any associated costs, shall be the responsibility of the Contractor, and shall be subject to availability of LCDOT Traffic staff.

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This provision is in addition to the requirement contained herein that the Contractor provide a representative from the control equipment vendor to attend the traffic signal inspection for both permanent and temporary traffic signal "turn-ons".

Any costs associated with Equipment Supplier and/or Vendor representation shall not be paid for separately, but shall be included in the cost of the associated traffic equipment being activated. Any unforeseen costs incurred by the Contractor to provide this representation shall not be the responsibility of the County.

#### INTERRUPTION OF COMMUNICATION

The interruption of communication with County equipment shall be kept to an absolute minimum. This includes communication such as controller telemetry, video transmission, camera control signals, Highway Advisory Radio, wireless interconnect, telephone (POTS/ISDN/DSL), high speed Internet, cellular modem, or any other County communication equipment. This provision applies to cable types including copper, multimode fiber optic, singlemode fiber optic, telephone cables, Ethernet cables, or any other cable used by the County to monitor and maintain its various signal and ITS equipment.

The contractor shall plan ahead, and shall stage their construction work accordingly, so that he can interrupt communication, and then restore communication, with as little down time as possible. For example, when a section of existing interconnect is being relocated, the new handholes and conduits should be installed prior to disconnecting the interconnect cable. The interconnect cable can then be disconnected, pulled out of the existing conduit, pulled through the new conduit, and re-connected. In addition, when an existing fiber optic cable is to be reused, the contractor shall be prepared to immediately replace any fiber splices and/or terminations that become damaged.

Prior to disconnecting any LCDOT communication link, the contractor shall contact the Traffic Engineer for approval of their planned construction method.

#### PASSAGE SYSTEM SUPPORT

The LCDOT PASSAGE TMC staff are available to provide a limited amount of technical support to the Contractor between the hours of 8:00 AM and 4:30 PM. The Contractor may request the TMC staff provide configuration information, settings, and testing support, and other items approved by the Traffic Engineer. Due to the primary responsibility of PASSAGE staff to maintain traffic flow in Lake County during peak hours, requests that require LCDOT support after 4:30 PM may not be honored until the next business day. Extensions to the contract working days or completion date will not be authorized solely due to requests for support that do not meet these requirements.

#### LAYER II (DATA LINK) SWITCH

This specification sets forth the minimum requirements for a layer II Ethernet switch that will transmit data from one traffic signal cabinet to another traffic signal cabinet containing a layer II switch or a layer III (Network) switch. The layer II switch shall be a Cisco Catalyst 2955 Series Intelligent Ethernet Switch.

The Layer II (Data Link) Switch shall be procured from Parsons, the County's Passage

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engineering consultant. Parsons shall program this equipment for the appropriate location in the County's communication network.

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

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

#### **SPLICE FIBER IN CABINET**

This work shall consist of fusion splicing singlemode fibers in a field cabinet or inside a building as indicated on the plans and as directed by the Engineer. Splices shall be secured in fiber optic splice trays within fiber optic distribution enclosures. All fusion splices shall be secured on aluminum splice trays capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The tray dimensions shall not exceed 7.5"x4.1"x0.45" and shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. All individual splice trays shall be labelled. Splice trays shall be included in the cost of SPLICE FIBER IN CABINET and shall not be paid for separately.

The quality of all fiber splices shall be verified by testing and documentation in accordance with Article 801.13(d) of the "Standard Specifications," to the satisfaction of the Engineer.

All optical fibers shall be spliced to provide continuous runs. Splices shall only be allowed in equipment cabinets except where otherwise shown on the Plans.

All splices shall be made using a fusion splicer that automatically positions the fibers using a system of light injection and detection. The Contractor shall provide all equipment and consumable supplies.

Basis of payment. This work shall be paid for at the contract unit price each for SPLICE FIBER IN CABINET, which will be payment in full for all fusion splicing, fiber optic splice trays, testing and documentation, at a cabinet or building location shown on the plans and as directed by the Engineer. This pay item shall include splices between existing fiber optic cables, including all splices listed in the plans as "BID." Splices involving fiber optic cable installed new under this Contract, including all splices listed in the plans as "INCLUDED," shall be included in the cost of the applicable FIBER OPTIC CABLE IN CONDUIT pay items.

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# STEEL MAST ARM ASSEMBLY AND POLE (SPECIAL) STEEL COMBINATION MAST ARM ASSEMBLY AND POLE (SPECIAL)

Add the following to Article 1077.03 of the "Standard Specifications":

Base covers for mast arm poles shall be cast aluminum. All mast arms, mast arm poles, luminaire arms, and any exposed steel hardware shall be hot-dipped galvanized, and then powder-coated black by the supplier/manufacturer, as described below or an approved alternative finishing method. Cast aluminum base covers shall be powder-coated black by the supplier/manufacturer, as described below or an approved alternative finishing method.

All galvanized and aluminum exterior surfaces shall be coated with chip resistive epoxy resin primer applied via electrostatic spray equipment. The primer is to be applied at a minimum dry film thickness (DFT) of 3.0 mils with a minimum DFT of 6.0 mils applied to the lower 8 feet of the pole. The primer coat must be energy absorptive, and capable of achieving a rating of 10A under testing per ASTM (American Society for Testing and Materials) Procedure D3170, Standard Test Method for Chipping Resistance of Coatings. The primed surfaces shall then be coated with a black semi-gloss TGIC Super Durable Polyester topcoat to a minimum dry film thickness of 3.0 mils. The topcoat must meet the requirements of AAMA (American Architectural Manufacturer's Association) 2604 for color and gloss retention properties.

The manufacturer shall warranty the finish of all components for a period of at least 5 years from the date of shipment. The contractor shall provide a copy of the warranty to the Engineer, upon request.

All chips, scrapes, scratches, etc. in the paint shall be touched-up by the Contractor according to the manufacturer's recommendations, with matching paint supplied by the manufacturer.

All holes drilled into signal poles, mast arms, or posts shall require rubber grommets to prevent chafing of wires.

Stainless steel mesh screening shall be stainless steel banded to the anchor bolts, with a minimum 2-inch lap, to enclose the void between the top of the foundation and the base plate. The mesh screening shall have ¼-inch maximum opening and a minimum wire diameter of AWG NO. 16. The screening shall not be installed until the LCDOT Traffic Signal Engineer has inspected the leveling nuts at the Traffic Signal Turn-On.

All base covers shall fit tightly around the poles, with little or no gap at the top of the base cover. Two-piece base covers shall fit together tightly, with little or no gap between the two pieces. All base covers shall fit securely on top of the foundation, and shall not easily move or wobble. All base covers shall have an access hand hole, with a removable cover, and a minimum opening size of 200 square inches.

Pedestrian pushbutton stations shall be mounted to mast arm base covers according to the following: The top and bottom of the station shall be secured by drilling, tapping, and installing a 3/8-inch stainless steel threaded bolt, lock washer, and hex nut. Do not use self-tapping screws. Spacers made of 3/4-inch aluminum conduit shall be installed behind the pushbutton station, to level and plumb the station.

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Luminaire arms shall be steel, and of the length shown on the plans. Luminaire arms over fifteen (15) feet in length shall be tapered, monotube style, with AASHTO 2001 wrap-around, gusset style connection.

Luminaires shall be installed at a minimum mounting height of forty-five (45) feet, and shall be paid for separately.

All (Special) steel mast arm assemblies and poles (including combination mast arm assemblies) shall be manufactured and/or supplied by Sternberg Vintage Lighting, Union Metal, or Valmont, according to the following:

- Round, tapered, 16-sharp fluted pole.
- Round, tapered, smooth, standard-curved, flange-connected, traffic signal mast arm

The two-piece mast arm base cover shall be cast aluminum, and shall be manufactured and/or supplied by the same company as the mast arm assembly and pole. Manufacturer designations for the two-piece mast arm base cover to be used with (SPECIAL) MAST ARM ASSEMBLIES include the following:

- Sternberg (Hamilton 6401SS)
- Valmont (Lake County AC1 base cover)
- Union Metal

Add the following to Article 877.04 of the "Standard Specifications":

This work will be paid for at the contract unit price per each for STEEL MAST ARM ASSEMBLY AND POLE (SPECIAL) or STEEL COMBINATION MAST ARM ASSEMBLY AND POLE (SPECIAL), of the signal arm length specified.

#### TERMINATE FIBER IN CABINET

This work shall consist of terminating existing or new fibers in field cabinets or buildings as indicated on the plans or as directed by the Engineer.

All multi-mode connectors shall be ST compatible, with ceramic ferrules. Singlemode fiber terminations shall utilize pre-fabricated, factory-terminated (SC compatible with ceramic ferrules) pigtails fusion spliced to bare fibers. The pre-fabricated pigtails shall have all of their fibers color coded to match the singlemode fibers in the fiber optic cable. All fusion splices shall be secured on aluminum splice trays capable of accommodating the required number of fusion splices, including necessary splice holders and a compatible splice tray cover. The tray dimensions shall not exceed 7.5"x4.1"x0.45" and shall be mounted within the enclosure using suitable hardware that allows removal for maintenance purposes without the use of tools. All individual splice trays shall be labelled. Splice trays and connector bulkheads shall be included in the cost of TERMINATE FIBER IN CABINET, and shall not be paid for separately. Connector bulkheads shall be the proper type for the fiber enclosure at the location, and shall be properly secured to the enclosure.

The quality of all fiber splices shall be verified by testing and documentation in accordance with Article 801.13(d) of the "Standard Specifications," to the satisfaction of the Engineer.

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Basis of payment. This work shall be paid for at the contract unit price each for each fiber terminated in a field cabinet or inside a building as TERMINATE FIBER IN CABINET, which will be payment in full for terminating each required multimode or singlemode fiber, including all connectors, pigtails, splice trays, bulkheads, testing and documentation. The splicing of pigtails for singlemode fibers is included in the cost of TERMINATE FIBER IN CABINET, and shall not be paid for separately. This pay item shall include terminations of existing fiber optic cables, including all terminations listed in the plans as "BID." Terminations involving fiber optic cable installed new under this Contract, including all terminations listed in the plans as "INCLUDED," shall be included in the cost of the applicable FIBER OPTIC CABLE IN CONDUIT pay items.

## **BOARDWALK STRUCTURE**

- 1. GENERAL
- 1.01 DESCRIPTION
- A. Work under this Section includes:
- Furnishing and installation of wood boardwalks.
  - B. Other specification sections which directly relate to the work of this section include, but are not limited to, the following:
    - 1. Section 02100 Temporary Site Access and Facilities
    - 2. Section 02300 Site and Natural Resource Protection
    - 3. Section 02500 Site Clearing and Vegetation Removal
    - 4. Section 02400 Soil Erosion and Sediment Control
    - 5. Section 05100 Trail Construction

#### 1.02 QUALITY ASSURANCE

- A. Contractor Qualifications: The work described in this section requires specialized knowledge, experience, skills and equipment to successfully complete. The Contractor shall possess the full capability to execute the work as specified, including trained, experienced and skilled personnel and possession or access to the required equipment. The boardwalk contractor shall provide proof of qualifications, including a work history documenting a minimum of five (5) heavy timber boardwalk or bridge projects completed in the last five (5) years which are comparable in scope, construction techniques and size. This information shall include a complete project description, lead foreman experience history, location, client name and contact phone numbers. The Contractor or Subcontractors responsible for the work in this section are subject to Owner approval as described in Article 1.12.
- B. Shop Drawings:

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1. The Contractor shall supply three (3) copies of boardwalk shop drawings which shall be prepared by a structural engineer licensed in the State of Illinois. All drawings, calculations and other submittals shall bear the engineer's signed licensure seal.

- Shop drawing shall be original drawings, specifications and calculations prepared specifically for this project and not generic 'boiler plate' documents from other unrelated projects. They shall include the project name, owner's project number, location and date.
- 3. Shop drawings shall include all plans, elevations, sections, details, labels and notes to fully describe material type, quantity, quality and size; layout, location, fabrication, erection and setting of assemblies; and references and industry standards to govern the construction. They shall also include all structural studies and calculations for all structural members, fasteners and assemblies to verify the structural integrity, required load capacities and compliance with the stated design goals.
- 4. The Contractor shall carefully review the shop drawings for discrepancies, omissions, material availability, and construction conflicts. The Contractor shall clearly stamp and sign the shop drawings with any suggested changes, deviations and / or approval based on this review before submittal to the Owner.
- Shop drawings, submittal requirements, procedures and schedules for boardwalks shall meet the requirements contained in Subsection 1.09 of Section 01000, General Project Requirements.

#### C. Other Submittals

- 1. Certification of compliance for wood preservative treatment from the treating facility shall be provided before commencement of work.
- 2. The boardwalk contractor shall provide detailed information regarding the round wood pile driving equipment and methods to be used on the project, including tractor model and vibratory driver attachment specifications to verify driving capacity. The Engineer shall review the proposed equipment, accessories and methods for compatibility with the project. However, the adequacy of the equipment shall remain the responsibility of the Contractor.
- 3. Manufacturer's data sheets indicating metal type and corrosion resistance treatment details shall be provided for all connectors and fasteners and shall be approved by the Owner before the commencement of work.

## D. Inspections and Warranty

- 1. The Contractor shall provide a written warranty against defects in materials and craftsmanship for a period of three (3) years from the completion date of the structure.
- 2. The completion date of the structure shall be determined only after correction of any defects noted during a complete inspection by the Owner, Contractor and

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boardwalk foreman. The Contractor shall re-inspect the structure within one year of the completion date and after the wood members have adequately dried and have attained a stable dimension. Defects and improperly seated fasteners found during the re-inspection shall be promptly remedied.

#### 2. PRODUCTS

#### 2.01 LUMBER

#### A. GENERAL

- 1. Unless otherwise specified, all lumber shall be Southern Yellow Pine (SYP), including source species Pinus elliottii (slash pine), P. echinata (shortleaf), P. palustris (longleaf) and P. taeda (loblolly).
- 2. Except for round timber piles, all lumber shall be sawn four sides (S4S).
- 3. Except for round timber piles, glued laminated timber members and stringer scab boards, all lumber shall be No. 1 Grade as defined under the rules of the Southern Pine Inspection Bureau (SPIB) and shall be imprinted with the appropriate grade stamp. Individual boards which contain defects such that they do not qualify as No. 1 Grade or which may adversely affect the finished product shall be rejected and disposed of offsite.
- 4. All installed lumber shall be free of damage which may affect the structural integrity or appearance of the finished boardwalk. Lumber which has been crushed, cracked, broken or otherwise compromised shall be rejected.
- 5. Lumber shall be delivered and stored at the work site in such a manner that mechanical and environmental damage is prevented.
- Lumber which has not been adequately seasoned after treatment shall be restacked with spacing stringers and allowed to dry until an acceptable maximum moisture content is achieved.
- 7. All preservative-treated lumber other than railing members, shall be pressure-impregnated with Chromated Copper Arsenate Type C (CCA) and shall meet the requirements of the latest applicable American Wood Protection Association (AWPA) Standards.

#### B. ROUND TIMBER PILES

- Round timber piles shall be new, unused and peeled piles provided in the minimum dimensions indicated on the plans. Pile lengths supplied to the work site shall be the maximum allowed by the approved driving equipment, estimated pile depths and any overhead obstructions in order to minimize pile splicing.
- 2. Round timber piles shall meet the requirements of ASTM D-25 (latest edition), Standard Specifications for Round Timber Piles.
- 3. Round timber piles shall be preservative-treated in accordance with AWPA Standard U1, Commodity Specification E and meeting the requirements of Use Category 4C (UC4C) with a minimum retention of .80 pounds per cubic foot (pcf).

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## C. PILE CAPS, HEADWALLS AND WINGWALLS

 Sawn lumber for pile caps, headwalls and wingwalls shall be preservative-treated in accordance with AWPA Standard U1, Commodity Specification A and meeting the requirements of Use Category 4B (UC4B) with a minimum retention of .60 pounds per cubic foot (pcf).

#### D. DECKING, STRINGERS AND WALL CAPS

1. Sawn lumber for decking, stringers and wall caps shall be preservative-treated in accordance with AWPA Standard U1, Commodity Specification A and meeting the requirements of Use Category 4A (UC4A) with a minimum retention of .40 pounds per cubic foot (pcf).

#### E. CURBS AND CURB BLOCKS

- Sawn lumber for curbs and curb blocks shall be preservative-treated in accordance with AWPA Standard U1, Commodity Specification A and meeting the requirements of Use Category 4A (UC4A) with a minimum retention of .40 pounds per cubic foot (pcf).
- 2. Sawn lumber for curbs and curb blocks shall be kiln dried after treatment (KDAT) to a moisture content of 19% or less.

#### F. RAILINGS

- 1. All railing members, including posts, stringers, pickets and rail caps shall be Southern Yellow Pine (SYP), pressure-impregnated with Alkaline Copper Quaternary (ACQ) or Copper Azole (CA) in accordance with AWPA Standard U1, Commodity Specification A and meeting the requirements of Use Category 4A (UC4A) with a minimum retention of .40 pounds per cubic foot (pcf).
- Rail caps or other members which have a likelihood of skin contact shall be sanded very smooth and be free of splinters, cracks or other defects which could cause injury.

#### G. GLU-LAMS

- All glued laminated timber (glulam) members shall be industrial grade Southern Yellow Pine (SYP) and shall conform to the latest edition of ANSI / AITC Standard A190.1 American National Standard for Wood Products — Structural Glued Laminated Timbers and AITC Design Standard 117-2010. Glu-lams shall be sourced from an APA/EWS certified manufacturer.
- Sawn lumber for curbs and curb blocks shall be preservative-treated in accordance with AWPA Standard U1, Commodity Specification F and meeting the requirements of Use Category 4B (UC4B) with a minimum retention of .40 pounds per cubic foot (pcf). Each ply shall be treated prior to gluing and lamination. Individual piles shall be 14% KDAT before treatment.

#### 2.02 HARDWARE

A. Steel bolts shall meet the requirements of ASTM A307-10.

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B. Screws for decking shall be 304 stainless steel or better.

- C. All other metal hardware including nails, bolts, nuts, washers, fasteners, straps and clips shall be zinc-coated hot-dipped galvanized steel meeting the requirements of ASTM A153 and / or ASTM A653, G-185.
- D. No aluminum components shall be used in contact with preservative-impregnated wood.

#### 2.03 GEOTEXTILE FABRIC

A. Geotextile fabric shall be Mirafi 140 NC, TerraTex N04E, or Thrace-LINQ GTF-140EX, a non-woven, needle-punched polypropylene staple fiber which is UV-stabilized and resistant to chemicals, mildew and insects.

#### 3. EXECUTION

#### 3.01 GENERAL

- A. Unless indicated otherwise in the drawings, the contractor shall be responsible for all clearing of herbaceous vegetation in the work area, including cattails, other grasses and forbs which may impact layout and construction. All such clearing shall be accomplished by workers on foot. No vehicular, machinery or other types of access which may impact the wetland or violate the conditions of the relevant wetland permits shall be allowed.
- B. Boardwalks shall be installed at the locations shown on the Drawings. They shall be accurately located and staked using the approved control points. Curved boardwalks shall be staked at 20 foot intervals, either at the structure center line or as an offset. The Owner shall approve all elevations and staking before the start of work. Unless otherwise indicated, boardwalks shall be constructed level.
- C. The Owner has established a minimum curve radius of 175 feet, which is reflected in the boardwalk design. When performing pile layout, pile offsets between typical 10 foot intervals should be no greater than 8 inches at the minimum radius to assure the desired appearance. Offsets should be varied to transition from curve to curve. Notify the Owner when initial layout indicates an offset greater than 8 inches.
- D. When located in wetlands or other designated sensitive areas, the contractor shall perform all work from deck level. All foot traffic, tools and materials shall be contained within fifteen feet of the boardwalk.
- E. When severe weather conditions such as extreme temperatures, snow or ice interfere with proper construction techniques and craftsmanship, work shall be suspended until proper conditions are present.
- F. Installed deck surfaces shall be kept clean of foreign debris such as stone or soil or protected from damage due to continued construction activity.
- G. The Owner shall install load limit signs at both ends of the boardwalk.

#### 3.02 ROUND TIMBER PILES

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A. The Contractor shall drive each timber pile to a depth and resistance which meets or exceeds the loading requirements indicated on the plans and shop drawings. Estimated pile depths indicated in the Geotechnical Investigation report are provided for guidance only, and it shall be the sole responsibility of the Contractor to provide the exact pile depths required for the project. No additional compensation shall be allowed for installing piles to a greater depth than indicated in the Geotechnical Investigation report.

- B. All piles shall be driven to a minimum depth of 8 feet. When the minimum depth cannot be met with the approved driving equipment, an auger with a diameter no greater than 90% of the pile diameter may be used before insertion as long as the minimum bearing requirements are achieved.
- C. All piles shall be driven from deck level or from outside the wetland boundary using only an approved vibratory compactor / driver and backhoe.
- D. The Owner may engage the services of an independent party to observe and approve the installation of one or more test piles.
- E. The Contractor shall compile and maintain a pile driving record on an approved plan which lists and locates each driven pile, the final pile depth from ground level to the pile tip and whether the pile was spliced. The pile driving record shall be submitted to the Owner upon completion. Piles shall be adequately marked to determine exact depth.
- F. Installed piles shall not deviate from plumb more than ¼" per foot of pile length or 6 inches total from the location of the pile top from original insertion location.
- G. Piles which have been split, cracked or otherwise damaged during driving shall be removed or abandoned, and a replacement pile installed.
- H. Splices shall be used only when the maximum usable pile length is insufficient to meet the required bearing capacity. Only approved splice methods shown on the drawings shall be used.
- I. Pile groups sharing a common pile cap shall be cut flush and level to each other such that the pile cap is contacted by every pile equally. Re-driving individual piles may be required due to soil disturbance when driving adjacent piles.
- J. All cuts, including end cuts and splices, shall be field-treated in accordance with AWPA Standard M4. A liberal application of a copper naphthenate preservative containing a minimum of 2% copper metal is specified.

#### 3.03 STRUCTURAL WOOD MEMBERS

- A. No splices of pile caps, stringers or other structural wood members shall be allowed.
- B. All screws shall be pre-drilled to a maximum hole diameter no greater than the root or minor diameter of the screw and at least 75% of the screw depth.

#### 3.04 WOOD DECKING

A. All wood decking boards shall be fully contacted by the support stringers below. Install decking with the bark side up.

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B. No splices of deck boards shall be allowed.

- C. All screws shall be pre-drilled to a maximum hole diameter no greater than the root or minor diameter of the screw and at least 75% of the screw depth. Deck screws shall be countersunk to a depth of ½".
- D. Deck boards which are cut along their length (ripped) to accommodate a curved design, shall measure at least 2 inches across at the smallest end.
- E. The maximum allowable gap between deck boards after full drying and shrinkage shall be one-half inch (1/2").
- F. The maximum allowable difference in elevation between adjacent deck boards shall be one-quarter inch (1/4") without a planed bevel. The maximum allowable difference in elevation between adjacent deck boards where at least one board has a planed bevel shall be one-half inch (1/2"). All planed bevels of deck boards shall be a minimum of one inch (1") wide.
- G. Deck boards which are end trimmed at curved sections shall be cut as a continuous curve and not as individual straight sections.

#### 3.05 WOOD CURBS

- A. Curbing at curved sections shall be installed in five foot (5') lengths. Curbing at straight sections shall be installed in ten foot (10') lengths.
- B. Nails shall be fully driven into curbs and curb blocks.

#### 3.06 ABUTMENTS

- A. Geotextile fabric shall be installed at the backfill side of the abutment wall and wing walls with 1" plastic cap nails.
- B. Abutment wing wall caps shall be firmly secured to the wall. Any wall caps which deflect when walked on shall have additional blocking installed to eliminate any movement.
- C. Bottom board of abutment shall be buried a minimum of 6" below undisturbed ground.

BASIS OF PAYMENT: This work will be paid for at the contract unit price per FOOT for BOARDWALK STRUCTURE, of the number specified, which shall include all labor, materials, and equipment necessary to complete the work as shown on the plans or as directed by the Engineer.

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# REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL POROUS GRANULAR EMBANKMENT, SPECIAL BIAXIAL GEOGRID

#### Description

This work shall include the removal of unsuitable soils and placement of geotextile fabrics and suitable replacement materials.

#### Material

## ON-SITE STRUCTURAL FILL (BORROW)

A. Excavated soil and borrow material to be used for undercuts shall meet the requirements of Article 204.02 of the IDOT Standard Specifications and shall be subject to approval by the Owner and Engineer.

#### FURNISHED EXCAVATION MATERIAL

A. Offsite furnished material shall be suitable for fills meeting the requirements of Article 204.02 of the IDOT Standard Specifications and shall be subject to approval by the Owner and Engineer.

#### GEOTEXTILE GROUND STABILIZATION

- A. Geotextile fabric shall be non-woven; needle punched polypropylene staple fiber that is UV stabilized and resistant to chemicals, mildew and insects and be approved by the Engineer.
- B. The geotextile fabric shall meet the following minimum criteria:

Grab Tensile Strength 215 lbs.
Elongation 50%
Puncture (CBR) 600 lbs.
Permittivity 1.3 sec<sup>-1</sup>

## POROUS GRANULAR EMBANKMENT (PGE), CA-1

A. Aggregate materials for use as PGE shall be CA-1, in conformance with Article 1004.01 of the IDOT Standard Specifications. Sources and/or samples of the proposed material shall be submitted to the Owner prior to delivery and installation.

#### Execution

#### GENERAL

A. If at any time the Contractor discovers unsuitable or unstable material in areas that require structural fill for trails, pavements or structures, work shall be stopped and the Owner shall be contacted immediately. The Contractor shall

Section No.: 14-F3000-04-BT

Lake County Contract: 61C67

excavate test pits at select locations to allow examination of the subsoils by the Engineer. A determination shall be made by the Engineer as to the most appropriate remedy and the Contractor shall be directed to perform the additional work. This work may include removal and replacement of soils, placement of geotextile fabrics or other remedies and shall be paid for as per the Schedule of Prices.

- B. Proof rolling of subgrades shall be performed in the presence of the Engineer. When proof rolling reveals unsuitable or unstable soils, the Engineer shall determine the most appropriate remedy and direct the Contractor accordingly as described above.
- C. All excess excavated soils and spoil materials shall be relocated to an on-site area and spread as directed by the Engineer. Should the Engineer require that material be removed from the site, it shall be paid for under a separate pay item if so included in the Schedule of Prices.

## EXCAVATION AND ON-SITE DISPOSAL OF UNSUITABLE MATERIAL

- A. Work contained under pay this item shall include the excavation, removal, loading hauling and on-site spreading of material deemed unsuitable by the Engineer.
- B. Prior to the commencement of this work, the Engineer shall determine the exact dimensions, depths and quantities to be removed. Failure of the Contractor to have the work area properly inspected, approved and quantified by the Engineer will result in the denial of payment for such work.

## PLACEMENT OF ON-SITE STRUCTURAL FILL / FURNISHED EXCAVATION

- A. Work contained under this item shall include placement, compaction and testing of suitable onsite material or furnished excavation in areas of undercut as directed by the Engineer. This work shall be done in accordance with Section 205 of the IDOT Standard Specifications.
- B. Compaction shall be to a minimum ninety-five percent (95%) of maximum density based on a Standard Proctor (ASTM D-698). Where compaction of the subgrade is required, any areas that are inaccessible to a roller shall be compacted either by other mechanical means or using a hand tamper meeting the approval of the Engineer.
- C. After final filling and compacting, undercut areas shall be proof rolled in the presence of the Engineer.

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## PLACEMENT OF POROUS GRANULAR EMBANKMENT (PGE), CA-1

- A. This work shall consist of furnishing all materials, equipment, and labor for the installation of Porous Granular Embankment (PGE). PGE shall be placed at the locations, dimensions and depths as directed by the Engineer.
- B. This item shall be used as replacement for unstable and unsuitable material that has been removed. PGE shall be furnished, placed and compacted to the satisfaction of the Engineer and in accordance with Section 207 of the IDOT Standard Specifications

Basis of Payment: This work will be paid for at the contract unit price per CU YD for REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL: per CU YD for POROUS GRANULAR EMBANKMENT, SPECIAL; and per SQ YD for BIAXIAL GEOGRID. The unit price shall include all labor, materials, and equipment necessary to complete the work as directed by the Engineer and as specified herein.

## AGGREGATE SURFACE COURSE, TYPE B SPECIAL

This work shall consist of placing aggregate surface course on the existing aggregate entrance road within Callahan Park used for construction staging. All work shall be completed in accordance with Section 402 of the Standard Specifications.

Upon completion of using Callahan Park for construction staging the contractor shall regrade the existing gravel access road to eliminate any holes, waves or undulations that have occurred during construction operations. Once the existing gravel access has been regraded, the contractor shall place 1" of Aggregate Surface Course Type B and compact per the special provisions or to the satisfaction of the Engineer.

Basis of Payment. This work will be paid for at the contract unit price per SQ YD for AGGREGATE SURFACE COURSE, TYPE B SPECIAL. The unit price includes all labor, materials, and equipment necessary to complete the work as directed by the Engineer and as specified herein.

#### TRAFFIC SIGNAL POST (SPECIAL) (LCDOT)

Effective: October 1, 2016

Revised: LC875.01

**Description:** This work shall consist of furnishing and installing a metal traffic signal post at locations shown on the plans and/or as directed by the Traffic Engineer.

**Materials:** The traffic signal post shall meet the requirements of Article 1077.01 of the "Standard Specifications" and the following:

The traffic signal post shall be made of extruded aluminum, 16 feet in height, unless otherwise shown on the plans. The base shall be cast aluminum.

The traffic signal post and associated base shall be manufactured and/or supplied by Beacon, Sternberg Vintage Lighting, Union Metal, or Valmont, according to the following:

- Round, straight (non-tapered), 5-inch diameter, 12-flat fluted post.
- A ball center cap for the top of the post, instead of a tenon.
- The base section of the post shall be approximately 43 inches tall.

Manufacturer designations for TRAFFIC SIGNAL POST (SPECIAL) include the following:

- Beacon (MainStreet Series (100SJ)) base
- Sternberg (Hamilton Series (5400D)) base
- Union Metal
- Valmont

The traffic signal post and associated base shall be assembled and any exposed steel hardware shall be hot-dipped galvanized and powder-coated black by the supplier/manufacturer, as described below or by a pre-approved alternative finishing method. Cast aluminum base covers shall be powder-coated black by the supplier/manufacturer, as described below or by a pre-approved alternative finishing method.

**Powder-Coated Finish:** All galvanized and aluminum exterior surfaces shall be coated with chip resistive epoxy resin primer applied via electrostatic spray equipment. The primer is to be applied at a minimum dry film thickness (DFT) of 3.0 mils with a minimum DFT of 6.0 mils applied to the lower 8 feet of the pole. The primer coat shall be energy absorptive, and capable of achieving a rating of 10A under testing according to the American Society for Testing and Materials (ASTM) Procedure D3170, Standard Test Method for Chipping Resistance of Coatings. The primed surfaces shall then be coated with a black semi-gloss TGIC Super Durable Polyester topcoat to a minimum dry

film thickness of 3.0 mils. The topcoat shall meet the requirements of the American Architectural Manufacturer's Association (AAMA) 2604 test for color and gloss retention properties.

The manufacturer shall warranty the finish of all components for a period of at least five years from the date of shipment. The Contractor shall provide a copy of the warranty to the Traffic Engineer, upon request.

**General:** This work shall be performed according to Section 875 of the "Standard Specifications" and the following:

All chips, scrapes, scratches, etc.., in the paint shall be touched-up by the Contractor according to the manufacturer's recommendations, with matching paint supplied by the manufacturer.

All holes drilled into signal poles, mast arms, or posts shall require rubber grommets to prevent the chafing of wires.

Pedestrian pushbutton stations shall be mounted to mast arm base covers according to the following:

- The top and bottom of the station shall be secured by drilling, tapping, and installing a 3/8-inch stainless steel threaded bolt, lock washer, and hex nut. Do not use self-tapping screws.
- Spacers made of 3/4-inch aluminum conduit shall be installed behind the pushbutton station, to level and plumb the station.

**Basis of Payment:** This work will be paid for at the contract unit price per each for TRAFFIC SIGNAL POST (SPECIAL) of the length specified.

## 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 one. 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.

#### DEPARTMENT OF THE ARMY



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

December 5, 2016

Technical Services Division Regulatory Branch LRC-2015-877

SUBJECT: Request Authorization to Impact 0.006 Acres of Wetland for a Proposed trail extension through Commonwealth Edison (ComEd) Right-Of-Way with Trailhead Beginning at North Green Bay Road at the Far West and Connecting to the Existing Lyons Woods Trail at the Robert McClory Bike Path at the East in Waukegan, Lake County, Illinois

Jeff Sloot Lake County Forest Preserve 1899 West Winchester Road Libertyville, IL 60048

Dear Mr. Sloot:

This office has verified that your proposed activity complies with the terms and conditions of Regional Permit #2 and the General Conditions for all activities authorized under the Regional Permit Program.

This verification expires three (3) years from the date of this letter and covers only your activity as described in your notification and as shown on the plans entitled "State of Illinois, Department of Transportation, Division of Highways, Proposed Highway Plans, Lyons Woods Trail Extension, Lake County Forest Preserve District, Section 14-F3000-04-BT, LCFD Project No. 63010-0119-764, From N Green Bay Road to Robert McClory Bike Path, New Constructions, Sheets 1-69" dated November 17, 2016, prepared by Gewalt Hamilton & Associates, Inc. Caution must be taken to prevent construction materials and activities from impacting waters of the United States beyond the scope of this authorization. If you anticipate changing the design or location of the activity, you should contact this office to determine the need for further authorization.

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

1. This authorization is contingent upon implementing and maintaining soil erosion and sediment controls in a serviceable condition throughout the duration of the project. You shall comply with the project's soil erosion and sediment control (SESC) plans and the

installation and maintenance requirements of the SESC practices on-site. You shall notify this office any changes or modifications to the approved plan set. Please be aware that field conditions during project construction may require the implementation of additional SESC measures for further protection of aquatic resources. If you fail to implement corrective measures, this office may require more frequent site inspections to ensure the installed SESC measures are acceptable. Please be aware that work authorized herein may not commence until you receive written notification from this office that your plans meet technical standards.

- 2. This site is within the aboriginal homelands of several American Indian Tribes. If any human remains, Native American cultural items or archaeological evidence are discovered during any phase of this project, interested Tribes request immediate consultation with the entity of jurisdiction for the location of discovery. In such case, please contact Melyssa Navis by telephone at (312) 846-5533, or email at melyssa.r.navis@usace.army.mil.
- 3. You are responsible for all work authorized herein and for ensuring that all contractors are aware of the terms and conditions of this authorization.
- 4. A copy of this authorization must be present at the project site during all phases of construction.
- 5. You shall notify this office of any proposed modifications to the project, including revisions to any of the plans or documents cited in this authorization. You must receive approval from this office before work affected by the proposed modification is performed.
- 6. You shall notify this office prior to the transfer of this authorization and liabilities associated with compliance with its terms and conditions.

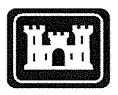
The authorization is without force and effect until all other permits or authorizations from local, state, or other Federal agencies are secured. Please note that IEPA has issued Section 401 Water Quality Certification for this RP. These conditions are included in the enclosed fact sheet. If you have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

Once you have completed the authorized activity, please sign and return the enclosed compliance certification. If you have any questions, please contact Melyssa Navis of my staff by telephone at (312) 846-5533, or email at melyssa.r.navis@usace.army.mil.

Sincerely,
CHERNICH.KATHLEEN.G.12
30365616
2016.12.07 16:07:18 -06'00'
Kathleen G. Chernich
Chief, East Section
Regulatory Branch

## Copy Furnished:

Lake County Stormwater Management Commission (Kurt Woolford)
Lake County Planning, Building and Development Department (Steve Crivello)
Gewalt Hamilton & Associates (Caitlin Burke)



#### PERMIT COMPLIANCE

#### CERTIFICATION

| Permit Number:      | LRC-2015-877   |
|---------------------|--|
| Permittee:          | Lake County Forest Preserve  |
| Date:               | December 5, 2016   |
| accordance with the | he work authorized by the above-referenced permit has been completed in terms and conditions of said permit and if applicable, compensatory wetland leted in accordance with the approved mitigation plan. |
| PERMITTEE           | DATE   |

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

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

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

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



## GENERAL CONDITIONS APPLICABLE TO THE 2012 REGIONAL PERMIT PROGRAM

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

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

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

- 1. The applicant shall not cause:
  - a) a violation of applicable water quality standards of the Illinois Pollution Control Board Title 35, Subtitle C: Water Pollution Rules and Regulations;
  - b) water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - c) interference with water use practices near public recreation areas or water supply intakes;
  - d) a violation of applicable provisions of the Illinois Environmental Protection Act.
- 2. The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Except as allowed under condition 9, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all State statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent soil erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining a NPDES Stormwater Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of (1) one or more acres, total land area. A NPDES Stormwater Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Illinois EPA's Division of Water Pollution Control, Permit Section.
- 5. The applicant shall implement erosion control measures consistent with the Illinois Urban Manual (IEPA/USDA, NRCS; 2011, http://aiswcd.org/IUM/index.html).
- 6. The applicant is advised that the following permits(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- Backfill used in the stream-crossing trench shall be predominantly sand or larger size material, with less than 20% passing a #230 U.S. sieve.
- 8. Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of flow.
- 9. Backfill used within trenches passing through surface waters of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
  - a) particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using #230 U.S. sieve; or
  - b) excavation and backfilling are done under dry conditions.
- 10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered "acid-producing material" as defined in 35 II. Adm. Code,

- Subtitle D. If considered "acid-producing material," the applicant shall obtain a permit to construct pursuant to 35 II. Adm. Code 404.101.
- 12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
- 13. Applicants that use site dewatering techniques in order to perform work in waterways for construction activities approved under Regional Permits 1 (Residential, Commercial and Institutional Developments), 2 (Recreation Projects), 3 (Transportation Projects), 7 (Temporary Construction Activities), 9 (Maintenance) or 12 (Bridge Scour Protection) shall maintain flow in the stream during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
- 14. In addition to any action required of the Regional Permit 13 (Cleanup of Toxic and Hazardous Materials Projects) applicant with respect to the "Notification" General Condition 22, the applicant shall notify the Illinois EPA Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL) for all cleanup activities under BOL jurisdiction, or for which authorization or approval is sought from BOL for no further remediation. This Regional Permit is not valid for activities that do not require or will not receive authorization or approval from the BOL.
- 2. Threatened and Endangered Species If the District determines that the activity may affect Federally listed species or critical habitat, the District will initiate section 7 consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with the Endangered Species Act of 1973, as amended (Act). Applicants shall provide additional information that would enable the District to conclude that the proposed action will have no effect on federally listed species.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

North Cook SWCD 899 Jay Street Elgin, IL 60120 (847) 468-0071 www.northcookswcd.org McHenry-Lake County SWCD 1648 South Eastwood Dr. Woodstock, IL 60098 (815) 338-0099 ext.3 www.mchenryswcd.org

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

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

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

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

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

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

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

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

#### For all activities, notification shall include:

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

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

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

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

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

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

| Approved by:              |                   |
|---------------------------|-------------------|
| //ORIGINAL SIGNED//       | February 24, 2012 |
| Frederic A. Drummond, Jr. | Date              |
| Colonel, U.S. Army        |                   |
| District Commander        |                   |



## **Storm Water Pollution Prevention Plan**



| Route                                      |  |                 | Marked Route   | !         | Section  |
|--|--|-----------------|--|-----------|--|
|  |  |                 | GreenBay to Butrick  |           | 14-F3000-04-BT   |
| Project                                    | Number   |                 | County   | -         | Contract Number  |
| TE-01                                      | 01(039)  |                 | Lake   | I         | 61C67  |
| Permit I                                   | n has been prepared to comply<br>No. ILR10 (Permit ILR10), issues<br>instruction site activities.          | wit             | h the provisions of the National Pollutant<br>y the Illinois Environmental Protection Ago  | Di:<br>en | scharge Elimination System (NPDES) cy (IEPA) for storm water discharges  |
| accorda<br>submitte<br>gatherir<br>I am aw | ince with a system designed to a<br>ed. Based on my inquiry of the p<br>ig the information, the informatio | ers             | ment and all attachments were prepared oure that qualified personnel properly gath son or persons who manage the system, or bubmitted is, to the best of my knowledge les for submitting false information, included   | or<br>ar  | ed and evaluated the information those persons directly responsible for and belief, true, accurate and complete. |
| Print Na                                   |  |                 | Title  | -         | Agency   |
| Susan                                      | Hall   |                 | Project Manager  |           | Lake County Forest Preserve Dist.  |
| Signatu                                    | re   |                 |  | ,         | Date   |
|  | Swan H   | -               | el   |           | 11/11/2016   |
| I. Site                                    | e Description  |                 |  |           |  |
| A.   | The project is located south Illinois. Geographically, the   | of<br>pro       | t location (include latitude and longitude):<br>(and parallel to) Yorkhouse Road in the<br>oject is located in Section 5 and 6, Town<br>de 42.407583, Longitude -87.864817   | he<br>wr  |  |
| В.   | Provide a description of the con   | str             | uction activity which is subject of this plar  | n:        |  |
|  | The project involves the con   | str             | uction of a new 10' wide HMA shared<br>n Bay Road (west termini) to Robert N   | u         |  |
| C.   | Provide the estimated duration   | of 1            | his project:   | -         | ·  |
|  | March 2017 - June 2018   |                 |  |           |  |
| D.   | The total area of the construction   | n s             | site is estimated to be30 acres.   |           |  |
|  | The total area of the site estima  | te              | to be disturbed by excavation, grading o   | or (      | other activities is 13.3 acres.  |
| E.   | The following is a weighted ave completed:   | raç             | ge of the runoff coefficient for this project  | aft       | er construction activities are   |
|  | 0.54   |                 |  |           |  |
| F.   |  | -               | oundaries. Include map unit name, slope  | in        | formation and erosivity:   |
|  | 298A: Beecher silt loam, 0 to<br>330A: Peoptone silty clay lo  | n,<br>o 2<br>am | 0 to 2 percent slopes, hydric. percent slopes. , 0 to 2 percent slopes, hydric.  |           |  |
|  | 530B: Ozaukee silt loam, 2 t<br>697A: Wauconda silt loam, (<br>830: Landfills                              |                 | The second contract of the con |           |  |

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| G. | Provid                      | e an aerial extent of wetland acreage at the site:   |
|----|-----------------------------|--|
|    | Wetla<br>acres              | nds are shown in the engineering plans. Total acreage of wetlands on site is approximately 3.2   |
| Н. | Provid                      | e a description of potentially erosive areas associated with this project:   |
|    | Gradi                       | ng will be the primary source of erosion   |
| l. | steepii                     | lowing is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. ess of slopes, length of scopes, etc.):  |
|    | 2. Gra                      |  |
| J. | site an<br>disturb<br>where | e erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, imate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the d controls to prevent off site sediment tracking (to be added after contractor identifies locations), areas of soil ance, the location of major structural and non-structural controls identified in the plan, the location of areas stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm is discharged to surface water including wetlands. |
| K. | Identify<br>City o          | who owns the drainage system (municipality or agency) this project will drain into:  f Waukegan  |
| ı  | l                           |  |
| L. | City o                      | lowing is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located.  |
| М. | <u> </u>                    | lowing is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the  |
|    | receivii                    | ng waters can be found on the erosion and sediment control plans:  |
|    | East s<br>West              | ide - Yeoman Creek to Waukegan River.<br>Side - Glen Flora Tributary   |
| N. | nigniy                      | pe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.   |
|    | Wetla<br>path ii            | nds on site will minimally impacted - all wetlands will be protected with silt fencing. Areas where the npacts a wetland will be culverted to ensure that flow is not disrupted.   |
| Ο. | impact                      | lowing sensitive environmental resources are associated with this project, and may have the potential to be ed by the proposed development:  |
|    | ☐ We                        | etland Riparian  |
|    |                             | reatened and Endangered Species  |
|    |                             | toric Preservation   |
|    |                             | B(d) Listed receiving waters for suspended solids, turbidity, or siltation   |
|    | ☐ An                        | ceiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity, or siltation<br>Dicable Federal, Tribal, State or Local Programs  |
|    | Otl                         | _  |
|    | 1. 303                      | (d) Listed receiving waters (fill out this section if checked above):  |
|    | <br>а.                      | The name(s) of the listed water body, and identification of all pollutants causing impairment:   |
|    |                             | ., and the second of all politicants 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:   |

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|    | Ċ    | Provide a description of the location   | (s) of any dewatering discharges to the MS4 and/or water body:  |
|----|------|---|---|
|    |      |   |   |
| 2  | 2. T | MDL (fill out this section if checked abo                                       | ove)  |
|    | a    | a. The name(s) of the listed water body   | <i>/</i> :  |
|    | k    | o. Provide a description of the erosion that is consistent with the assumption  | and sediment control strategy that will be incorporated into the site design ns and requirements of the TMDL: |
|    | (    | c. If a specific numeric waste load allog provide a description of the necessar | cation has been established that would apply to the project's discharges, ry steps to meet the allocation:    |
| P. | The  | following pollutants of concern will be a                                       | ssociated with this construction project:   |
|    | X    | Soil Sediment   | ▼ Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)  |
|    | X    | Concrete  | Antifreeze / Coolants   |
|    | ×    | Concrete Truck waste  | ➤ Waste water from cleaning construction equipment  |
|    | ×    | Concrete Curing Compounds   | Other (specify)   |
|    | ×    | Solid waste Debris  | Other (specify)   |
|    |      | Paints  | Other (specify)   |
|    |      | Solvents  | Other (specify)   |
|    |      | Fertilizers / Pesticides  | Other (specify)   |
|    |      |   |   |

#### II. Controls

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit 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.

| On areas where construction activity has temporary stabilization method can be used.   | temporarily ceased and will resume after fourteen (14) days, a sed.  |
|--|--|
| The following stabilization practices will be us           X         Preservation of Mature Vegetation   | sed for this project:  |
| Vegetated Buffer Strips  | Sodding  |
| Protection of Trees  | ☐ Geotextiles  |
| ▼ Temporary Erosion Control Seeding  | ☐ Other (specify)  |
| Temporary Turf (Seeding, Class 7)  | Other (specify)  |
| Temporary Mulching   | Other (specify)  |
| Rermanent Seeding  | Other (specify)  |
| Describe how the stabilization practices listed  |  |
|  | be protected. Erosion control blankets will be utilized to prevent   |
| Describe how the stabilization practices lister  | d above will be utilized after construction activities have been completed:  |
|  | erosion control blanket and seed immediately following   |
| attainable, to divert flows from exposed soils exposed areas of the site. Such practices madrainage swales, sediment traps, ditch checkinlet protection, rock outlet protection, reinfor sediment basins. The installation of these de | escription of structural practices that will be implemented, to the degree store flows or otherwise limit runoff and the discharge of pollutants from any include but are not limited to: perimeter erosion barrier, earth dikes, as, subsurface drains, pipe slope drains, level spreaders, storm drain ced soil retaining systems, gabions, and temporary or permanent vices may be subject to Section 404 of the Clean Water Act. |
| The following stabilization practices will be us   |  |
| ➤ Perimeter Erosion Barrier  | ⊠ Rock Outlet Protection   |
| ▼ Temporary Ditch Check  | X   Riprap   |
| Storm Drain Inlet Protection   | ☐ Gabions  |
| Sediment Trap  | ☐ Slope Mattress   |
| ☐ Temporary Pipe Slope Drain   | Retaining Walls  |
| ☐ Temporary Sediment Basin   | Slope Walls  |
| ☐ Temporary Stream Crossing  | Concrete Revetment Mats  |
| <ul><li> ☒ Stabilized Construction Exits</li><li> ☐ Turf Reinforcement Mats</li></ul>  | ☐ Level Spreaders  |
| Permanent Check Dams   | Other (specify)  Other (specify)   |
| Permanent Sediment Basin   | Other (specify)  |
| Aggregate Ditch  | Other (specify)  |
| Paved Ditch  | Other (specify)  |
| _  |  |
| Describe how the structural practices listed a   | sediment-laden water prior to release from the site during   |
| · · ·  | on, and temporary ditch checks to flow water flow and trap   |
| Describe how the structural practices listed   | above will be utilized after construction activities have been completed:  |
| Post construction structural practices lis   | ted above will remain intact until final stabilization of the site.  |

| <b>L.</b> | ins<br>afte                             | talled during the construction process to control volume and pollutants in storm water discharges that will occur er construction operations have been completed. The installation of these devices may be subject to Section 404 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 & 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:   |
|           |   | The permanent stormwater quality control for the project is to provide: Site stabilization by blanketing and seeding.   |
| F.        | in a<br>En<br>sec<br>inc<br>site<br>pro | proved State or Local Laws: The management practices, controls, and provisions contained in this plan will be accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois price in applicable of the protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable diment and erosion site plans or storm water management plans approved by local officials shall be described or corporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, the permits, storm water management site plans or site permits approved by local officials that are applicable to preciting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit R10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the land. |
|           |   | escription of procedures and requirements specified in applicable sediment and erosion site plans or storm water anagement plans approved by local officials:   |
|           | in<br>st                                | emporary erosion control measures such as silt fence, inlet protection filter baskets on existing storm lets must be installed prior to site disturbance. Inlet protection filter baskets on proposed storm ructures must be installed as soon as the structures are set. All measures are to be maintained during postruction in accordance with the details/procedures in the plans, and the following standards:   |
|           |   | ity of Waukegan inois Department of Transportation inois Environmental Protection Agency  |

Will polymer flocculents or treatment chemicals be utilized on this project: Yes X No

If yes above, identify where and how polymer flocculents or treatment chemicals will be utilized on this project.

D. Treatment Chemicals

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

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:

a Contractor Certification Statement, BDE 2342a.

- 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 time frame
- · 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
- · Time frame 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 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 Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

Silt fence - Accumulated sediment shall be removed in front of all silt fence when sediment reaches 1/2 the height of the silt fence. Silt fence shall promptly be replaced and/or repaired in the event it falls down or is torn.

Inlet protection - Inlet protection devices shall be cleaned after storm event with 25% full of sediment. Inlet protection devices shall promptly be replaced in the event they are torn.

#### 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 e-mail at: <a href="mailto:epa.swnoncomp@illinois.gov">epa.swnoncomp@illinois.gov</a>, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

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

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

Additional Inspections Required:

## V. Failure to Comply

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



#### **Contractor Certification Statement**



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

| Route  | Marked Route               |                      | Section   |
|--|----------------------------|----------------------|---|
|  | GreenBay to Butric         | k                    | 14-F3000-04-BT  |
| Project Number   | County                     |                      | Contract Number   |
| TE-01D1(039)   | Lake                       |                      | 61C67   |
| This certification statement is a part of Permit No. ILR10 issue               |                            |                      | in accordance with the General NPDES ironmental Protection Agency.  |
| I certify under penalty of law that I unde associated with industrial activity |                            |                      | nat authorizes the storm water discharges fied as part of this certification.   |
|  | propriate maintenance p    | procedures; and, I   | tated in SWPPP for the above mentioned have provided all documentation required ates to these documents as necessary. |
| ☐ Contractor   |                            |                      |   |
| Sub-Contractor   |                            |                      |   |
| Print Name   |                            | Signature            |   |
|  |                            |                      |   |
| Title  |                            | Date                 |   |
| Name of Firm   |                            | Telephone            |   |
| Street Address   |                            | City/State/Zip       |   |
| Items which the Contractor/subcontractor                                       | or will be responsible for | r as required in Sec | tion II.G. of SWPPP:  |



November 28, 2016

Susan Hall Lake County Forest Preserves 1899 West Winchester Road Libertyville, IL 60048

Subject: SMC Watershed Development Permit #C14-84-108

Lyons Woods Trail Extension Lake County Forest Preserves

#### PERMIT ISSUANCE

Dear Ms. Hall:

Accompanying this letter is the required Watershed Development Permit for the proposed trail extension from Green Bay Rd. to the Robert McClory bike path and pedestrian bridge installation at Bevier Park (42.40750, -87.86156). This approval is subject to the conditions on the back of the permit including the following:

 Provide prior notification to Tim Cook (of the SMC) of the pre-construction meeting at least five (5) calendar days in advance to enable SMC attendance. The refund for the \$240 pre-construction deposit will be refunded after the meeting. The \$720 deposit, minus any and all assessed fees will be refunded after permanent site stabilization and approval of an as-built submittal.

Discussion at the pre-construction meeting will include:

- Work in floodplain and flood problem areas
- o Designated Erosion Control Inspector (DECI) contact information,
- Reduced copy of the permitted plan set that has been signed and sealed by a professional engineer
- o How the trails will be accessed for the proposed work
- o The discussion of the drain tiles at the following locations:
  - Tile AG AH 4" clay tile near Station 23+00
  - Tile AP 3" clay tile near Station 71+00
  - Tile AS 3" clay tile near Station 79+50

- No impacts to Waters of the United States are permitted without prior receipt of a permit from the U.S. Army Corps of Engineers (USACE). Please provide SMC with a copy of the final USACE permit for our file records, upon receipt.
- The DECI shall provide weekly reports to the SMC Inspector. At a minimum, the reports shall include photographs and evaluation of critical areas, as directed by the SMC Inspector, including:
  - Areas of concentrated flow as it leaves the site (sediment free discharge)

### Please be advised that DECI inspections are required until final as-built approval.

- Due to the proximity of work areas to wetlands/waters, you (or your contractor) shall field-mark the proposed trail features near isolated waters of Lake County (e.g., perimeter protection measures, limits of disturbance, stockpile/staging areas, etc.) and notify Juli Crane with SMC at <a href="mailto:icrane@lakecountyil.gov">icrane@lakecountyil.gov</a> at least five (5) calendar days prior to the start of project construction activities so she can confirm the applicability of the LONI and the wetland protective measures.
- Provide an as-built submittal including:
  - Copies of the native vegetation seed tags and/or landscaper invoices clearly showing the species of native vegetation that were planted
  - Floodplain fill and provided compensatory storage calculations and crosssections.

#### This approval is based on the plans entitled:

LAKE COUNTY FOREST PRESERVE DISTRICT, LYONS WOODS TRAIL EXTENSION, PREPARED BY GEWALT HAMILTON ASSOCIATES, INC., DATED JANUARY 25, 2016, REVISED NOVEMBER 9, 2016, RECEIVED BY SMC NOVEMBER 21, 2016 (5 SHEETS - DIGITAL SET).

We would like to be of assistance. Do not hesitate to contact Tim Cook at (847) 377-7703 if you have questions or would like to set up the pre-construction meeting.

If you have any additional concerns that have not been addressed by the regulatory staff, you may contact Chief Engineer Kurt Woolford <a href="mailto:kwoolford@lakecountyil.gov">kwoolford@lakecountyil.gov</a> or Executive Director Michael Warner <a href="mailto:mwarner@lakecountyil.gov">mwarner@lakecountyil.gov</a> at (847) 377-7700.

November 28, 2016 Page 3

Kelcey Trayroff

Sincerely,

LAKE COUNTY STORMWATER MANAGEMENT COMMISSION

Kelcey Traynoff, E.I.T. Sr. Civil Engineer

Kurt Woolford, P.E., CFM

Chief Engineer

Ket Wolfel

C: Melyssa Navis – USACE (LRC-2015-877)

Mei Zhu/Caitlin Burke- Gewalt Hamilton Associates, Inc.

Jedd Anderson - CBBEL

Marcia McCutchan/Chris Bouchard - RHMG Engineering/Beach Park E.O.

Frank Furlan – Waukegan E.O.

Michael Trigg - Waukegan Park District



# WATERSHED DEVELOPMENT PERMIT NUMBER Permit # C14-84-108 HAS BEEN SECURED

Project: Lyons Woods Trail Extension

Date Issued: November 28, 2016

**Lat/Long:** 42.40750/-87.86156

**PIN No.:** 08-05-100-006

Conditions: • Install and maintain all SE/SC measures

• Minimize environmental impacts

Issued By: Kelcey Traynoff, E.I.T.

Sr. Civil Engineer

Kurt A. Woolford, PE, CFM, LEED AP

Chief Engineer

## **Notice to Contractors and Owners**

Post this card at the site, visible from the street and so located as to permit the inspector to record the indicated inspections on the placard. Do not post in the interior of a building.

Inspectors and sheriff's deputies are instructed to stop all work where this permit card is not displayed.

Always mention the Watershed Development Permit number when referring to this project. If this card becomes mislaid or lost please contact Lake County Stormwater Management Commission for a replacement.

Lake County Stormwater Management Commission (847) 377-7705



## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AYENUE EAST, P.O. BOX 19276, SFRINGFIELD, ILLINOIS 62794-9276 💌 (217) 132-2329

217/782-0610

03/14/2016

Lake County Forest Preserve District Jeff Sloot 1899 W. Winchester Road Libertyville, IL 60048

RE: FACILITY: Lyons Woods Trail Extension Waukegan, IL

COUNTY: LAKE NPDES Permit No:ILR10W271

Notice of Coverage Under Construction Site Activity Storm Water General Permit

#### Dear NPDES Permittee:

We have reviewed your application and determined that storm water discharges associated with industrial activity from construction sites are appropriately covered by the attached General NPDES Permit issued by the Agency. Your discharge is covered by this permit effective as of the date of this letter or as identified by the conditions of the permit. The Permit as issued covers application requirements, a storm water pollution prevention plan and reporting requirements.

As a Permit Holder, it is your responsibility to:

- 1. Submit a modified Notice of Intent of any ownership or address change to the Permit Section within 30 days;
- 2. A Notice of Termination must be sent to the Agency, at the address indicated on the Notice of Termination, once your construction project has been <u>completed and the site is properly stabilized</u>. A Notice of Termination form has been enclosed for your convenience;

This letter shows your facility permit number below the construction site name. Please save this number and reference it in all future correspondence. Should you have any questions concerning the Permit, please contact Cathy Demeroukas at (217) 782-0610.

Very truly yours,

Alan Keller, P.E.

Manager, Permit Section

Division of Water Pollution Control

CC: Records Unit Lake County SWCD, GHA, Region: DesPlaines

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

## SPECIAL PROVISION FOR INSURANCE

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

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

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

| Lake County Forest Preserve District   |  |
|--|--|
| Waukegan Park District                 |  |
| City of Waukegan                       |  |
| Village of Beach Park                  |  |
| Lake County Division of Transportation |  |
|  |  |

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

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

Effective: November 2, 2006

Revised: July 1, 2015

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

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

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

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

Where: CA = Cost Adjustment, \$.

BPI<sub>P</sub> = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).

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

%AC<sub>V</sub> = Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC<sub>V</sub> 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<sub>V</sub> and undiluted emulsified asphalt will be considered to be 65% AC<sub>V</sub>.

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

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

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

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

D = Depth of the HMA mixture, in. (mm).

G<sub>mb</sub> = Average bulk specific gravity of the mixture, from the approved mix design.

V = Volume of the bituminous material, gal (L).

SG = Specific Gravity of bituminous material as shown on the bill of lading.

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

Percent Difference =  $\{(BPI_L - BPI_P) \div BPI_L\} \times 100$ 

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

### Return With Bid

## ILLINOIS DEPARTMENT OF TRANSPORTATION

## OPTION FOR BITUMINOUS MATERIALS COST ADJUSTMENTS

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

| Contract N  | o.:      |               |             |                |                          |  |
|-------------|----------|---------------|-------------|----------------|--------------------------|--|
| Company I   | Name:    |               |             |                |                          |  |
| Contractor  | 's Optio | <u>n</u> :    |             |                |                          |  |
| ls your com | pany opt | ting to inclu | de this spe | cial provision | as part of the contract? |  |
|             | Yes      |               | No          |                |                          |  |
| Signature:  |          |               |             |                | Date:                    |  |
| 80173       |          |               |             |                |                          |  |

## CONSTRUCTION AIR QUALITY - DIESEL RETROFIT (BDE)

Effective: June 1, 2010 Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

| Effective Dates | Horsepower Range | Model Year |
|-----------------|------------------|------------|
|                 |                  |            |
| June 1, 2010 1/ | 600-749          | 2002       |
|                 | 750 and up       | 2006       |
| June 1, 2011 2/ | 100-299          | 2003       |
|                 | 300-599          | 2001       |
|                 | 600-749          | 2002       |
|                 | 750 and up       | 2006       |
| June 1, 2012 2/ | 50-99            | 2004       |
|                 | 100-299          | 2003       |
|                 | 300-599          | 2001       |
|                 | 600-749          | 2002       |
|                 | 750 and up       | 2006       |

<sup>1/</sup> Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) Verified Retrofit
   Technology List (<a href="http://www.epa.gov/cleandiesel/verification/verif-list.htm">http://www.epa.gov/cleandiesel/verification/verif-list.htm</a>),
   or verified by the California Air Resources Board (CARB)
   (<a href="http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm">http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm</a>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

<sup>2/</sup> Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

## **Diesel Retrofit Deficiency Deduction**

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

## DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: July 2, 2016

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

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

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

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

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a

good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform \_\_\_11.00\_% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

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

<u>DBE LOCATOR REFERENCES</u>. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at:

http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index.

<u>BIDDING PROCEDURES</u>. Compliance with this Special Provision is required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a DBE Utilization Plan on completed Department forms SBE 2025 and 2026.
  - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting in accordance with subsection (a)(2) of Bidding Procedures herein.

(2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to <u>DOT.DBE.UP@illinois.gov</u> or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service when the Utilization Plan is received by the Department. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation Bureau of Small Business Enterprises Contract Compliance Section 2300 South Dirksen Parkway, Room 319 Springfield, Illinois 62764

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of Utilization Plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and scanned or faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:

- (1) The names and addresses of DBE firms that will participate in the contract;
- (2) A description, including pay item numbers, of the work each DBE will perform;
- (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
- (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the Utilization Plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
- (6) If the contract goal is not met, evidence of good faith efforts; the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere pro forma efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors

are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
  - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with subsection (c)(6) of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
- (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.
- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period in order to cure the deficiency.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration

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

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
  - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
  - (2) The DBE may also lease trucks from a non-DBE firm, including from an owneroperator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:

- (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
- (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
- (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

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

- (a) <u>NO AMENDMENT</u>. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

- (c) <u>SUBCONTRACT</u>. The Contractor must provide DBE subcontracts to IDOT upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.
- (d) <u>ALTERNATIVE WORK METHODS</u>. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractorinitiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
  - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
  - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
  - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor,

with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) <u>RECONSIDERATION</u>. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

## HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010 Revised: April 1, 2016

<u>Description</u>. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) 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<br>Composition | Parameter         | Individual Test<br>(includes confined<br>edges) | Unconfined Edge<br>Joint Density<br>Minimum |
|-------------------------|-------------------|---|---|
| IL-4.75                 | Ndesign = 50      | 93.0 – 97.4% <sup>17</sup>                      | 91.0%                                       |
| IL-9.5                  | Ndesign = 90      | 92.0 - 96.0%                                    | 90.0%                                       |
| IL-9.5,IL-9.5L          | Ndesign < 90      | 92.5 - 97.4%                                    | 90.0%                                       |
| IL-19.0                 | Ndesign = 90      | 93.0 - 96.0%                                    | 90.0%                                       |
| IL-19.0, IL-19.0L       | Ndesign < 90      | 93.0 <sup>2/</sup> - 97.4%                      | 90.0%                                       |
| SMA                     | Ndesign = 50 & 80 | 93.5 – 97.4%                                    | 91.0%"                                      |

## HOT-MIX ASPHALT - TACK COAT (BDE)

Effective: November 1, 2016

Revise Article 1032.06(a) of the Standard Specifications to read:

"(a) Anionic Emulsified Asphalt. Anionic emulsified asphalts shall be according to AASHTO M 140. SS-1h emulsions used as a tack coat shall have the cement mixing test waived."

## PAVEMENT MARKING REMOVAL (BDE)

Effective: July 1, 2016

Revise Article 783.02 of the Standard Specifications to read:

"783.02 Equipment. Equipment shall be according to the following.

Note 1. Grinding equipment shall be approved by the Engineer."

Revise the first paragraph of Article 783.03 of the Standard Specifications to read:

"783.03 Removal of Conflicting Markings. Existing pavement markings that conflict with revised traffic patterns shall be removed. If darkness or inclement weather prohibits the removal operations, such operations shall be resumed the next morning or when weather permits. In the event of removal equipment failure, such equipment shall be repaired, replaced, or leased so removal operations can be resumed within 24 hours."

Revise the first and second sentences of the first paragraph of Article 783.03(a) of the Standard Specifications to read:

"The existing pavement markings shall be removed by the method specified and in a manner that does not materially damage the surface or texture of the pavement or surfacing. Small particles of tightly adhering existing markings may remain in place, if in the opinion of the Engineer, complete removal of the small particles will result in pavement surface damage."

Revise the first paragraph of Article 783.04 of the Standard Specifications to read:

"783.04 Cleaning. The roadway surface shall be cleaned of debris or any other deleterious material by the use of compressed air or water blast."

Revise the first paragraph of Article 783.06 of the Standard Specifications to read:

"783.06 Basis of Payment. This work will be paid for at the contract unit price per each for RAISED REFLECTIVE PAVEMENT MARKER REMOVAL, or at the contract unit price per square foot (square meter) for PAVEMENT MARKING REMOVAL – GRINDING and/or PAVEMENT MARKING REMOVAL – WATER BLASTING."

Delete Article 1101.13 from the Standard Specifications.

## PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)

Effective: November 1, 2016

Revise this second sentence of the first paragraph of Article 1106.02(i) of the Standard Specifications to read:

"The message panel shall be a minimum of 7 ft (2.1 m) above the edge of pavement in urban areas and a minimum of 5 ft (1.5 m) above the edge of pavement in rural areas, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time."

## 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."

**TRAINING SPECIAL PROVISIONS (BDE)** This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be one. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

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.

## WARM MIX ASPHALT (BDE)

Effective: January 1, 2012 Revised: April 1, 2016

<u>Description</u>. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

### Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

- "(11) Equipment for Warm Mix Technologies.
  - a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ±2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

## Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

- "(e) Warm Mix Technologies.
  - (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
  - (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

### Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

### Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

## **WEEKLY DBE TRUCKING REPORTS (BDE)**

Effective: June 2, 2012 | Revised: April 2, 2015

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

## **WORKING DAYS (BDE)**

Effective: January 1, 2002

The Contractor shall complete the work within 125 working days.

## PEDESTRIAN TRUSS SUPERSTRUCTURE

Effective: January 13, 1998 Revised: December 29, 2014

**Description:** This work shall consist of the design, fabrication, storage, delivery and erection of a welded steel, pedestrian truss superstructure. Also included in this work shall be the furnishing and installation of a deck, all bearings, anchors and/or retainers, railings, fencing and miscellaneous items as indicated on the plans.

#### Materials:

Truss. Structural steel shall conform to the requirements of Section 1006 of the Standard Specifications, ASTM A847 for cold formed welded square and rectangular tubing, AASHTO M270 Grade 50W (M270M 345W) for atmospheric corrosion resistant structural steel, as applicable, unless otherwise shown on the plans or approved by the Engineer. All structural steel field connections shall be bolted with high strength bolts. High strength bolts for unpainted weathering steel shall conform to ASTM A325 (A325M) (Type 3). For painted structures, the high strength bolts shall be mechanically galvanized according to the requirements of Article 1006.08(a) of the Standard Specifications.

<u>Deck.</u> The deck type shall be as specified on the plans. The materials shall comply with the applicable portions of the materials section of the Standard Specifications.

When specified for use, the concrete deck and stay-in-place forms shall be non composite. Metal Forms shall have a minimum thickness of 0.0359 in. (912 microns) or 20 Gage and shall be galvanized per ASTM A653 (A653M) with a G165 (Z350) min. coating designation.

<u>Railing.</u> The railing shall consist of a smooth rub rail, a toe plate and misc. elements, all located on the inside face of the truss.

<u>Bearings.</u> The bearing shall be designed and furnished as detailed in the plans, in the absence of details, the bearings details shall be as specified by the bridge manufacturer.

When specified for use, elastomeric bearings shall be according to Article 1083 of the Standard Specifications. Teflon surfaces shall be per Article 1083.02(b) of the Standard Specification and shall be bonded to the bearing plate.

<u>Suppliers.</u> The Department maintains a pre-qualified list of proprietary structural systems allowed for pedestrian truss superstructures. This list can be found on the Departments web site under Prequalified Structural Systems. The Contractor's options are limited to those systems pre-qualified by the Department. These systems have been reviewed for structural feasibility and adequacy only. Presence on this list shall in no case relieve the Contractor of the site specific design or QC/QA requirements stated herein.

The manufacturer shall provide evidence of current certification by AISC according to Article 106.08(b) of the Standard Specifications.

Design: The superstructure shall conform to the clear span, clear width, and railing configuration shown on the contract plans. The design shall be according to the LRFD Guide

Specifications for the Design of Pedestrian Bridges. The design loads shall be as specified by the Guide Specification except as follows:

| Design Wind Loads (F | z) for Pedestria | n Trusses in Illinois                      |
|----------------------|------------------|--|
| Application          | psf (kPa)        | Applied to:                                |
| Circular Members     | 35 (1.68)        | Projected vertical area of member          |
| Flat Members         | 55 (2.63)        | Projected vertical area of member          |
| Signs                | 35 (1.68)        | Projected vertical area of sign            |
| Chain Link Fencing   | 10 (0.48)        | Full projected area of fencing as if solid |

The railings shall be designed per the appropriate Bridge Design Specifications for bicycle railings as shown on the plans. Smooth rub rails shall be attached to the bicycle railing and located at a bicycle handlebar height of 3.5 ft. (1.1 m) above the top of the deck.

Prior to beginning construction or fabrication, the Contractor shall submit design calculations and six sets of shop drawings for each pedestrian bridge to the Engineer for review and approval. In addition, for bridges with any span over 150 ft. (46 m), or over a State or Federal Route, or within the States Right-of-Way, a copy of the shop drawings will be reviewed and approved for structural adequacy, by the Bureau of Bridges and Structures prior to final approval of shop drawings. The shop drawings shall include all support reactions for each load type. The following certification shall be placed on the first sheet of the bridge shop plans adjacent to the seal and signature of the Structural Engineer:

"I certify that to the best of my knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans and complies with the requirements of the Contract and the current 'Guide Specifications for Design of Pedestrian Bridges'."

The substructure is designed per the appropriate Bridge Design Specifications and based on the assumed truss loads, as shown on the plans. If the manufacturer's design exceeds those loads and/or the substructure needs to be adjusted to accommodate the truss superstructure chosen, then the Contractor shall submit the redesign to the Engineer for approval prior to ordering any material or starting construction. All design calculations, shop drawings and redesigned substructure drawings shall be sealed by a Structural Engineer licensed in the State of Illinois.

**Construction:** Truss erection procedures shall be according to the manufacturer's instructions. The deck shall be placed according to the applicable Sections of the Standard Specifications.

When weathering steel is used, all structural steel shall be prepared according to Article 506.07.

When painting is specified, all structural steel shall be cleaned and painted according to Section 506. The paint system and color of the finish coat shall be as specified in the plans.

**Method of Measurement:** The pedestrian truss superstructure will be measured in square feet (square meters) of completed and accepted structure measured horizontally from back to back of abutments and within the clear path width as defined on the plans.

Basis of Payment: The pedestrian superstructure will be paid for at the contract unit price per square foot (square meter) for "PEDESTRIAN TRUSS SUPERSTRUCTURE."

## PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000 Revised: January 22, 2010

<u>Description</u>. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

<u>Construction Requirements.</u> All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

Method of Measurement. Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

# REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

#### **ATTACHMENTS**

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

- 2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
- 3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
- 4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

- 1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:
- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:
  - "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or onthe-job training."
- 2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

- 3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
- a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
- b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
- c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
- d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
- e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
- **4. Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
- a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
- b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
- c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
- **5. Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
- a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
- b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
- c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If

the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

#### 6. Training and Promotion:

- a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
- b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
- c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
- d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.
- **7. Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
- a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
- b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
- c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
- d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

- 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
- 9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
- a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
- b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

#### 10. Assurance Required by 49 CFR 26.13(b):

- a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
- b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
- 11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
  - a. The records kept by the contractor shall document the following:
- (1) The number and work hours of minority and nonminority group members and women employed in each work classification on the project;
  - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
  - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color,

religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

#### IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

- (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (ii) The classification is utilized in the area by the construction industry; and
- (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

### 2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such

action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

#### 3. Payrolls and basic records

- a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose Wage and Hour Division Web http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..
- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
  - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
  - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
- (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

#### 4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

- **5. Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
- **6. Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- **7. Contract termination: debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

- **8. Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- **9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

#### 10. Certification of eligibility.

- a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
- c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

- 1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- 2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
- 3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

- 1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
- a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:
- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
- 2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
- 3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

- 4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
- 5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

- 1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
- 2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
- 3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

#### **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

#### 18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

# IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

- 1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
- 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

# X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more — as defined in 2 CFR Parts 180 and 1200.

### 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

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# 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
- (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
- (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

- (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

#### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
- d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<a href="https://www.epls.gov/">https://www.epls.gov/</a>), 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.

## Contract Provision - Cargo Preference Requirements

In accordance with Title 46 CFR § 381.7 (b), the contractor agrees—

- "(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.
- (2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.
- (3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

Provisions (1) and (2) apply to materials or equipment that are acquired solely for the project. The two provisions do not apply to goods or materials that come into inventories independent of the project, such as shipments of Portland cement, asphalt cement, or aggregates, when industry suppliers and contractors use these materials to replenish existing inventories.

# 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.