If you plan to submit a bid directly to the Department of Transportation

PREQUALIFICATION

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

REQUESTS FOR AUTHORIZATION TO BID

Contractors wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 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. This does not apply to Small Business Set-Asides.

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. This does not apply to Small Business Set-Asides.

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 that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID: Firms that have not received an authorization form within a reasonable time of complete and correct original document submittal should contact the department as to status. This is critical in the week before the letting. These documents must be received three days before the letting date. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

ADDENDA AND REVISIONS: It is the contractor's responsibility to determine which, if any, addenda or revisions pertain to any project they may be bidding. Failure to incorporate all relevant addenda or revisions may cause the bid to be declared unacceptable.

Each addendum will be placed with the contract number. Addenda and revisions will also be placed on the Addendum/Revision Checklist and each subscription service subscriber will be notified by e-mail of each addendum and revision issued.

The Internet is the Department's primary way of doing business. The subscription server e-mails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at http://www.dot.il.gov/desenv/delett.html before submitting final bid information.

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

Addenda Questions may be directed to the Plans and Contracts Office at (217)782-7806 or D&Econtracts@dot.il.gov

Technical Questions about downloading these files may be directed to Tim Garman (217)524-1642 or <u>Timothy.Garman@illinois.gov.</u>

WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

- 1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
- 2. Other special documentation and/or information that may be
 - required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

ABOUT SUBMITTING BIDS: It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

| Questions Regarding | Call |
|--|--------------|
| Prequalification and/or Authorization to Bid | 217/782-3413 |
| Preparation and submittal of bids | 217/782-7806 |
| Mailing of plans and proposals | 217/782-7806 |

ADDENDUMS AND REVISIONS TO THE PROPOSAL FORMS

Bidders should verify that they have received and incorporated any addendum and/or revision prior to submitting their bid. Failure by the bidder to include an addendum or revision could result in a bid being rejected as irregular.

Proposal Submitted By

136

Name

Address

City

Letting April 29, 2011

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. This does not apply to Small Business Set-Asides.

(SEE INSTRUCTIONS ON THE INSIDE OF COVER)

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

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



Illinois Department of Transportation

Springfield, Illinois 62764

Contract No. 93544 SANGAMON County Section 10-00447-04-PV (Springfield) Route FAU 7982 (Capitol Avenue) Project HPP-TE-00D6(099) District 6 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

A Bid Bond is included.

A Cashier's Check or a Certified Check is included

Prepared by Checked by ted by authority of the State of Illinois)

F

INSTRUCTIONS

ABOUT IDOT PROPOSALS: All proposals issued by IDOT are potential bidding proposals. Each proposal contains all Certifications and Affidavits, a Proposal Signature Sheet and a Proposal Bid Bond. In addition, this proposal contains new statutory requirements applicable to the use of subcontractors and, in particular, includes the <u>State Required Ethical</u> <u>Standards Governing Subcontractors</u> to be signed and incorporated into all subcontracts.

WHO CAN BID?: Bids will be accepted from only those companies that request and receive written **Authorization to Bid** from IDOT's Central Bureau of Construction. To request authorization, a potential bidder <u>must complete and submit Part</u> <u>B of the Request for Authorization to Bid/or Not For Bid Status form (BDE 124) and submit an original Affidavit of Availability (BC 57)</u>. This does not apply to Small Business Set-Asides.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?: When a prospective prime bidder submits a "Authorization to Bid or Not for Bid" form, he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued a Authorization to Bid or Not for Bid Report, approved by the Central Bureau of Construction, that indicates which items have been approved For Bidding. If Authorization to Bid cannot be approved, the Authorization to Bid or Not for Bid Report will indicate the reason for denial. If a contractor has requested to bid but has not received a Authorization to Bid or Not for Bid Report, they should contact the Central Bureau of Construction in advance of the letting date.

WHAT MUST BE INCLUDED WHEN BIDS ARE SUBMITTED?: Bidders need not return the entire proposal when bids are submitted. That portion of the proposal that must be returned includes the following:

- 1. All documents from the Proposal Cover Sheet through the Proposal Bid Bond
- 2. Other special documentation and/or information that may be required by the contract special provisions

All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed by IDOT personnel.

ABOUT SUBMITTING BIDS: It is recommended that bidders deliver bids in person to insure they arrive at the proper location prior to the time specified for the receipt of bids. Any bid received at the place of letting after the time specified will not be accepted.

WHO SHOULD BE CALLED IF ASSISTANCE IS NEEDED?

| Questions Regarding | Call |
|--|--------------|
| Prequalification and/or Authorization to Bid | 217/782-3413 |
| Preparation and submittal of bids | 217/782-7806 |



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of ______

Taxpayer Identification Number (Mandatory)

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

Contract No. 93544 SANGAMON County Section 10-00447-04-PV (Springfield) Project HPP-TE-00D6(099) Route FAU 7982 (Capitol Avenue) District 6 Construction Funds

Project consists of the removal of the existing pavement, sidewalk, lighting and street appurtenances, installation of concrete pavers, crosswalks, several planting beds, lighting and a roundabout, repair of water services and replacement of existing water hydrants, and all other incidental items to complete the work on FAU Route 7982 (Capitol Avenue) from 11th Street to Martin Luther King Drive in the city of Springfield.

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

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

| | | | posal | | | | Proposal |
|-------------|-----------|------------------|--------|--------------|---------|--------------|-----------------|
| : | Amount of | of Bid Gu | aranty | <u>A</u> | mount o | of Bid | <u>Guaranty</u> |
| Up to | | \$5,000 | \$150 | \$2,000,000 | to | \$3,000,000 | \$100,000 |
| \$5,000 | to | \$10,000 | \$300 | \$3,000,000 | to | \$5,000,000 | \$150,000 |
| \$10,000 | to | \$50,000 \$1 | ,000 | \$5,000,000 | to | \$7,500,000 | \$250,000 |
| \$50,000 | to | \$100,000 \$3 | ,000 | \$7,500,000 | to | \$10,000,000 | \$400,000 |
| \$100,000 | to | \$150,000 \$5 | ,000 | \$10,000,000 | to | \$15,000,000 | \$500,000 |
| \$150,000 | to | \$250,000 \$7 | ,500 | \$15,000,000 | to | \$20,000,000 | \$600,000 |
| \$250,000 | to | \$500,000 \$12 | ,500 | \$20,000,000 | to | \$25,000,000 | \$700,000 |
| \$500,000 | to | \$1,000,000 \$25 | ,000 | \$25,000,000 | to | \$30,000,000 | \$800,000 |
| \$1,000,000 | to | \$1,500,000 \$50 | ,000 | \$30,000,000 | to | \$35,000,000 | \$900,000 |
| \$1,500,000 | to | \$2,000,000 \$75 | ,000 | over | | \$35,000,000 | \$1,000,000 |

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

If a combination bid is submitted, the proposal guaranties which accompany the individual 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 shall fail to execute a contract bond as required herein, it is hereby agreed that the amount of the proposal guaranty shall become the property of the State of Illinois, and shall be considered as payment of damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond shall become void or the proposal guaranty check shall be returned to the undersigned.

Attach Cashier's Check or Certified Check Here

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

The proposal guaranty check will be found in the proposal for:

Item

Section No.

County

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

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

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

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

Schedule of Combination Bids

| Combination | | Combination B | id |
|-------------|----------------------------------|---------------|-------|
| No. | Sections Included in Combination | 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 shall govern. Payment to the contractor awarded the contract will be made only for actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as provided elsewhere in the contract.
- 8. AUTHORITY TO DO BUSINESS IN ILLINOIS. Section 20-43 of the Illinois Procurement Code (30 ILCS 500/20-43) provides that a person (other than an individual acting as a sole proprietor) must be a legal entity authorized to do business in the State of Illinois prior to submitting the bid.

9. The services of a subcontractor will or may be used.

| Check box | Yes | |
|-----------|-----|--|
| Check box | No | |

For known subcontractors with subcontracts with an annual value of more than \$25,000, the contract shall include their name, address, and the dollar allocation for each subcontractor.

10. **EXECUTION OF CONTRACT**: The Department of Transportation will, in accordance with the rules governing Department procurements, execute the contract and shall be the sole entity having the authority to accept performance and make payments under the contract. Execution of the contract by the Chief Procurement Officer or the State Purchasing Officer is for approval of the procurement process and execution of the contract by the Department. Neither the Chief Procurement Officer or the State Purchasing Officer shall be responsible for administration of the contract or determinations respecting performance or payment there under except as otherwise permitted in the Illinois Procurement Code.

| Image: Normal State of the image of the | NUMBER PRINGFIELD) EACH | HPP-TE-0006/099/000 FAU 7982 111TY UNIT PRICE TOTAL PRICE 13.000 X 13.000 X 13.000 X 13.000 X 11.000 X 11.000 X 11.000 X 11.000 X 11.000 X 11.000 X 12.000 X 11.000 X 12.000 X 11.000 X 11.000 |
|---|---|--|
| 0 CONC PAVER PAVEMENT | Q YD 1, | 38.00 |

--

| 2 | <u>STS</u> | | | | | | | | | | | | | | [| | - | |
|--|--------------------------|--------------|--|---|--------------|--------------|-----------|--------------|--|------------------|--------------|---------|------------------------------------|-----------|-------------|------------|------------------|--|
| ECMR003 PAGE | TOTAL PRICE DOLLARS C | <u> </u> | | | | | | | 8 8 8 8 8 1 1 1 1 1 1 1 | | | | | | | | | |
|)TGECM03 - 03/15/ - 183108 | CE CENTS | 11 | | | | | II | | | 11 | 11 | | - II I I I I I I | - 11 - | | | _ - | |
| ECMS002 D RUN DATE RUN TIME | UNIT PRI DOLLARS | | | | | | | | | | | | | | | | | |
| TRANSPORTATION RICES - 93544 | QUANTITY | 658.000 X | 2.00 | 1,703.000 X | 380.000 X | 8.000 X | 84.000 X | 220.000 X | • | 2.000 X | 3,053.000 X | 5.000 X | 486.000 X | 349.000 X | 104.000 X | 104.000 X | | |
| S DEPARTMENT OF SCHEDULE OF PR CONTRACT NUMBER | UNIT OF MEASURE | SQ YD | EACH | CU CU | SQ FT | EACH | FO | | EACH | EA | | - | | | FOOT | FOOT | | |
| IULIUUI | DESCRIPTION | × . | 1 1 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | \sim | 10 | SM | - N | ΤΥ2 | | GPH | | 1.5 | E -1 | | | | |
| (SPRINGFIELD) | PAY ITEM DES | PAVER SIDEWA | RECEPTACLES | IAL EXCAVATIO | REIN BRIC PA | UNDERDRN CLN | EDGE PAVE | IL PLANT MIX | PLANTER EDGE | LING RECE | ATION BED 0. | | Ш d | Ы | 40 PIPE CSN | PIPE 4 | | |
| -04-PV | | CON | TRA | SPE | 1 | ים. י | Vd | - 10 - 10 | PR - | Ц Ч Ц Ц | IR | RA | PV | Ъ | SC SC | | | |
| FAU 7982 10-00447- SANGAMON | I TEM NUMBER | R43005 | 6000X | 00128 | X00331 | 0048 | X00590 | u O | 732 | XX007324 | 32 - | 32 | 00733 | 33 | 131 | X00733 | | |

٠.

| FAU 7982 10-00447-04 SANGAMON | 04-PV (SPF | (SPRINGFIELD) | ILLINOIS DEPA SCHEI CONTRA | ARTMENT OF T EDULE OF PRI ACT NUMBER - | TRANSPORTATION RICES - 93544 | ECMS002 DTGECM03 RUN DATE - 03/15 RUN TIME - 18310 | ECMR003 PAGE /11 8 | က |
|-------------------------------------|----------------------------|--------------------|--|--|------------------------------------|---|--|--------|
| 1 | РАҮ | Y ITEM DESCRIPTION | | UNIT OF MEASURE | QUANTITY | UNIT PRICE DOLLARS CENTS | TOTAL PRICE DOLLARS C | S |
| | SIGN FRA | 1 1 11 | | FOOT | 386.000 X | | - | |
| | SIGN PAN | OVERLAY SP | | | 9 | - 11 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | I I |
| | DETECTAB | E WRNING SPL | C C C C C C C C C C C C C C C C C C C | | 6.00 | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 1 |
| | л Н П М И М | S T20 SPL | E 1 2 1 2 1 2 1 2 1 2 1 5 | | 3.0 | | | |
| | METBENC | 6 SEC | | EACH | 4.000 X | | | |
| | DECORATI | STL RAIL | | | 386.000 X | | | |
| | RM-STK-RPL | SN P/SPA S | | EACH | 4.000 X | | | 1 |
| | DECORATI | SIGN POST | | - | | | | ! |
| | TREE FR | AND GRATE | | Ā | | | | 1 |
| | D I STOR | SEWER 12 | | _ | Ō | | i i | |
| I | CB TG-1 | | | Ā | 00. | | | I [|
| | CB TD 3 | w/SPL F&G | | Ā | 00. | | | - |
| [[| INLETS T | W/SPL F&G | I 1 | Ā | | | | |
| | CONC GUT | ER SPL | | ō | Ō | | | 1 |
| | TRAF CON | & PROT SPL | | L SUM | 1.000 X | | | |
| | | | | | | | | ī |

| /11 | TOTAL PRICE DOLLARS CTS | | | | | 1 1 | 800.00 | | | | | | | | | |
|--------------------------------------|-----------------------------|---------------|---|---------------|-----------------------|--|-------------|-----------------|--------------------|----------------|-------------------|-----------------|-----------------|--------------------|----------------------|-------------|
| RUN DATE - 03/15 RUN TIME - 18310 | UNIT PRICE DOLLARS CENTS | 11 | - 11 - 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | - 11 - 1 - | | | | | | | | | | |
| LCES - 93544 | QUANTITY | 680.000 X | 1.0 | 336.000 X | 2.00 | 1,970.000 X | 1,000.000 X | 10.000 X | | | 8.0 | 7.00 | .00 | | 7.000 X | |
| CONTRACT NUMBER | UNIT OF MEASURE | SQIFT | | _ | EA | FOO | | | NU | EACH | ΕA | CU Y | SQΥ | POUN | POUN | |
| | PAY ITEM DESCRIPTION | TEMP SIDEWALK | CONSTRUCTION LAYOUT | FENCE REMOVAL | BATT BACKUP SYS/CABNT | TEMP CONSTR FENCE | TRAINEES | TREE REMOV 6-15 | TREE REMOV OVER 15 | TREE PRUN 1-10 | TREE PRUN OVER 10 | TRENCH BACKFILL | TOPSOIL F & P 6 | NITROGEN FERT NUTR | PHOSPHORUS FERT NUTR | M FERT NUTR |
| SANGAMON | I TEM NUMBER | 0007430 | 0013798 | 22800 | | 12 | 00 | 101 | . 0 | 00 | - 02 | 100 | 22 1 | - 00 | - 00 | |

| FAU 7982 10-00447-0 SANGAMON | 04-PV (SPRINGFIELD) ILLINOIS C | I'S DEPARTMENT OF SCHEDULE OF PI CONTRACT NUMBER | TRANSPORTATION RICES - 93544 | ECMS002 DTGECM03 ECMR003 PAGE 5 RUN DATE - 03/15/11 RUN TIME - 183108 |
|------------------------------------|-----------------------------------|--|------------------------------------|---|
| I TEM NUMBER | PAY ITEM DESCRIPTION | WIT OF MEASURE | QUANTITY | UNIT PRICE TOTAL PRICE DOLLARS CENTS DOLLARS CTS |
| 10 | SODDING SALT TOLERANT | SQ YD | 265.000 X | |
| I N | SUPPLE WATERING | | - 0 - | |
| 250 | TEMP EROS CONTR SEED | POI | 12.000 X | |
| 51 | INLET FILTERS | | 15.000 X | |
| 300 | SUB GRAN MAT A 4 | Š | 2,362.000 X | |
| | SUB GRAN MAT C | | ,016.00 | |
| 000 | AGGREGATE-TEMP ACCESS | 10 | .00 | |
| 100 | BIT MATLS PR CT | i GALLO | 4.000 | |
| I 00 I | MA SURF REM BUTT JT | SQ YD | 2.000 | |
| 310 | HMA SC "C" N50 | | 7.000 | |
| 201 | PCC PVT 7 JOINTED | SQ Y | 7.000 | |
| 301 | PCC PVT 8 JOINTED | SQ | _ | |
| 30 | ROTECTIVE COAT | SQ | 5,236.000 X | |
| 200 | PCC DRIVEWAY PAVT 6 | SQ | 47.0 | |
| 100 | PC CONC SIDEWALK 4 | | 17,885.000 X | |
| | | | | |

·** 4.

•

•

| ON ECMS002 DTGECM03 ECMR003 PAGE 6 RUN DATE - 03/15/11 RUN TIME - 183108 | DOLLARS CENTS DOLLARS CTS | | | | | | | | | | 1 1 | | | - | - 11 | |
|--|--------------------------------|-------------------|------------------|--------------------|----------------------|--------------|----------------------|-------------|--------------------|------------------|--------------------|-------------------------|--------------------|----------------------|------------|------------------|
| PARTMENT OF TRANSPORTATION HEDULE OF PRICES RACT NUMBER - 93544 | UNIT OF MEASURE QUANTITY | FT 446.00 | SQ YD 10,861.000 | YD 235.00 | 00T 1,413.00 | FT 8, 352. | YD 341.00 | YD 88.00 | UND 16,460.00 | 00T 13.00 | F00T 91 00 | CU YD 57.000 | OT 1,023.0 | OT 125.0 | Õ | EACH 5.000 |
| 04-PV (SPRINGFIELD) ILLINOIS DEP SCHI CONTR | PAY ITEM DESCRIPTION | DETECTABLE WARNIN | HMA SURF REM 2 | DRIVE PAVEMENT REM | COMB CURB GUTTER REM | SIDEWALK REM | STRUCTURE EXCAVATION | CONC STRUCT | REINFORCEMENT BARS | STORM SEW CL B 1 | STORM SEWER REM 12 | CONTR LOW-STRENG MATL · | PIPE UNDERDRAINS 4 | PIPE UNDERDRAIN 4 SP | MAN ADJUST | FR & LIDS ADJUST |
| FAU 7982 10-00447-04-PV SANGAMON | I TEM NUMBER | 2400800 | 4000157 | 400020 | 4000500 | 4000600 | 0200100 | 0300225 | 0800105 | 50B0010 | 5100500 | 9300100 | | 0108100 | 5500 | 030030 |

| FAU 7982 10-00447-04-PV SANGAMON | V (SPRINGFIELD) | ILLINOIS DEP/ SCHE CONTR/ | ARTN EDUL ACT | TRANSPORTATION RICES - 93544 | ECMS002 DTGECM03 ECMR003 RUN DATE - 03/15/11 RUN TIME - 183108 | 2003 PAGE 7 |
|--|-------------------|---|---------------------|------------------------------------|--|----------------------|
| | PAY ITEM DESCR | DESCRIPTION | UNIT OF MEASURE | QUANTITY | UNIT PRICE TOTA DOLLARS CENTS DOLI | AL PRICE LARS CTS |
| Ē | V INLETS | | EACH | 5.000 X | 11 | |
| COMB | CC&G TB6.06 MO | | | 00. | | 1 |
| comb | CC&G TB6.18 | | FOOT | 4.00 | - - - - - - - - - - - - - - | |
| omb | CC&G | | FOOT | 151.000 X | | |
| ¦ S | B CC&G TM2.12 | | | 7.00 | - - - - - - - - - - - - - - | I |
| 0B | ILIZATION | | | 0 | - [] | 1 1 1 |
| TR | CONT & PROT 7015 | - | L SUM | 1.000 X | | 1 |
| L L | CONT & PROT 7018 | | | | | |
| ΞĤ | NGEABLE MESSAGE | | Ē | 12.000 X | | |
| - - | T TERM PAVT MKIN | | FOOT | 1,075.000 X | | l |
| | P VT MK LTR & SY | 1 1 1 1 1 1 1 1 | SQ | 136.000 X | | I |
| ч Ш | PVT MK LINE 4 | | | 808.0 | | |
| OR OR | K ZONE PAVT MK RE | 1 2 1 | | ,552.0 | | |
| 9 | N PANEL T1 | | | 10 | | i i |
| Ē | SIN PAN ASSY T | A | | 14.000 X | | I |
| | | | | | | |

| ON ECMS002 DTGECM03 ECMR003 PAGE 8 RUN DATE - 03/15/11 RUN TIME - 183108 | UNIT PRICE TOTAL PRICE DOLLARS CENTS DOLLARS CTS | | | | | | | | | TOTAL \$ |
|--|---|------------------|---------------------|-----------|--------------------|---------------------|--------------------|---------------------|---------------------|----------|
| IENT OF TRANSPORTATION .E OF PRICES NUMBER - 93544 | E QUANTITY | T 1.500 | D 111.100 | T 457.000 | T 1,387.000 | T 122.000 | T 136.000 | Т 679.000 | 39.00 | |
| ILLINOIS DEPARTMENT SCHEDULE O CONTRACT NUM | IPTION MEASURE | SQ FT | | | [[[| | | | FOOT | |
| 4-PV (SPRINGFIELD) | PAY ITEM DESCRIPTION | REMOV SIGN PANEL | DRILL SHAFT CONC FD | PVT MK | THPL PVT MK LINE 6 | THPL PVT MK LINE 24 | OXY PVT MK LTR-SYM | EPOXY PVT MK LINE 8 | POXY PVT MK LINE 12 | |
| FAU 7982 10-00447-04-PV SANGAMON | I TEM NUMBER | | 00 | 8000300 | 00 | 00650 | 5100 | 8005140 | 0 | |

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

NOTE:

- 2. THE UNIT PRICE SHALL GOVERN IF NO TOTAL PRICE IS SHOWN OR IF THERE IS A DISCREPANCY BETWEEN THE PRODUCT OF THE UNIT PRICE MULTIPLIED BY THE QUANTITY.
- 3. IF A UNIT PRICE IS OMITTED, THE TOTAL PRICE WILL BE DIVIDED BY THE QUANTITY IN ORDER TO ESTABLISH A UNIT PRICE.
- 4. A BID MAY BE DECLARED UNACCEPTABLE IF NEITHER A UNIT PRICE NOR A TOTAL PRICE IS SHOWN.

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

I. GENERAL

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

B. In order to comply with the provisions of Article 50 and to carry out the duty established therein, all bidders are to adhere to ethical standards established for the procurement process, and to make such assurances, disclosures and certifications required by law. Except as otherwise required in subsection III, paragraphs J-M, by execution of the Proposal Signature Sheet, the bidder indicates that each of the mandated assurances have been read and understood, that each certification is made and understood, and that each disclosure requirement has been understood and completed.

C. In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the chief procurement officer to void the contract, or subcontract, and may result in the suspension or debarment of the bidder or subcontractor.

II. ASSURANCES

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

A. Conflicts of Interest

1. The Illinois Procurement Code provides in pertinent part:

Section 50-13. Conflicts of Interest.

(a) Prohibition. It is unlawful for any person holding an elective office in this State, holding a seat in the General Assembly, or appointed to or employed in any of the offices or agencies of state government and who receives compensation for such employment in excess of 60% of the salary of the Governor of the State of Illinois, or who is an officer or employee of the Capital Development Board or the Illinois Toll Highway Authority, or who is the spouse or minor child of any such person to have or acquire any contract, or any direct pecuniary interest in any contract therein, whether for stationery, printing, paper, or any services, materials, or supplies, that will be wholly or partially satisfied by the payment of funds appropriated by the General Assembly of the State of Illinois or in any contract of the Capital Development Board or the Illinois Toll Highway authority.

(b) Interests. It is unlawful for any firm, partnership, association or corporation, in which any person listed in subsection (a) is entitled to receive (i) more than 7 1/2% of the total distributable income or (ii) an amount in excess of the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(c) Combined interests. It is unlawful for any firm, partnership, association, or corporation, in which any person listed in subsection (a) together with his or her spouse or minor children is entitled to receive (i) more than 15%, in the aggregate, of the total distributable income or (ii) an amount in excess of 2 times the salary of the Governor, to have or acquire any such contract or direct pecuniary interest therein.

(d) Securities. Nothing in this Section invalidates the provisions of any bond or other security previously offered or to be offered for sale or sold by or for the State of Illinois.

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 days after the officer, member, or employee takes office or is employed.

The current salary of the Governor is \$177,412.00. Sixty percent of the salary is \$106,447.20.

2. The bidder assures the Department that the award and execution of the contract would not cause a violation of Section 50-13, or that an effective exemption has been issued by the Board of Ethics to any individual subject to the Section 50-13 prohibitions pursuant to the provisions of Section 50-20 of the Code and Executive Order Number 3 (1998). Information concerning the exemption process is available from the Department upon request.

B. Negotiations

1. The Illinois Procurement Code provides in pertinent part:

Section 50-15. Negotiations.

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

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

C. Inducements

1. The Illinois Procurement Code provides:

Section 50-25. Inducement. Any person who offers or pays any money or other valuable thing to any person to induce him or her not to bid for a State contract or as recompense for not having bid on a State contract is guilty of a Class 4 felony. Any person who accepts any money or other valuable thing for not bidding for a State contract or who withholds a bid in consideration of the promise for the payment of money or other valuable thing is guilty of a Class 4 felony.

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

D. <u>Revolving Door Prohibition</u>

1. The Illinois Procurement Code provides:

Section 50-30. Revolving door prohibition. Chief procurement officers, State purchasing officers, procurement compliance monitors, their designees whose principal duties are directly related to State procurement, and executive officers confirmed by the Senate are expressly prohibited for a period of 2 years after terminating an affected position from engaging in any procurement activity relating to the State agency most recently employing them in an affected position for a period of at least 6 months. The prohibition includes, but is not limited to: lobbying the procurement process; specifying; bidding; proposing bid, proposal, or contract documents; on their own behalf or on behalf of any firm, partnership, association, or corporation. This Section applies only to persons who terminate an affected position on or after January 15, 1999.

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

E. Reporting Anticompetitive Practices

1. The Illinois Procurement Code provides:

Section 50-40. Reporting anticompetitive practices. When, for any reason, any vendor, bidder, contractor, chief procurement officer, State purchasing officer, designee, elected official, or State employee suspects collusion or other anticompetitive practice among any bidders, offerors, contractors, proposers, or employees of the State, a notice of the relevant facts shall be transmitted to the Attorney General and the chief procurement officer.

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

F. Confidentiality

1. The Illinois Procurement Code provides:

Section 50-45. Confidentiality. Any chief procurement officer, State purchasing officer, designee, or executive officer who willfully uses or allows the use of specifications, competitive bid documents, proprietary competitive information, proposals, contracts, or selection information to compromise the fairness or integrity of the procurement, bidding, or contract process shall be subject to immediate dismissal, regardless of the Personnel code, any contract, or any collective bargaining agreement, and may in addition be subject to criminal prosecution.

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

G. Insider Information

1. The Illinois Procurement Act provides:

Section 50-50. Insider information. It is unlawful for any current or former elected or appointed State official or State employee to knowingly use confidential information available only by virtue of that office or employment for actual or anticipated gain for themselves or another person.

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

III. CERTIFICATIONS

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

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. <u>Felons</u>

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

3. Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any of the certifications required by this Section are false.

C. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

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

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

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Procurement Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the chief procurement officer may declare the contract void if this certification is false.

F. Educational Loan

1. Section 3 of the Educational Loan Default Act provides:

§ 3. No State agency shall contract with an individual for goods or services if that individual is in default, as defined in Section 2 of this Act, on an educational loan. Any contract used by any State agency shall include a statement certifying that the individual is not in default on an educational loan as provided in this Section.

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

G. Bid-Rigging/Bid Rotating

1. Section 33E-11 of the Criminal Code of 1961 provides:

§ 33E-11. (a) Every bid submitted to and public contract executed pursuant to such bid by the State or a unit of local government shall contain a certification by the prime contractor that the prime contractor is not barred from contracting with any unit of State or local government as a result of a violation of either Section 33E-3 or 33E-4 of this Article. The State and units of local government shall provide the appropriate forms for such certification.

(b) A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

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

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of state or local government. No corporation shall be barred from contracting with any unit of state or local government. No corporation shall be barred from contracting with any unit of state or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

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

H. International Anti-Boycott

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

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

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

I. Drug Free Workplace

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

2. The bidder certifies that if awarded a contract in excess of \$5,000 it will provide a drug free workplace by:

(a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance, including cannabis, is prohibited in the contractor's workplace; specifying the actions that will be taken against employees for violations of such prohibition; and notifying the employee that, as a condition of employment on such contract, the employee shall abide by the terms of the statement, and notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.

(b) Establishing a drug free awareness program to inform employees about the dangers of drug abuse in the workplace; the contractor's policy of maintaining a drug free workplace; any available drug counseling, rehabilitation, and employee assistance programs; and the penalties that may be imposed upon employees for drug violations.

(c) Providing a copy of the statement required by subparagraph (1) to each employee engaged in the performance of the contract and to post the statement in a prominent place in the workplace.

(d) Notifying the Department within ten (10) days after receiving notice from an employee or otherwise receiving actual notice of the conviction of an employee for a violation of any criminal drug statute occurring in the workplace.

(e) Imposing or requiring, within 30 days after receiving notice from an employee of a conviction or actual notice of such a conviction, an appropriate personnel action, up to and including termination, or the satisfactory participation in a drug abuse assistance or rehabilitation program approved by a federal, state or local health, law enforcement or other appropriate agency.

(f) Assisting employees in selecting a course of action in the event drug counseling, treatment, and rehabilitation is required and indicating that a trained referral team is in place.

(g) Making a good faith effort to continue to maintain a drug free workplace through implementation of the actions and efforts stated in this certification.

J. Disclosure of Business Operations in Iran

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

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

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

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

Check the appropriate statement:

- /___/ Company has no business operations in Iran to disclose.
- /___/ Company has business operations in Iran as disclosed the attached document.

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

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

NA-FEDERAL_____

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

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

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

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

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

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

M. Lobbyist Disclosure

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

(i) Disclose all costs, fees, compensation, reimbursements, and other remunerations paid or to be paid to the lobbyist related to the contract,

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

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

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

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

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

Name and address of person:

All costs, fees, compensation, reimbursements and other remuneration paid to said person:

IV. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all bids of more than \$25,000 shall be accompanied by disclosure of the financial interests of the bidder. This disclosed information for the successful bidder, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the contract. Furthermore, pursuant to Section 5-5, the Procurement Policy Board may review a proposal, bid, or contract and issue a recommendation to void a contract or reject a proposal or bid based on any violation of the Procurement Code or the existence of a conflict of interest as provided_in subsections (b) and (d) of Section 50-35.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the bidding entity or its parent entity, whichever is less, unless the contractor or bidder is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a bidder is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form. **The current annual salary of the Governor is \$177,412.00**.

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

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

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

- 1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ___ NO
- 2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES <u>NO</u>
- 3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the bidding entity's or parent entity's distributive income? YES ____ NO ___
- 4. Does anyone in your organization receive greater than 5% of the bidding entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ____ NO ___

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

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

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 a person that is authorized to execute contracts for your company.

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

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

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 | e previous | 3 years, | including contractua | l employr | nent of services | 5. |
|-----|-------------------|---------------------|------------|----------|----------------------|-----------|------------------|----|
| | | | - | - | - | Yes | No | |

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

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

- If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive
 (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor? Yes ____ No ___
- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes ____ No ___
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment for services in the previous 2 years.

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ____No ___
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of the spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess 100% of the annual salary of the Governor? Yes ___ No __
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?

Yes No ____

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ____No ___

(e) Appointive office; the holding of any appointive government office of the State of Illinois, the United State of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statues of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years.

| (f) Relationship to anyone | holding appointive office | ce currently | or in the p | previous 2 | 2 years; s | spouse, | father, | mother, |
|----------------------------|---------------------------|--------------|-------------|------------|------------|---------|---------|---------|
| son, or daughter. | | | | | Yes _ | No | | |

(g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ___No ___

Yes <u>No</u>

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ____No ___
- (i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes No

(j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes ___ No ___

3. Communication Disclosure.

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

Name and address of person(s):

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

Name of person(s):

Nature of disclosure:

APPLICABLE STATEMENT

This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on previous page. Under penalty of perjury, I certify the contents of this disclosure to be true and accurate to the best of my knowledge.

Completed by:

Signature of Individual or Authorized Representative

Date

| | NOT APPLICABLE STATEMENT | | | | | |
|--|--|------------|--|--|--|--|
| Inder penalty of perjury, I have determined that no individuals associated with this organization meet he criteria that would require the completion of this Form A. | | | | | | |
| This Disclosure Form | A is submitted on behalf of the CONTRACTOR listed on the previ | ious page. | | | | |
| | | | | | | |
| | Signature of Authorized Representative | Date | | | | |
| | | | | | | |

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Procurement Related Information Disclosure

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

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for bids in excess of \$25,000, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

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

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

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

THE FOLLOWING STATEMENT MUST BE CHECKED

| Signature of Authorized Representative | Date |
|--|------|

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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



Contract No. 93544 SANGAMON County Section 10-00447-04-PV (Springfield) Project HPP-TE-00D6(099) Route FAU 7982 (Capitol Avenue) District 6 Construction Funds

PART I. IDENTIFICATION

Dept. Human Rights # _____

Duration of Project:

Name of Bidder:

PART II. WORKFORCE PROJECTION

A. The undersigned bidder has analyzed minority group and female populations, unemployment rates and availability of workers for the location in which this contract work is to be performed, and for the locations from which the bidder recruits employees, and hereby submits the following workforce projection including a projection for minority and female employee utilization in all job categories in the workforce to be allocated to this contract: TABLE A TABLE B

| | | TOTA | AL Wo | rkforce | Project | tion for | Contr | act | | | | | | C | | - | S |
|---------------------------|-----|--------------|---------|---------|---------|----------|-------|------------------|---|-----|--------|------------------------|------|-------|----------------|---------------|---|
| | | | | MIN | ORITY I | EMPLC | YEES | 5 | | TRA | AINEES | | | | TO BE TO CO | | |
| JOB CATEGORIES | | TAL OYEES | BL/ | ACK | HISP | ANIC | | *OTHER MINOR. | | | | ON THE JOB TRAINEES | | | OTAL OYEES | MINO EMPLO | |
| | М | F | Μ | F | М | F | М | F | Μ | F | М | F | | М | F | М | F |
| OFFICIALS (MANAGERS) | | | | | | | | | | | | | | | | | |
| SUPERVISORS | | | | | | | | | | | | | | | | | |
| FOREMEN | | | | | | | | | | | | | | | | | |
| CLERICAL | | | | | | | | | | | | | | | | | |
| EQUIPMENT OPERATORS | | | | | | | | | | | | | | | | | |
| MECHANICS | | | | | | | | | | | | | | | | | |
| TRUCK DRIVERS | | | | | | | | | | | | | | | | | |
| IRONWORKERS | | | | | | | | | | | | | | | | | |
| CARPENTERS | | | | | | | | | | | | | | | | | |
| CEMENT MASONS | | | | | | | | | | | | | | | | | |
| ELECTRICIANS | | | | | | | | | | | | | | | | | |
| PIPEFITTERS, PLUMBERS | | | | | | | | | | | | | | | | | |
| PAINTERS | | | | | | | | | | | | | | | | | |
| LABORERS, SEMI-SKILLED | | | | | | | | | | | | | | | | | |
| LABORERS, UNSKILLED | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | |
| | TAE | BLE C | | | | | | | | | Г | EOI | ם כ | | IENT USE | | |
| | | aining Pro | ojectio | n for C | ontract | | | | | | | FUI | V DE | FARIN | | N∟ĭ | |
| | TO | ТЛІ | | | | | *0 | TUED | | | | | | | | | |

| T | DTAL Tra | aining Pro | ojection | n for C | ontract | | | | | | |
|-------------|-----------|------------|-----------|---------|----------------|---|--------|------|--------|--|--|
| EMPLOYEES | TO | TOTAL | | | | | *OTHER | | | | |
| IN | EMPLOYEES | | EMPLOYEES | | MPLOYEES BLACK | | HISP | ANIC | MINOR. | | |
| TRAINING | М | F | М | F | М | F | М | F | | | |
| APPRENTICES | | | | | | | | | | | |
| | | | | | | | | | | | |
| ON THE JOB | | | | | | | | | | | |
| TRAINEES | | | | | | | | | | | |

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

BC 1256 (Rev. 12/11/08)

Note: See instructions on page 2

Contract No. 93544 SANGAMON County Section 10-00447-04-PV (Springfield) Project HPP-TE-00D6(099) Route FAU 7982 (Capitol Avenue) District 6 Construction Funds

PART II. WORKFORCE PROJECTION - continued

B. Included in "Total Employees" under Table A is the total number of **new hires** that would be employed in the event the undersigned bidder is awarded this contract.

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

office or base of operation is located.

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

Company _____

Address _____

| | NOTICE REGARDING SIGNATURE |
|---------------|--|
| | signature on the Proposal Signature Sheet will constitute the signing of this form. The following signature block needs ad only if revisions are required. |
| Signature: | Title: Date: |
| Instructions: | All tables must include subcontractor personnel in addition to prime contractor personnel. |
| Table A - | Include both the number of employees that would be hired to perform the contract work and the total number currently employed (Table B) that will be allocated to contract work, and include all apprentices and on-the-job trainees. The "Total Employees" column should include all employees including all minorities, apprentices and on-the-job trainees to be employed on the contract work. |
| Table B - | Include all employees currently employed that will be allocated to the contract work including any apprentices and on-the-job trainees currently employed. |
| Table C - | Indicate the racial breakdown of the total apprentices and on-the-job trainees shown in Table A. |

BC-1256 (Rev. 12/11/08)

Telephone Number _____

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 _____
 - If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations? YES _____ NO _____

Contract No. 93544 SANGAMON County Section 10-00447-04-PV (Springfield) Project HPP-TE-00D6(099) Route FAU 7982 (Capitol Avenue) District 6 Construction Funds

PROPOSAL SIGNATURE SHEET

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

| Firm Name | |
|--------------------|---|
| Signature of Owner | |
| | |
| | |
| | |
| Firm Name | |
| Ву | |
| Business Address | |
| | Name and Address of All Members of the Firm: |
| | |
| | |
| Corporate Name | |
| | |
| Бу | Signature of Authorized Representative |
| | |
| | Typed or printed name and title of Authorized Representative |
| Attest | |
| | Signature |
| Business Address | |
| | |
| Corporate Name | |
| | |
| | Signature of Authorized Representative |
| | |
| | Typed or printed name and title of Authorized Representative |
| | |
| Attest | Typed or printed name and title of Authorized Representative |
| | Signature of Owner Business Address Firm Name By Business Address Corporate Name By Attest Business Address Corporate Name |



Return with Bid

Division of Highways Proposal Bid Bond (Effective November 1, 1992)

Item No.

Letting Date

KNOW ALL MEN BY THESE PRESENTS, That We

as PRINCIPAL, and

as SURETY, are

held jointly, severally and firmly bound unto the STATE OF ILLINOIS in the penal sum of 5 percent of the total bid price, or for the amount specified in Article 102.09 of the "Standard Specifications for Road and Bridge Construction" in effect on the date of invitation for bids, whichever is the lesser sum, well and truly to be paid unto said STATE OF ILLINOIS, for the payment of which we bind ourselves, our heirs, executors, administrators, successors and assigns.

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by

| their respective officers this | day of | | A.D., . | | |
|--------------------------------|------------------------------|--|--|--|--|
| PRINCIPAL | | SURETY | | | |
| (Company Name) | | | (Company Name) | | |
| Ву | | By: | | | |
| (Signature & Title) | | (Signature of Attorney-in-Fact) | | | |
| | Notary Certif | ication for Principal and S | ırety | | |
| STATE OF ILLINOIS, | | | | | |
| County of | | | | | |
| l, | | , a Notary Public in and for said County, do hereby certify that | | | |
| | | and | | | |
| (| Insert names of individuals | signing on behalf of PRIN | CIPAL & SURETY) | | |
| | nis day in person and ackno | | ed to the foregoing instrument on behalf of PRINCI t they signed and delivered said instrument as their | | |
| Given under my hand and nota | rial seal this | day of | A.D. | | |
| My commission expires | | | | | |
| · · · <u>–</u> | | | Notary Public | | |
| | ignature and Title line belo | w, the Principal is ensurin | an Electronic Bid Bond. By signing the proposal g the identified electronic bid bond has been exec of the bid bond as shown above. | | |
| | | | | | |
| Electronic Bid Bond ID# | D# Company / Bidder Name | | Signature and Title | | |
| | | | | | |

BDE 356B (REV. 10/24/07)



(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

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

(3) Project and Bid Identification

Complete the following information concerning the project and bid:

| Route | Total Bid | | <u>.</u> |
|------------------|-------------------|-----------|-----------------|
| Section | Contract DBE Goal | | |
| Project | | (Percent) | (Dollar Amount) |
| County | | | |
| Letting Date | | | |
| Contract No. | | | |
| Letting Item No. | | | |

(4) Assurance

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

Meets or exceeds contract award goals and has provided documented participation as follows:

Disadvantaged Business Participation _____ percent

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

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

Disadvantaged Business Participation _____ percent

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

| Company | The "as read" Low Bidder is required to comply with the Special Provision. |
|---------|--|
| Ву | Submit only one utilization plan for each project. The utilization plan shall be submitted in accordance with the special provision. |
| Title | Bureau of Small Business EnterprisesLocal Let Projects2300 South Dirksen ParkwaySubmit forms to the Local Agency |
| Date | |

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.



DBE Participation Statement

| Subcontractor Registration | Letting |
|----------------------------|----------|
| Participation Statement | Item No. |
| (1) Instructions | Contract |

This form must be completed for each disadvantaged business participating in the Utilization Plan. This form shall be submitted in accordance with the special provision and will be attached to the Utilization Plan form. If additional space is needed complete an additional form for the firm.

(2) Work

| Pay Item No. | Description | Quantity | Unit Price | Total |
|-----------------|-------------|----------|------------|-------|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| <u> </u> | | 1 | Total | |

(3) Partial Payment Items

For any of the above items which are partial pay items, specifically describe the work and subcontract dollar amount:

(4) Commitment

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. 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.

| Signature for Prime Contractor | Signature for DBE Firm |
|--|--|
| Title | Title |
| Date | Dete |
| Contact | Contact Person |
| Phone | Dhono |
| Firm Name | — — — — |
| Address | |
| City/State/Zip | |
| | E |
| The Department of Transportation is requesting disclosure of information that is necessary | to accomplish the statutory purpose as outlined under the state and federal 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:

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

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

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

NOTICE

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

CONTRACTOR OFFICE COPY OF CONTRACT SPECIFICATIONS

NOTICE

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

Contract No. 93544 SANGAMON County Section 10-00447-04-PV (Springfield) Project HPP-TE-00D6(099) Route FAU 7982 (Capitol Avenue) District 6 Construction Funds



SUBCONTRACTOR DOCUMENTATION

Public Acts 96-0795 and 96-0920, enacted substantial changes to the provisions of the Illinois Procurement Code (30 ILCS 500). Among the changes are provisions affecting subcontractors. The Contractor awarded this contract will be required as a material condition of the contract to implement and enforce the contract requirements applicable to subcontractors approved in accordance with article 108.01 of the Standard Specifications for Road and Bridge Construction.

If the Contractor seeks approval of subcontractors to perform a portion of the work, and approval is granted by the Department, the Contractor shall provide a copy of the subcontract to the Chief Procurement Officer within 20 calendar days after execution of the subcontract.

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

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

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

The certifications hereinafter made by the subcontractor are each a material representation of fact upon which reliance is placed should the Department approve the subcontractor. The chief procurement officer may terminate or void the subcontract approval if it is later determined that the bidder or subcontractor rendered a false or erroneous certification.

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

A. Bribery

1. The Illinois Procurement Code provides:

Section 50-5. Bribery.

(a) Prohibition. No person or business shall be awarded a contract or subcontract under this Code who:

(1) has been convicted under the laws of Illinois or any other state of bribery or attempting to bribe an officer or employee of the State of Illinois or any other state in that officer's or employee's official capacity; or

(2) has made an admission of guilt of that conduct that is a matter of record but has not been prosecuted for that conduct.

(b) Businesses. No business shall be barred from contracting with any unit of State or local government, or subcontracting under such a contract, as a result of a conviction under this Section of any employee or agent of the business if the employee or agent is no longer employed by the business and:

(1) the business has been finally adjudicated not guilty; or

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 1961.

(c) Conduct on behalf of business. For purposes of this Section, when an official, agent, or employee of a business committed the bribery or attempted bribery on behalf of the business and in accordance with the direction or authorization of a responsible official of the business, the business shall be chargeable with the conduct.

(d) Certification. Every bid submitted to and contract executed by the State, and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the contractor or the subcontractor, respectively, that the contractor or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any certifications required by this Section are false. A contractor who makes a false statement, material to the certification, commits a Class 3 felony.

2. The contractor or subcontractor certifies that it is not barred from being awarded a contract under Section 50.5.

B. <u>Felons</u>

1. The Illinois Procurement Code provides:

Section 50-10. Felons. Unless otherwise provided, no person or business convicted of a felony shall do business with the State of Illinois or any State agency, or enter into a subcontract, from the date of conviction until 5 years after the date of completion of the sentence for that felony, unless no person held responsible by a prosecutorial office for the facts upon which the conviction was based continues to have any involvement with the business.

2. Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Procurement Code shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the chief procurement officer may declare the related contract void if any of the certifications required by this Section are false.

C. Debt Delinquency

1. The Illinois Procurement Code provides:

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

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

D. Prohibited Bidders, Contractors and Subcontractors

1. The Illinois Procurement Code provides:

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

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

E. Section 42 of the Environmental Protection Act

The bidder or contractor or subcontractor, respectively, certifies in accordance with 30 ILCS 500/50-12 that the bidder, contractor, or subcontractor, is not barred from being awarded a contract or entering into a subcontract under this Section which prohibits the bidding on or entering into contracts with the State of Illinois or a State agency, or entering into any subcontract, that is subject to the Procurement Code by a person or business found by a court or the Pollution Control Board to have committed a willful or knowing violation of Section 42 of the Environmental Protection Act for a period of five years from the date of the order. The bidder or contractor or subcontractor, respectively, acknowledges that the chief procurement officer may declare the contract void if this certification is false.

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

Name of Subcontracting Company

Authorized Officer

Date

SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

1. Section 50-35 of the Illinois Procurement Code provides that all subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, shall be accompanied by disclosure of the financial interests of the subcontractor. This disclosed information for the subcontractor, will be maintained as public information subject to release by request pursuant to the Freedom of Information Act, filed with the Procurement Policy Board, and shall be incorporated as a material term of the Prime Contractor's contract. Furthermore, pursuant to this Section, the Procurement Policy Board may recommend to allow or void a contract or subcontract based on a potential conflict of interest.

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 400 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any person or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each person making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each person making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form. **The current annual salary of the Governor is \$177,412.00**.

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

2. <u>Disclosure Forms</u>. Disclosure Form A is attached for use concerning the individuals meeting the above ownership or distributive share requirements. Subject individuals should be covered each by one form. In addition, a second form (Disclosure Form B) provides for the disclosure of current or pending procurement relationships with other (non-IDOT) state agencies.

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

- 1. Does anyone in your organization have a direct or beneficial ownership share of greater than 5% of the bidding entity or parent entity? YES ____ NO ____
- 2. Does anyone in your organization have a direct or beneficial ownership share of less than 5%, but which has a value greater than 60% of the annual salary of the Governor? YES ____ NO____
- 3. Does anyone in your organization receive more than 60% of the annual salary of the Governor of the subcontracting entity's or parent entity's distributive income? YES ____ NO ___

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

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

(Note: Only one set of forms needs to be completed <u>per person per subcontract</u> even if a specific individual would require a yes answer to more than one question.)

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

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

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

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

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

ILLINOIS DEPARTMENT OF TRANSPORTATION

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

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

| FOR INDIVIDUAL | . (type or print information) | | |
|----------------|--------------------------------------|-------------|-------------------------------------|
| NAME: | | | |
| ADDRESS | | | |
| | | | |
| Type of own | ership/distributable income share | : | |
| stock | sole proprietorship | Partnership | other: (explain on separate sheet): |
| % or \$ value | of ownership/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 <u>No</u>

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

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

If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive
 (i) more than 7 1/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of 100% of the annual salary of the Governor?

Yes No ___

- 4. If you are currently appointed to or employed by any agency of the State of Illinois, and your annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor? Yes No ___
- (b) State employment of spouse, father, mother, son, or daughter, including contractual employment services in the previous 2 years.

Yes <u>No</u>

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

- 1. Is your spouse or any minor children currently an officer or employee of the Capitol Development Board or the Illinois State Toll Highway Authority? Yes ____No ___
- 2. Is your spouse or any minor children currently appointed to or employed by any agency of the State of Illinois? If your spouse or minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, provide the name of your spouse and/or minor children, the name of the State agency for which he/she is employed and his/her annual salary.
- 3. If your spouse or any minor children is/are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you entitled to receive (i) more than 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of of 100% of the annual salary of the Governor? Yes ____No ___
- 4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?

Yes <u>No</u>

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years.
Yes ___No ___

(d) Relationship to anyone holding elective office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes ____No ___

- (e) Appointive office; the holding of any appointive government office of the State of Illinois, the United States of America, or any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. Yes ____No ___
- (f) Relationship to anyone holding appointive office currently or in the previous 2 years; spouse, father, mother, son, or daughter. Yes <u>No</u>
- (g) Employment, currently or in the previous 3 years, as or by any registered lobbyist of the State government. Yes ____No ___

- (h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ____No ___
- (i) Compensated employment, currently or in the previous 3 years, by any registered election or reelection committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections. Yes ___ No ___
- (j) Relationship to anyone; spouse, father, mother, son, or daughter; who was a compensated employee in the last 2 years by any registered election or re-election committee registered with the Secretary of State or any county clerk of the State of Illinois, or any political action committee registered with either the Secretary of State or the Federal Board of Elections.

Yes ___ No ___

3. Communication Disclosure.

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

Name and address of person(s): _____

4. Debarment Disclosure. For each of the persons identified under Sections 2 and 3 of this form, disclose whether any of the following has occurred within the previous 10 years: debarment from contracting with any governmental entity; professional licensure discipline; bankruptcies; adverse civil judgments and administrative findings; and criminal felony convictions. This disclosure is a continuing obligation and must be promptly supplemented for accuracy throughout the procurement process and term of the contract. If no person is identified, enter "None" on the line below:

| Name of person(s): | |
|--|------------------------|
| Nature of disclosure: | |
| | |
| | |
| | |
| APPLICABLE STATEMENT | |
| This Disclosure Form A is submitted on behalf of the INDIVIDUAL named on propenalty of perjury, I certify the contents of this disclosure to be true and accura 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 the criteria that would require the completion of this Form A. | this organization meet |
| This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed | on the previous page. |
| | |
| Signature of Authorized Officer | Date |

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Procurement Related Information Disclosure

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

Disclosure of the information contained in this Form is required by the Section 50-35 of the Illinois Procurement Act (30 ILCS 500). This information shall become part of the publicly available contract file. This Form B must be completed for subcontracts with a total value of \$25,000 or more, from subcontractors identified in Section 20-120 of the Illinois Procurement Code, and for all open-ended contracts.

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

1. Identifying Other Contracts & Procurement Related Information. The SUBCONTRACTOR shall identify whether it has any pending contracts, subcontracts, including leases, bids, proposals, or other ongoing procurement relationship with any other State of Illinois agency: Yes _____No ____

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

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

THE FOLLOWING STATEMENT MUST BE CHECKED

| Signature of Authorized Officer | Date |
|-------------------------------------|------|

Illinois Department of Transportation

NOTICE TO BIDDERS

- TIME AND PLACE OF OPENING BIDS. Sealed proposals for the improvement described herein will be received by the Department of Transportation at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 o'clock a.m., April 29, 2011. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after the 10:00 a.m. cut off time.
- 2. DESCRIPTION OF WORK. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

Contract No. 93544 SANGAMON County Section 10-00447-04-PV (Springfield) Project HPP-TE-00D6(099) Route FAU 7982 (Capitol Avenue) District 6 Construction Funds

Project consists of the removal of the existing pavement, sidewalk, lighting and street appurtenances, installation of concrete pavers, crosswalks, several planting beds, lighting and a roundabout, repair of water services and replacement of existing water hydrants, and all other incidental items to complete the work on FAU Route 7982 (Capitol Avenue) from 11th Street to Martin Luther King Drive in the city of Springfield.

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

By Order of the Illinois Department of Transportation

Gary Hannig, Secretary

INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2011

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS and frequently used RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-07) (Revised 1-1-11)

SUPPLEMENTAL SPECIFICATIONS

| Std. Sp | <u>bec. Sec.</u> | <u>Page No.</u> |
|------------|--|-----------------|
| 201 | Clearing, Tree Removal and Protection | |
| 205 | Embankment | |
| 251 | Mulch | |
| 253 | Planting Woody Plants | 4 |
| 280 | Temporary Erosion Control | |
| 406 | Hot-Mix Asphalt Binder and Surface Course | 7 |
| 420 | Portland Cement Concrete Pavement | |
| 443 | Reflective Crack Control Treatment | |
| 501 | Removal of Existing Structures | |
| 502 | Excavation for Structures | |
| 503 | Concrete Structures | |
| 504 | Precast Concrete Structures | |
| 505 | Steel Structures | |
| 508 | Reinforcement Bars | |
| 540 | Box Culverts | |
| 581 | Waterproofing Membrane System | |
| 606 | Concrete Gutter, Curb, Median, and Paved Ditch | |
| 630 | Steel Plate Beam Guardrail | |
| 633 | Removing and Reerecting Guardrail and Terminals | |
| 637 | Concrete Barrier | |
| 664 | Chain Link Fence | |
| 669 | Removal and Disposal of Regulated Substances | |
| 672 | Sealing Abandoned Water Wells | |
| 701 | Work Zone Traffic Control and Protection | |
| 720 | Sign Panels and Appurtenances | |
| 721 | Sign Panel Overlay | |
| 722 | Demountable Sign Legend Characters and Arrows | |
| 726 | Mile Post Marker Assembly | |
| 733 | Overhead Sign Structures | |
| 780 | Pavement Striping | |
| 782 | Priemetia Deflectors | |
| 783 | Prismatic Reflectors Pavement Marking and Marker Removal | |
| | Flavement Marking and Marker Removal | |
| 801 805 | Electrical Requirements Electrical Service Installation – Traffic Signals | |
| | Deedway Luminairaa | |
| 821 | Roadway Luminaires | |
| 836 | Pole Foundation | |
| 838 | Breakaway Devices | |
| 843 | Removal of Navigational Obstruction Warning Lighting System | |
| 862 | Uninterruptable Power Supply | |
| 873 | Electric Cable | |
| 878 | Traffic Signal Concrete Foundation | |
| 1003 | Fine Aggregates | |
| 1004 | Coarse Aggregates | |
| 1005 | Stone and Broken Concrete | |
| 1006 | Metals | |
| 1008 | Structural Steel Coatings | |
| 1010 | Finely Divided Materials | |
| 1020 | Portland Cement Concrete | |
| 1022 | Concrete Curing Materials | |

| Nonshrink Grout | 78 |
|------------------------------------|----------------------|
| | 10 |
| Concrete Sealer | 79 |
| Hot-Mix Asphalt | 80 |
| Bituminous Materials | 87 |
| Precast Concrete Products | 90 |
| Reflective Crack Control System | 92 |
| | 94 |
| | 97 |
| | 102 |
| Post and Foundation | 103 |
| | 105 |
| Materials for Planting | 106 |
| Elastomeric Bearings | 108 |
| | 109 |
| | 111 |
| | 119 |
| | 120 |
| Overhead Sign Structures | 122 |
| | 128 |
| Reflectors | 136 |
| General Equipment | 137 |
| | 138 |
| Portland Cement Concrete Equipment | 140 |
| | 141 |
| Work Zone Traffic Control Devices | 143 |
| | Bituminous Materials |

RECURRING SPECIAL PROVISIONS

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

| | CHECK SHEET # PAGE | | | | | |
|-----------------|--------------------|--|-------|--|--|--|
| <u>NO.</u> 1 | х | Additional State Requirements For Federal-Aid Construction Contracts | | | | |
| · | | (Eff. 2-1-69) (Rev. 1-1-10) | 145 | | | |
| 2 | х | | 148 | | | |
| 3 | | EEO (Eff. 7-21-78) (Rev. 11-18-80) | 140 | | | |
| 4 | | Specific Equal Employment Opportunity Responsibilities | 140 | | | |
| • | | Non Federal-Aid Contracts (Eff. 3-20-69) (Rev. 1-1-94) | 159 | | | |
| 5 | | Required Provisions - State Contracts (Eff. 4-1-65) (Rev. 1-1-10) | | | | |
| 6 | | Reserved | | | | |
| 7 | | Reserved | | | | |
| 8 | | Haul Road Stream Crossings, Other Temporary Stream Crossings, and | | | | |
| • | | In-Stream Work Pads (Eff. 1-2-92) (Rev. 1-1-98) | 171 | | | |
| 9 | | Construction Layout Stakes Except for Bridges (Eff. 1-1-99) (Rev. 1-1-07) | 172 | | | |
| 10 | Х | Construction Layout Stakes (Eff. 5-1-93) (Rev. 1-1-07) | | | | |
| 11 | | Use of Geotextile Fabric for Railroad Crossing (Eff. 1-1-95) (Rev. 1-1-07) | | | | |
| 12 | | Subsealing of Concrete Pavements (Eff. 11-1-84) (Rev. 1-1-07) | . 180 | | | |
| 13 | | Hot-Mix Asphalt Surface Correction (Eff. 11-1-87) (Rev. 1-1-09) | | | | |
| 14 | | Pavement and Shoulder Resurfacing (Eff. 2-1-00) (Rev. 1-1-09) | | | | |
| 15 | | PCC Partial Depth Hot-Mix Asphalt Patching (Eff. 1-1-98) (Rev. 1-1-07) | . 187 | | | |
| 16 | | Patching with Hot-Mix Asphalt Overlay Removal (Eff. 10-1-95) (Rev. 1-1-07) | . 189 | | | |
| 17 | | Polymer Concrete (Eff. 8-1-95) (Rev. 1-1-08) | | | | |
| 18 | | PVC Pipeliner (Eff. 4-1-04) (Rev. 1-1-07) | . 192 | | | |
| 19 | | Pipe Underdrains (Eff. 9-9-87) (Rev. 1-1-07) | . 193 | | | |
| 20 | | Guardrail and Barrier Wall Delineation (Eff. 12-15-93) (Rev. 1-1-97) | | | | |
| 21 | | Bicycle Racks (Eff. 4-1-94) (Rev. 1-1-07) | | | | |
| 22 | | Temporary Modular Glare Screen System (Eff. 1-1-00) (Rev. 1-1-07) | . 200 | | | |
| 23 | | Temporary Portable Bridge Traffic Signals (Eff. 8-1-03) (Rev. 1-1-07) | | | | |
| 24 | | Work Zone Public Information Signs (Eff. 9-1-02) (Rev. 1-1-07) | . 204 | | | |
| 25 | | Night Time Inspection of Roadway Lighting (Eff. 5-1-96) | . 205 | | | |
| 26 | | English Substitution of Metric Bolts (Eff. 7-1-96) | . 206 | | | |
| 27 | | English Substitution of Metric Reinforcement Bars (Eff. 4-1-96) (Rev. 1-1-03) | . 207 | | | |
| 28 | | Calcium Chloride Accelerator for Portland Cement Concrete (Eff. 1-1-01) | . 208 | | | |
| 29 | | Reserved | . 209 | | | |
| 30 | Х | Quality Control of Concrete Mixtures at the Plant (Eff. 8-1-00) (Rev. 1-1-11) | 210 | | | |
| 31 | | Quality Control/Quality Assurance of Concrete Mixtures | . 210 | | | |
| | | (Eff. 4-1-92) (Rev. 1-1-11) | 218 | | | |
| 32 | | Asbestos Bearing Pad Removal (Eff. 11-1-03) | | | | |
| 33 | | Asbestos Hot-Mix Asphalt Surface Removal (Eff. 6-1-89) (Rev. 1-1-09) | | | | |
| | | | | | | |

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

| LRS 1 Reserved LRS 2 Furnished Excavation (Eff. 1-1-99) (Rev. 1-1-07) LRS 3 Work Zone Traffic Control (Eff. 1-1-99) (Rev. 1-1-10) LRS 4 Flaggers in Work Zones (Eff. 1-1-99) (Rev. 1-1-07) LRS 5 Contract Claims (Eff. 1-1-02) (Rev. 1-1-07) LRS 6 Bidding Requirements and Conditions for Contract Proposals (Eff. 1-1-02) LRS 7 Bidding Requirements and Conditions for Material Proposals (Eff. 1-1-02) (Rev. 1-1-03) LRS 8 Reserved LRS 9 Bituminous Surface Treatments (Eff. 1-1-99) (Rev. 1-1-11) LRS 10 Reserved LRS 11 Employment Practices (Eff. 1-1-99) LRS 12 Wages of Employees on Public Works (Eff. 1-1-99) (Rev. 1-1-10) LRS 13 Selection of Labor (Eff. 1-1-99) LRS 14 Paving Brick and Concrete Paver Pavements and Sidewalks (Eff. 1-1-04) (Rev. 1-1-09) | 234 235 236 237 238 244 250 251 252 253 255 256 257 |
|--|---|
| LRS 13 🔲 Selection of Labor (Eff. 1-1-99) | 256 257 260 |
| LRS 17 🗍 Substance Abuse Prevention Program (Eff. 1-1-08) (Rev. 1-8-08) | 262 |

.

TABLE OF CONTENTS

| LOCATION OF PROJECT | 1 |
|--|---------------|
| DESCRIPTION OF IMPROVEMENT | 1 |
| CONSTRUCTION SEQUENCE AND SCHEDULE | 1 |
| COMPLETION DATE | |
| | |
| TRAFFIC CONTROL PLAN | |
| ROADWAY | 3 |
| BASEMENT EXTENSIONS UNDER SIDEWALK | |
| CATCH BASINS, TYPE D, 3'-DIAMETER, WITH SPECIAL FRAME AND GRATE | 3 |
| CATCH BASINS, TYPE G-1 | 4 |
| COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06 (MODIFIED) | |
| CONCRETE GUTTER (SPECIAL) CONNECTIONS TO EXISTING SEWERS | 4 |
| CONNECTIONS TO EXISTING SEWERS CONSTRUCTION LAYOUT | |
| CONSTRUCTION LAYOUT | |
| CWLP UTILITY WORK COORDINATION | |
| DECORATIVE SIGN POST | |
| DUCTILE IRON STORM SEWER 12 INCH | |
| FENCE REMOVAL | |
| FRAMES AND GRATES. TYPE 20 (SPECIAL) | 7 |
| INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE | 7 |
| PIPE UNDERDRAIN | 8 |
| PIPE UNDERDRAIN CLEANOUT, COMPLETE | |
| REMOVE AND REINSTALL BRICK PAVER | 8 |
| REMOVE, STOCKPILE AND REPLACE SIGN PANEL AND SIGN PANEL ASSEMBLY (SPECIA | L)8 |
| SIDEWALK FINISH | |
| SIGN FRAME | |
| SIGN PANEL OVERLAY SPECIAL | |
| SPECIAL EXCAVATION STATUS OF UTILITIES TO BE ADJUSTED | |
| TEMPORARY CONSTRUCTION FENCE | |
| TEMPORARY CONSTRUCTION FENCE | |
| | |
| STREETSCAPE | 14 |
| CONCRETE PAVER PAVEMENT, CONCRETE PAVER SIDEWALK, AND DETECTABLE | 1.4 |
| WARNINGS | |
| METAL BENCH 6' SECTION | |
| PAVE-EDGE PAVER RETAINING SYSTEM | |
| PRECAST PLANTER EDGE, TYPE 1 AND TYPE 2 | ·····19 20 |
| RECYCLING RECEPTACLE | |
| TRASH RECEPTACLES | |
| LANDSCAPING | |
| | |

-i-

| IRRIGATION BED 0.5 GPH | |
|--|----|
| IRRIGATION PIPING | 29 |
| PLANT MATERIAL | |
| PVC CASING PIPE | |
| RAISED URN SUPPLY | |
| SCHEDULE 40 PIPE IN CASING | |
| TREE FRAME AND GRATE | |
| TREE REMOVAL, TREE PRUNING, SHREDDED BARK MULCH 4" | |
| TRAFFIC SIGNALS | |
| BATTERY BACKUP SYSTEM WITH CABINET | |

-ii-

INDEX LOCAL ROADS AND STREETS SPECIAL PROVISIONS

| LR # | Pg # | _ | Special Provision Title | Effective Nov. 11, 1984 | Revised Jan. 1, 2007 |
|-----------|------|-------------|---|----------------------------|-------------------------|
| LR SD 12 | | Ц | Slab Movement Detection Device | Nov. 1, 1987 | Jan. 1, 2007 |
| LR SD 13 | | | Required Cold Milled Surface Texture | April 1, 2011 | Jan. 1, 2007 |
| LR SD406 | | | Safety Edge | Jan. 1, 1999 | Jan. 1, 2007 |
| LR 105 | 47 | \boxtimes | Cooperation with Utilities | | Jan. 1, 2007 |
| LR 107-2 | | | Railroad Protective Liability Insurance for Local Lettings | Mar. 1, 2005 | Aug. 1, 2000 |
| LR 107-4 | 50 | \boxtimes | Insurance | Feb. 1, 2007 | Aug. 1, 2007 |
| LR 107-6 | | | Selection of Labor | Aug. 1, 2010 | Mar 1 2005 |
| LR 108 | | | Combination Bids | Jan. 1, 1994 | Mar. 1, 2005 |
| LR 212 | | | Shaping Roadway | Aug. 1, 1969 | Jan. 1, 2002 |
| LR 355-1 | | | Asphalt Stabilized Base Course, Road Mix or Traveling Plant Mix | Oct. 1, 1973 | Jan. 1, 2007 |
| LR 355-2 | | | Asphalt Stabilized Base Course, Plant Mix | Feb. 20, 1963 | Jan. 1, 2007 |
| LR 400-1 | | | Bituminous Treated Earth Surface | Jan. 1, 2007 | Jan. 1, 2008 |
| LR 400-2 | | | Bituminous Surface Mixture (Class B) | Jan. 1, 2008 | lan 1 2007 |
| LR 402 | | | Salt Stabilized Surface Course | Feb. 20, 1963 | Jan. 1, 2007 |
| LR 403-2 | | | Bituminous Hot Mix Sand Seal Coat | Aug. 1, 1969 | Jan. 1, 2007 |
| LR 406 | | \Box | Filling HMA Core Holes with Non-shrink Grout | Jan. 1, 2008 | 0.007 |
| LR 420 | | | PCC Pavement (Special) | May 12, 1964 | Jan. 2, 2007 |
| LR 442 | | | Bituminous Patching Mixtures for Maintenance Use | Jan. 1, 2004 | Jun. 1, 2007 |
| LR 451 | | | Crack Filling Bituminous Pavement with Fiber-Asphalt | Oct. 1, 1991 | Jan. 1, 2007 |
| LR 503-1 | | | Furnishing Class SI Concrete | Oct. 1, 1973 | Jan. 1, 2002 |
| LR 503-2 | | | Furnishing Class SI Concrete (Short Load) | Jan. 1, 1989 | Jan. 1, 2002 |
| LR 542 | | | Pipe Culverts, Type (Furnished) | Sep. 1, 1964 | Jan. 1, 2007 |
| LR 663 | | | Calcium Chloride Applied | Jun. 1, 1958 | Jan. 1, 2007 |
| LR 702 | | | Construction and Maintenance Signs | Jan. 1, 2004 | Jun. 1, 2007 |
| LR 1004 | | | Coarse Aggregate for Bituminous Surface Treatment | Jan. 1, 2002 | Jan. 1, 2007 |
| LR 1030 | | | Growth Curve | Mar. 1, 2008 | Jan. 1, 2010 |
| LR 1032-1 | | | Emulsified Asphalts | Jan. 1, 2007 | Feb. 7, 2008 |
| LR 1032-2 | | | Multigrade Cold Mix Asphalt | Jan. 1, 2007 | Feb. 1, 2007 |
| LR 1095 | | | Fast-Dry Pavement Marking Paint Black (Lead Free Waterborne | April 1, 2011 | |
| | | | Type) | | |
| LR 1102 | | | Road Mix or Traveling Plan Mix Equipment | Jan. 1, 2007 | |

LR 1102

BDE SPECIAL PROVISIONS For the April 29 and June 17, 2011 Lettings

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 Name</u> | <u>Pg #</u> | | Special Provision Title | Effective | Revised |
|------------------|-------------|----------|---|------------------------------|---|
| 80240 | | | Above Grade Inlet Protection | July 1, 2009 | 1 1 0007 |
| 80099 | | | Accessible Pedestrian Signals (APS) | April 1, 2003 | Jan. 1, 2007 |
| 80243 | | | American Recovery and Reinvestment Act Provisions | April 1, 2009 | April 15, 2000 |
| 80236 | | | American Recovery and Reinvestment Act Signing Alkali-Silica Reaction for Cast-in-Place Concrete | April 1, 2009 | April 15, 2009 |
| 80186 | E1. | _ | | Aug. 1, 2007 Jan. 1, 2009 | Jan. 1, 2009 |
| 80213 | 51 54 | X X | Alkali-Silica Reaction for Precast and Precast Prestressed Concrete Approval of Proposed Borrow Areas, Use Areas, and/or Waste Areas | | Nov. 1, 2010 |
| 80207 | 34 | ^ | (NOTE: This special provision was previously named "Approval of Proposed | | NOV. 1, 2010 |
| | | | Borrow Areas, Use Areas, and/or Waste Areas Inside Illinois State Borders".) | | |
| 80192 | | | Automated Flagger Assistance Device | Jan. 1, 2008 | |
| 80173 | 55 | X | Bituminous Materials Cost Adjustments | Nov. 2, 2006 | April 1, 2009 |
| 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 |
| * 80166 | 58 | X | Cement | Jan. 1, 2007 | April 1, 2011 |
| 80260 | 61 | X | Certification of Metal Fabricator | July 1, 2010 | Easter Haller (1997) & not (1999) (1999) / 1999) / 1999) and 1999) (1999) |
| 80198 | | | Completion Date (via calendar days) | April 1, 2008 | |
| 80199 | | | Completion Date (via calendar days) Plus Working Days | April 1, 2008 | |
| 80094 | 62 | X | Concrete Admixtures | Jan. 1, 2003 | April 1, 2009 |
| 80215 | | | Concrete Joint Sealer | Jan. 1, 2009 | |
| 80226 | | | Concrete Mix Designs | April 1, 2009 | |
| 80261 | | | Construction Air Quality – Diesel Retrofit | June 1, 2010 | |
| 80237 | 66 | Х | Construction Air Quality – Diesel Vehicle Emissions Control | April 1, 2009 | July 1, 2009 |
| 80239 | 68 | Х | Construction Air Quality – Idling Restrictions | April 1, 2009 | |
| 80227 | 70 | X | Determination of Thickness | April 1, 2009 | |
| 80177 | | | Digital Terrain Modeling for Earthwork Calculations | April 1, 2007 | |
| * 80029 | 82 | X | Disadvantaged Business Enterprise Participation | Sept. 1, 2000 | Jan. 1, 2011 |
| * 80177 | 91 | X | | April 1, 2011 | |
| 80179 | | | Engineer's Field Office Type A | April 1, 2007 | Jan. 1, 2011 |
| 80205 | | | Engineer's Field Office Type B | Aug. 1, 2008 | Jan. 1, 2011 |
| 80189 | 93 | X | Equipment Rental Rates | Aug. 2, 2007 | Jan. 2, 2008 |
| 80228 | | | Flagger at Side Roads and Entrances | April 1, 2009 | |
| 80249 | | | Frames and Grates | Jan. 1, 2010 | , |
| 80265 | 95 | X | Friction Aggregate | Jan. 1, 2011 | |
| 80229 | 99 | X | Fuel Cost Adjustment | April 1, 2009 | July 1, 2009 |
| 80169 | | | High Tension Cable Median Barrier | Jan. 1, 2007 | April 1, 2009 |
| 80194 | | | HMA – Hauling on Partially Completed Full-Depth Pavement | Jan. 1, 2008 | |
| 80245 | 104 | X | | Nov. 1, 2009 | |
| 80246 | 105 | X | Hot-Mix Asphalt – Density Testing of Longitudinal Joints | Jan. 1, 2010 | |
| 80250 | 106 | <u>X</u> | Hot-Mix Asphalt – Drop-Offs | Jan. 1, 2010 | |
| 80259 | 107 | X | Hot-Mix Asphalt – Fine Aggregate | April 1, 2010 | No. 4 0000 |
| 80109 | | | Impact Attenuators | Nov. 1, 2003 | Nov. 1, 2008 |
| 80110 | | | Impact Attenuators, Temporary | Nov. 1, 2003 | Jan. 1, 2007 |
| 80252 | | | Improved Subgrade | Jan. 1, 2010 | lan 2 2011 |
| 80266 | | | Lane Closure, Multilane, Intermittent or Moving Operation, for Speeds ≤ 40 MPH | Jan. 1, 2011 | Jan. 2, 2011 |
| * 80230 | 108 | X | | April 1, 2009 | April 1, 2011 |
| 80267 | 100 | | Long-Span Guardrail over Culvert | Jan. 1, 2011 | and a contraction of the |
| 80207 | | | Material Transfer Device | June 15, 1999 | Jan. 1, 2009 |
| 80203 | 109 | x | Metal Hardware Cast into Concrete | April 1, 2008 | April 1, 2009 |
| 00200 | | | | | |

| - | D# | | Special Provision Title | Effective | Revised |
|--------------|-------------|----------|--|---------------|------------------------------|
| File Name | <u>Pg #</u> | | Special Provision Title | Nov. 1, 2006 | Jan. 1, 2010 |
| 80165 | | | Moisture Cured Urethane Paint System | April 1, 2009 | Jan. 1, 2010 |
| 80238 | | | Monthly Employment Report | Jan. 1, 2009 | Jan. 1, 2010 Jan. 1, 2011 |
| 80253 | | | Movable Traffic Barrier | Jan. 1, 2010 | Jan. 1, 2011 |
| | | | (NOTE: This Special Provision was previously named "Moveable | | |
| * 80262 | | 100000 | Traffic Barrier System".) Mulch and Erosion Control Blankets | Nov. 1, 2010 | April 1, 2011 |
| 00202 | 60. S. S. | | (Note: the Special Provision was previously named "Mulch") | | , ipin, i, |
| 80180 | 110 | X | National Pollutant Discharge Elimination System / Erosion and Sediment | April 1, 2007 | Nov. 1, 2009 |
| 00100 | | | Control Deficiency Deduction | , p | |
| 80208 | | | Nighttime Work Zone Lighting | Nov. 1, 2008 | |
| 80231 | 112 | Х | Pavement Marking Removal | April 1, 2009 | |
| 80254 | •• | | Pavement Patching | Jan. 1, 2010 | |
| 80022 | 113 | X | Payments to Subcontractors | June 1, 2000 | Jan. 1, 2006 |
| 80232 | | | Pipe Culverts | April 1, 2009 | April 1, 2010 |
| 80263 | 115 | Х | Planting Perennial Plants | Jan. 1, 2011 | |
| 80210 | | | Portland Cement Concrete Inlay or Overlay | Nov. 1, 2008 | |
| 80217 | | | Post Clips for Extruded Aluminum Signs | Jan. 1, 2009 | |
| 80268 | 118 | Х | Post Mounting of Signs | Jan. 1, 2011 | |
| 80171 | 119 | X | Precast Handling Holes | Jan. 1, 2007 | |
| 80218 | | | Preventive Maintenance – Bituminous Surface Treatment | Jan. 1, 2009 | April 1, 2009 |
| 80219 | | | Preventive Maintenance – Cape Seal | Jan. 1, 2009 | April 1, 2009 |
| 80220 | | | Preventive Maintenance – Micro-Surfacing | Jan. 1, 2009 | • |
| 80221 | | | Preventive Maintenance – Slurry Seal | Jan. 1, 2009 | |
| 80015 | | | Public Convenience and Safety | Jan. 1, 2000 | |
| 34261 | | | Railroad Protective Liability Insurance | Dec. 1, 1986 | Jan. 1, 2006 |
| 80157 | | | Railroad Protective Liability Insurance (5 and 10) | Jan. 1, 2006 | |
| 80247 | | | Raised Reflective Pavement Markers | Nov. 1, 2009 | April 1, 2010 |
| 80172 | 121 | X | Reclaimed Asphalt Pavement (RAP) | Jan. 1, 2007 | Jan. 1, 2011 |
| 80224 | | | Restoring Bridge Approach Pavements Using High-Density Foam | Jan. 1, 2009 | |
| * 80271 | e de la | 1.12 | Safety Edge | April 1, 2011 | |
| 80131 | | | Seeding | July 1, 2004 | July 1, 2010 |
| 80264 | | | Selection of Labor | July 2, 2010 | |
| 80152 | | | Self-Consolidating Concrete for Cast-In-Place Construction | Nov. 1, 2005 | July 1, 2010 |
| 80132 | 129 | X | Self-Consolidating Concrete for Precast Products | July 1, 2004 | July 1, 2010 |
| 80127 | | | Steel Cost Adjustment | April 2, 2004 | April 1, 2009 |
| 80255 | | | Stone Matrix Asphalt | Jan. 1, 2010 | |
| 80234 | 131 | X | Storm Sewers | April 1, 2009 | April 1, 2010 |
| * 80143 | 138 | X | | April 2, 2005 | |
| 80075 | | | Surface Testing of Pavements | April 1, 2002 | Jan. 1, 2007 |
| 80087 | 139 | X | Temporary Erosion Control | Nov. 1, 2002 | Jan. 1, 2011 |
| 80225 | | | Temporary Raised Pavement Marker | Jan. 1, 2009 | |
| 80256 | | | Temporary Water Filled Barrier | Jan. 1, 2010 | Jan. 1, 2011 |
| • • | - | | (NOTE: This special provision was previously named "Temporary | | |
| 00057 | 1 ji | | Longitudinal Traffic Barrier System".) | | · |
| 80257 | | | Traffic Barrier Terminal, Type 6 | Jan. 1, 2010 | |
| 80269 | 4.40 | | Traffic Control Surveillance | Jan. 1, 2011 | |
| 20338 | 143 | X | Training Special Provisions | Oct. 15, 1975 | |
| 80258 | PERMIT | | Truck Mounted/Trailer Mounted Attenuators | Jan. 1, 2010 | |
| * 80270 | | <u> </u> | Utility Coordination and Conflicts | April 1, 2011 | |
| 80071 | | L | Working Days | Jan. 1, 2002 | |

.

.

The following special provisions are in the 2011 Supplemental Specifications and Recurring Special Provisions:

| <u>File Name</u> | Special Provision Title | New Location | Effective | Revised |
|------------------|--|-----------------------------|---------------|---------------|
| 80214 | Concrete Gutter, Type A | Article 606.07 | Jan. 1, 2009 | |
| 80178 | Dowel Bars | Article 1006.11 | April 1, 2007 | Jan. 1, 2008 |
| 80201 | Hot-Mix Asphalt – Plant Test Frequency | Article 1030.05 | April 1, 2008 | Jan. 1, 2010 |
| 80251 | Hot-Mix Asphalt – QC/QA Acceptance Criteria | Article 1030.05 | Jan. 1, 2010 | |
| 80202 | Hot-Mix Asphalt – Transportation | Article 1030.08 | April 1, 2008 | |
| 80196 | Mast Arm Assembly and Pole | Article 1077.03 | Jan. 1, 2008 | Jan. 1, 2009 |
| 80182 | Notification of Reduced Width | Article 701.06 | April 1, 2007 | |
| 80069 | Organic Zinc-Rich Paint System | Article 1008.05 | Nov. 1, 2001 | Jan. 1, 2010 |
| 80216 | Partial Exit Ramp Closure for Freeway/Expressway | Section 701 | Jan. 1, 2009 | |
| 80209 | Personal Protective Equipment | Article 701.12 | Nov. 1, 2008 | |
| 80119 | Polyurea Pavement Marking | Sections 780, 1095 and 1105 | April 1, 2004 | Jan. 1, 2009 |
| 80170 | Portland Cement Concrete Plants | Article 1020.11 | Jan. 1, 2007 | |
| 80211 | Prismatic Curb Reflectors | Articles 782.03 and 1097.04 | Nov. 1, 2008 | |
| 80223 | Ramp Closure for Freeway/Expressway | Section 701 | Jan. 1, 2009 | |
| 80183 | Reflective Sheeting on Channelizing Devices | Article 1106.02 | April 1, 2007 | Nov. 1, 2008 |
| 80206 | Reinforcement Bars – Storage and Protection | Article 508.03 | Aug. 1, 2008 | April 1, 2009 |
| 80176 | Thermoplastic Pavement Marking | Article 1095.01 | Jan. 1, 2007 | |

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

•

•

•

i.

- Building Removal-Case IVCompletion Date
- Building Removal-Case I Complet Building Removal-Case II • Complet
 - Completion Date Plus Working Days
- Building Removal-Case III DBE Participation

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

STATE OF ILLINOIS SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction," (SSRBC) adopted January 1, 2007 and the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways" (ILMUTCD) and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids; and the "Supplemental Specifications and Recurring Special Provisions," indicated on the Check Sheet, included herein, which apply to and govern the construction of FAU Route 7982 (Capitol Avenue), Section 10-00447-04-PV, Project HPP-TE-00D6(099) in the City of Springfield, Sangamon County. In case of conflict with any part or parts of said specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

The reconstruction project begins the east side of the 11th Street and Capitol Avenue intersection to 12th Street and Capitol Avenue. The overlay project begins on the east side of the intersection of 12th Street and Capitol Avenue and extends east to the intersection of Martin Luther King Drive and Capitol Avenue.

DESCRIPTION OF IMPROVEMENT

The reconstruction section between 11th Street and 12th Street consists of the removal of all existing pavement, sidewalk, lighting and street appurtenances in the existing right of way. At the intersection of 12th Street, the reconstruction extends to the cross streets approximately 30 feet and the curb lines are moved in, removing parking in these areas. The proposed improvements consist of the installation of concrete pavers in the mid-block areas, the adjacent flexible use areas and the crosswalks, several planting beds located along the corridor and intersections and adjacent to alley and parking entrances, installation of new and lighting (lighting installed by CWLP), repair of water services and replacement of existing hydrants (CWLP) and construction of a roundabout at the 12th Street Capitol Avenue intersection.

The overlay section between 12th Street and Martin Luther King Drive consists of the milling and overlay of the existing street to the radius returns of the adjacent streets, curb and sidewalk repairs, removal of overhead electrical utilities along the north side of Capitol Avenue (CWLP) and installation of additional lighting (CWLP) and trees.

CONSTRUCTION SEQUENCE AND SCHEDULE

The Contractor shall prepare a progress schedule as required by Section 108 of the Standard Specifications. The Contractor shall coordinate items of work in order to keep hazards, traffic inconvenience and access to business along Capitol Avenue to a minimum. In particular, construction shall be staged as shown on the plans and as listed below to meet the following requirements:

-1-

- Construction shall begin at the 12th Street Intersection. The intersection shall be staged to accommodate southbound bus traffic at all times when school is in session. The contractor shall expedite the completion of the intersection and have it fully open to northbound, southbound and eastbound traffic by the 3rd of October, 2011.
- Construction between 11th Street and 12th Street and 12th Street and Martin Luther King Drive may occur at the same time as the 12th Street intersection.
- Access to businesses and residences located along Capitol Avenue shall be maintained for as long as possible during construction, until closure is required for removal or placement of pavement and sidewalk surfaces. These closures shall be staged to ensure closures last no longer than 48 hours. The use of temporary sidewalk surfaces and construction fencing can be used to maintain pedestrian access, if necessary.
- Cooperation between CWLP Electric and Water utilities for the work they are performing should be included in progress schedules and anticipated staging. See CWLP Utility Work Coordination Special Provision for details of work being performed by CWLP.

COMPLETION DATE

All work required in the contract shall be completed within 75 working days, with the exception that all work required in the contract to open the 12th Street intersection to traffic shall be completed by the 3rd of October, 2011. A construction progress schedule indicating project milestones shall be completed and strictly adhered to by the Contractor unless a request to modify the schedule is submitted in writing and approved by the Engineer.

TRAFFIC CONTROL PLAN

Description: Traffic control shall be in accordance with the applicable sections of the SSRBC, the applicable guidelines contained in the ILMUTCD for Streets and Highways, the Manual on Uniform Traffic Control Devices, latest edition; these special provisions, and any details and highway standards contained herein and in the plans.

General: Special attention is called to Articles 107.09 and 107.14 and Sections 701 through 705 of the SSRBC and the following traffic control related Highway Standards; Supplemental Specifications and Recurring Special Provisions; BDE Special Provisions; and Other Special Provisions relating to Traffic Control.

The contractor shall be responsible for the traffic control devices at all times during construction activities, and shall coordinate the items of work to keep traffic hazards and/or inconveniences to a minimum.

All advance-warning signs shall be in new or like new condition at the start of the project. If an advanced warning sign is damaged or becomes unreadable, the sign shall be replaced by a new or like new sign.

Standard 701501 shall be used for milling and resurfacing operations between 12th Street and Martin Luther King Drive.

-2-

Standard 701801 shall be used for all sidewalk closures necessary during the construction.

The Contractor shall provide the name and phone number of a contact on a 24-hour basis in the event an accident or other unforeseen damage occurs that necessitates replacement or resetting of traffic control items.

Basis of Payment: Traffic control and protection standards 701501 and 701801 shall be paid for at the contract lump sum price.

Additional traffic control and protection, other than those standards listed to be paid for above, as shown on the plans and described in these specifications will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL), which work shall include furnishing, installing, maintaining, replacing, relocating and removing all traffic control devices used for the purpose of regulating, warning, directing, closing and detouring traffic on the local streets impacted by the construction of the project.

ROADWAY

BASEMENT EXTENSIONS UNDER SIDEWALK

Description: This work shall consist of the filling of basement extensions found under the sidewalk along the proposed improvement. If such a void under the sidewalk is discovered, the Engineer shall be notified immediately.

General: A survey of the existing buildings along the proposed improvements did not indicate that any basement extensions remained. However, this survey shall not be considered comprehensive enough to guarantee basement extension will not be found.

If a basement extension or other void under the sidewalk adjacent to a building is found, the Engineer shall contact the Owner of the building adjacent to construction to determine the best course of action for continuing with construction.

Basis of Payment: Payment for the filling and removal of basement extensions under sidewalk shall be paid for according to Article 109.04 of the SSRBC.

CATCH BASINS, TYPE D, 3'-DIAMETER, WITH SPECIAL FRAME AND GRATE

Description: This work shall consist of constructing catch basins with frames and grates according to Section 602 of the SSRBC at locations shown on the plans or as directed by the Engineer.

General: CATCH BASINS, TYPE D, 3'-DIAMETER will be as specified in CATCH BASINS, TYPE G-1.

SPECIAL FRAME AND GRATE shall be an East Jordan Iron Works 7460 Catch Basin Curb Inlet or approved equal.

Basis of Payment: This work will be paid for at the contract unit price per each for CATCH BASINS, TYPE D, 3'-DIAMETER, WITH SPECIAL FRAME AND GRATE.

CATCH BASINS, TYPE G-1

Description: This work shall consist of constructing half traps and catch basins with frames and grates according to Section 602 of the SSRBC and plan details at locations shown on the plans or as directed by the Engineer.

Half-trap construction for catch basins shall be made of Storm Sewer Ductile Iron 12", which shall include all angles and fittings for construction the half-trap. This work shall not be paid for separately, but shall be included in the cost for construction Catch Basins.

Basis of Payment: This work shall be paid for at the contract unit price per each for CATCH BASINS, TYPE G-1.

COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06 (MODIFIED)

Description: This work shall consist of constructing combination concrete curb and gutter according to Section 606 of the SSRBC and plan details at locations shown on the plans or as directed by the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.06 (MODIFIED).

CONCRETE GUTTER (SPECIAL)

Description: This work shall consist of constructing concrete gutter (special) according to Section 606 of the SSRBC and plan details at locations shown on the plans or as directed by the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per foot for CONCRETE GUTTER (SPECIAL).

CONNECTIONS TO EXISTING SEWERS

Description: This work shall consist of connecting proposed sewer to existing sewers or manholes at locations shown on the plans or as directed by the Engineer.

General: Proposed sewers shall be connected to existing sewers using rubberized connections or concrete collars creating a water-tight seal at locations shown in the plans. Connections to existing manholes shall be made by cutting a hole in the manhole and extending the proposed sewer through the manhole wall. The space around the pipe shall be filled with concrete so as to prevent leakage.

-4-

Basis of Payment: This work, including rubberized connections and concrete collars, will not be paid for separately but shall be included in the cost of STORM SEWERS of the type and size specified.

CONSTRUCTION LAYOUT

Description: This work shall also consist of furnishing and placing construction layout stakes for all CWLP Water and Electrical items included in schedules, detailed in the plans or as directed by the Engineer according to Supplemental Recurring Special Provisions checksheet #10.

Basis of Payment: This work will be included in the contract unit price per lump sum for CONSTRUCTION LAYOUT.

CONTROLLED LOW-STRENGTH MATERIAL

Description: This work shall consist of filling steam vaults, handholes or other structures according to Section 593 of the SSRBC at locations directed by the Engineer.

General: Abandoned steam vaults are known to existing within the proposed subgrade of Capitol Avenue. The number, size and location of these is unknown, but if encountered, the Engineer should be contacted immediately. Any castings or lids encountered from the vaults shall be stockpile and delivered to the City of Springfield. The Contractor shall determine if any live utilities are located within the vault that would prevent it from being filled. The Contractor shall notify the Engineer whether or not any live utilities are located within the vault and whether it is acceptable to be filled. Should the vault be filled, all open pipe connections shall be grouted shut and the vault filled with controlled low-strength material to the level of the proposed subgrade.

Existing signal handholes noted in the plans to be removed, but containing unknown existing wires, upon approval of the Engineer, shall be filled with controlled low-strength material.

Other structures not intended to be removed by other means as apart of the contract, encountered by the Contractor and known not to contain live utilities, shall be filled with controlled low-strength material, upon approval of the Engineer.

Basis of Payment: This work shall be paid for at the contract unit price per cubic yard for CONTROLLED LOW-STRENGTH MATERIAL.

CWLP UTILITY WORK COORDINATION

Description: The City of Springfield City Water Light and Power (CWLP) Electric and Water Departments will be completing work during this contract as shown in the plans or as outlined below:

CWLP Water – Dave Antonacci, 789-2022

• Performing water service checks, replacing water services, providing new water services, checking valves and replacing boxes and relocating hydrants as shown in the plans or as determined by CWLP crews in the field.

All work is anticipated to start after the contractor has removed the pavement in the area of work and all holes constructed by CWLP for their work shall be backfilled and compacted to the satisfaction of the Engineer.

CWLP Electric – Mark Carlock, 757-8520 ext. 2205

- Installation of all street and pedestrian lighting. This includes all cabling and light fixtures. This work is anticipated to begin once curb construction is complete. Foundations for lighting will be installed by the contractor.
- Removing existing overhead power lines along Capitol Avenue between 11th Street and Martin Luther King Drive. This work may also involve burying underground lines to replace the overhead lines.

The contractor shall coordinate his contract work activities with the work listed here and the CWLP contacts according to Article 105.08 of the SSRBC.

DECORATIVE SIGN POST

Description: This work shall consist of the furnishing and installation of decorative sign posts according to Section 729 of the SSRBC and Highway Standard 729001 for post depths, as shown in the plans or as directed by the Engineer.

General: Decorative sign posts shall be as manufactured by one of the following suppliers:

Brandon Industries, Inc, 1601 W. Willmeth Rd., McKinney TX 75069 (972) 542-3000 fax (972) 542-1015.

Tapco Traffic & Parking Control Company, Inc, 800 Wall Street, Elm Grove WI 53122, (800) 236-0112.

Beacon Products, 6503 19th Street East, Sarasota, FL 34243 (941) 755-6694.

The poles shall be aluminum, 3" outside diameter long fluted channel poles with a ball finial applied to the top. The poles and finials shall have a combination coat system, as specified by the manufacturer and shall be all black.

Concrete foundations for the metal posts, if required by the manufacturer, shall be included in the cost for Decorative Sign Post.

Basis of Payment: This work shall be paid for at the contract unit price per each for DECORATIVE SIGN POST.

DUCTILE IRON STORM SEWER 12 INCH

Description: This work shall consist of constructing and installing ductile iron storm sewers according to Sections 550 and 551 of the SSRBC and Sections 40-2.01 and 41-2.05 of the Standard Specification for Water and Sewer Main Construction in Illinois, Fifth Edition, at locations shown on the plans or as directed by the Engineer.

General: Ductile Iron Storm Sewer pipe shall be Thickness Class 51 conforming to A.N.S.I./A.W.W.A. C-151/A21.51, with single gasket joints meeting A.N.S.I./A.W.W.A. C-111/A21.11, with standard cement lining as per A.N.S.I./A.W.W.A. C-104/A21.4 and with bituminous coating as per Section 51-8.1 of A.N.S.I./A.W.W.A. C-151/A21.51.

Half-trap construction for catch basins shall be made of Storm Sewer Ductile Iron 12", which shall include all angles and fittings for construction the half-trap. This work shall not be paid for separately, but shall be included in the cost for construction Catch Basins.

Basis of Payment: This work will be paid for at the contract unit price per foot for DUCTILE IRON STORM SEWER 12 INCH.

FENCE REMOVAL

Description: This work shall consist of removing existing fencing, posts, supports, foundations, gates and associated hardware according to Section 201 of the SSRBC at locations shown on the plans or as directed by the Engineer.

General: All material included with this removal shall be disposed of off-site by the Contractor.

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

FRAMES AND GRATES, TYPE 20 (SPECIAL)

Description: This work shall consist of installing frames and grates according to Section 604 of the SSRBC at locations shown on the plans or as directed by the Engineer.

The frame and grate shall be a Neenah R-3508-B or approved equal.

Basis of Payment: This work will be paid for at the contract unit price per each for FRAMES AND GRATES, TYPE 20 (SPECIAL).

INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE

Description: This work shall consist of constructing inlets with frames and grates according to Section 602 of the SSRBC at locations shown on the plans or as directed by the Engineer.

General: INLETS, TYPE A will be as shown in Standard 602301.

SPECIAL FRAME AND GRATE shall be an East Jordan Iron Works 7460 Catch Basin Curb Inlet or approved equal.

Basis of Payment: This work will be paid for at the contract unit price per each for INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE.

PIPE UNDERDRAIN

Pipe underdrain material shall only use round pipe as specified in Section 601 of the SSRBC.

PIPE UNDERDRAIN CLEANOUT, COMPLETE

Description: This work shall consist of constructing cleanouts to proposed underdrains to be connected to the combined sewer system according to Sections 601 and 602 of the SSRBC at locations shown on the plans or as directed by the Engineer.

General: The materials shown in the plans, including all elbows, tees, wyes, frame and covers, shall be included in the cost for the work. All excavation, labor, equipment and materials necessary for completing the work shall be included in the cost for PIPE UNDERDRAIN CLEANOUT, COMPLETE.

Basis of Payment: This work shall be paid for at the contract unit price per each for PIPE UNDERDRAIN CLEANOUT, COMPLETE.

REMOVE AND REINSTALL BRICK PAVER

Description: This work shall consist of removing, salvaging and reinstalling brick pavers along curb sections removed for planting beds according to Section 440 of the SSRBC and the Special Provision CONCRETE PAVER PAVER PAVEMENT, CONCRETE PAVER SIDEWALK, and DETECTABLE WARNINGS at location shown in the plans or as directed by the Engineer.

Basis of Payment: This work will be paid for at the contract unit price per square foot for REMOVE AND RESINSTALL BRICK PAVER.

<u>REMOVE, STOCKPILE AND REPLACE SIGN PANEL AND SIGN PANEL</u> ASSEMBLY (SPECIAL)

Description: This work shall consist of removing, salvaging, cleaning and replacing sign panel and sign panel assemblies according to Sections 720 and 724 of the SSRBC at locations shown on the plans or as directed by the Engineer.

General: Sign panels and sign panel assemblies shown on the plans to be removed shall be stored at a location approved by the Engineer.

-8-

Sign panels and sign panel assemblies shall be reinstalled or mounted as shown in the plans or as directed by the engineer. Mounting hardware shall be all black and sign posts, if used, shall be new and be Metal Posts as described in these special provisions.

Any damage caused by the Contractor that prevents the sign panel from being used, shall be replaced by the Contractor at no additional cost to the Department.

Basis of Payment: This work will be paid for at the contract unit price per each for REMOVE, STOCKPILE AND REPLACE SIGN PANEL AND SIGN PANEL ASSEMBLY (SPECIAL).

SIDEWALK FINISH

Description: Sidewalk finishes shall be constructed according to Section 424 of the SSRBC and as modified below.

General: A medium broom finish perpendicular to the street shall be applied to all square jointed concrete sidewalk surfaces. The two foot bands surrounding these areas shall be smooth trowel finished. A tooled grooved edge shall separate all smooth and broom finished sidewalk. All other control joints to be sawcut to create a "V" shape, using V-Line Blades by Soff-Cut, or approved equal. These sawcuts shall replace the hand-tooling of these joints.

Isolatioin/expansion joint sealer: Self leveling polyurethane sealant compatible with isolation joint filler; Color: Aluminum gray.

Prepare minimum 8' x 10' sample panels to show various proposed finishes. Panel may be incorporated into project if properly located and finish is acceptable.

False joints along the National Park Site shall be the same as a contraction joint, except that the depth of cut shall only be ¹/₄".

Basis of Payment: The finishes described in this special provision shall not be paid for separately, but shall be included in the cost for sidewalk.

SIGN FRAME

Description: This work shall consist of placing frames around sign panels according to Section 720 of the SSRBC at locations shown on the plans or as directed by the Engineer.

General: Sign panel frames shall be cast aluminum black frames as manufactured by Brandon Industries or an approved equal. Measurement of the frame shall be along the perimeter of the sign.

Basis of Payment: This work will be paid for at the contract unit price per foot for SIGN FRAME.

SIGN PANEL OVERLAY SPECIAL

Description: This work shall consist of covering the back of signs with a black nonreflective sheeting or by painting the backs of the signs black according to Sections 721 and 1091 of the SSRBC at locations shown on the plans or as directed by the Engineer.

General: Painting of the back of the signs shall be done so that the front of the sign is protected from overspray.

Basis of Payment: This work will be paid for at the contract unit price per square foot for SIGN PANEL OVERLAY SPECIAL.

SPECIAL EXCAVATION

Description: Special excavation shall consist of the removal of all existing structures as defined herein.

Special excavation shall only be quantified between 11th Street and 12th Street.

Special excavation shall not be interpreted to include rock excavation, the adjustment, reconstruction, removal or filling of existing catch basins, manholes, inlets, or valve vaults, fence removal.

Removal plans showing locations of pavement removal, sidewalk removal, driveway pavement removal, curb removal, curb removal special, and curb and gutter removals are provided in the plans for information only. Some thicknesses are shown for some items; however, most are not known.

Contract unit pay items specifying "removal and replacement" are not covered by this special provision.

Definition of Structures: For the purpose of this Specification, structures shall be interpreted to mean all types of pavement surfaces (including base and surface courses), curbs, gutters, combination curb and gutters, medians, median surfaces, sidewalks, driveways, concrete steps, concrete or masonry walls or foundations, street car rails, ties and ballast, sign foundations, parking meter posts, steam vaults, abandoned utility lines, flagpoles, concrete signs and all other existing structures of a similar nature, the removal of which is called for on the plans or required in the execution of work included in the contract.

Construction Requirements for Special Excavation

Classification: Special excavation shall include all materials that are encountered, except rock excavation. Rock excavation, when encountered, will be classified in accordance with Article 202.04.

Should the Engineer deem it necessary, in order to construct a stable sub-grade or embankment, the existing structures will be removed to a greater depth than shown on the plans. Payment for such replacement will be made to the depth ordered by the Engineer.

In removing driveway pavement, sidewalk, pavement, curb, gutter and combination curb and gutter, provisions shall be made for satisfactory transition between replacements and the portion remaining in place. The contractor shall saw cut a joint between the portion of the driveway pavement, sidewalk, pavement and curb and gutter to be removed and that to be left in place in order to prevent the surface from spalling when the concrete is broken out. This work shall be done in such a manner that a straight joint will be secured.

When the plans provide for the removal of existing concrete, brick, or flagstone sidewalks or driveways, located so that they do not interfere with the construction work, they shall not be removed until contractor is prepared and ready to proceed with their reconstruction.

Excavation near Existing Foundation and Footings: Excavation near existing foundations and footings shall be completed without compromising the integrity of the structures adjacent to the special excavation items. All existing foundations and footings shall be protected during construction against damage from any construction activities. The Contractor shall be responsible for any damages to existing foundations or footings and shall make all necessary repairs at no additional cost to the Department.

Replacement and Embankment: If the removal of existing structures necessitates excavation below the elevation of the subgrade of the proposed improvement, such excavation shall be replaced with granular subbase. The material for all replacement and embankments shall conform to, and shall be placed and compacted in accordance with Article 311 (Type C).

Method of Measurement: (a). Contract Quantities: When the project is constructed essentially to the lines, grades or dimensions shown on the plans and the Contractor and the Engineer have agreed in writing that the plans' quantities are accurate, no further measurement will be required and payment will be made for the quantities shown in the contract for the various items involved, except that if errors are discovered after work has been started, appropriate adjustments will be made.

When the plans have been altered or when disagreement exists between the Contractor and the Engineer as to the accuracy of the plan quantities either party shall, before any work is started which would affect the measurement, have the right to request in writing and thereby cause the quantities involved to be measured as hereinafter specified.

(b). Measured Quantities. Special Excavation will be measured for payment in cubic yard, the total volume being the sum of the volume of material between the elevation of the surface of the ground, or the tops of structures as they existed prior to starting the work and the elevation of the subgrade or the finished earth grade.

Construction Distances

These volumes will be determined by the Engineer by the method of average end areas, by taking cross sections at such intervals as may be necessary, supplemented by actual measurements in the field to determine the excavated volume of structures.

Basis of Payment: Special excavation will be paid for at the contract unit price per cubic yard for SPECIAL EXCAVATION, measured as specified herein, which price shall include payment in full for performing all excavation, except rock excavation, the removal, transportation and disposal of all materials and existing structures as required herein; and all other work required under the general heading of Earthwork for which no payment item is included in the contract.

When the contract does not contain a unit price for Rock Excavation, and such excavation is encountered, it will be paid for in accordance with Article 109.04.

STATUS OF UTILITIES TO BE ADJUSTED

The following utilities are involved in this project. The utility companies have provided the estimated dates.

| Name & Address of Utility | Туре | Location | Estimated Date of Relocation Completed |
|--|----------|---------------------------|--|
| Ameren Cilco Mr. George Sommer 825 North MacArthur Blvd. Springfield, IL 62702 Phone: 753-6458 | Gas | Throughout the Project | During Construction, If Necessary |
| Ameren Cilco Mr. George Sommer 825 North MacArthur Blvd. Springfield, IL 62702 Phone: 753-6458 | Electric | 10th Street | During Construction |
| City Water, Light & Power Mr. David Antonacci 401 North 11th Street Phone: 789-2022, Ext. 610 | Water | Throughout the Project | During Construction |
| City Water, Light & Power Mr. Rob Cunningham 1008 East Miller Street Springfield, Illinois 62702 Phone: 757-8520 | Electric | Throughout the Project | During Construction |
| Curran Gardner Township Mr. Bud Mason 3382 Hazlett Road Springfield, IL 62707 Phone: (217) 546-3981 | Water | N/A | During Construction, If Necessary |

| Department of Central Management Services - Bureau of Communication and Computer Services Attn: Mr. Jerry Pickett 785-7500 Mr. David Yost 524-6619 Mr. Mark Loges 557-6530 120 West Jefferson Springfield, IL 62702-5103 | Fiber Optic | Throughout the Project | During Construction, If Necessary |
|--|--------------------------|---------------------------|--------------------------------------|
| Insight Communications Mr. Rob Davis 711 South Dirksen Parkway Springfield, IL 62703 Phone: (217) 788-5898 x636 | Cable | Throughout the Project | During Construction, If Necessary |
| Kentucky Data Link, Inc. Mr. David Dobbs 3701 Communications Way Evansville, IN 47715 Phone: (812) 456-4729 | Fiber Optic | N/A | During Construction, If Necessary |
| MCI Network Services, Inc. Attn: OSP National Support Mr. John Bachelder Department 42864 Loc 107 2400 North Glenville Richardson, Texas 75082 Phone: (972) 729-6016 | Telephone | Throughout the Project | During Construction, If Necessary |
| McLeod USA Mr. Mark Mills 102 East Shafter Forsyth, Illinois 62535 Phone: 876-7194 Ext. 222 | Telephone | Throughout the Project | During Construction, If Necessary |
| AT&T Mr. Rich Weingand 529 South 7th St.; Floor 3B Springfield, Illinois 62721 Phone: 789-8227 | Fiber Optic/Telephone | Throughout the Project | During Construction, If Necessary |
| Sprint Nextel Attn: James Burton 5600 N. River Rd., Suite 300 Rosemont, IL 60018 Phone: (847) 318-3437 | Telephone | Throughout the Project | During Construction, If Necessary |

Wiltel Communications Mr. Steve Crabtree 813 Country Club Drive Hannibal, MO 63401 Phone: (573) 588-7541

N/A

N/A

During Construction, If Necessary

The above represents the best information of the Department and is only included for the convenience of the bidder. The applicable provisions of Articles 105.07, 107.20, 107.31, and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

The estimated utility relocation dates should be part of the progress schedule submitted by the Contractor. If any utility adjustments or relocations have not been completed by the above dates specified and when required by the Contractor's operations after these dates, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's critical path schedule is affected.

TEMPORARY CONSTRUCTION FENCE

Description: This work shall consist of installing, maintaining and removing temporary construction fence to control pedestrian traffic along the work area at locations shown on the plans or as directed by the Engineer.

General: The temporary fence shall be similar to plastic or wood lathe snow fence, and shall be a minimum of 4 ft high with posts placed a maximum of 15 ft apart.

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

TEMPORARY SIDEWALK

Description: This work shall consist of installing, maintaining and removing temporary sidewalk to maintain pedestrian traffic along the work area at locations shown on the plans or as directed by the Engineer.

General: Temporary sidewalk shall be constructed to provide temporary Americans with Disabilities Act (ADA) accessibility along the construction area.

Basis of Payment: This work will be paid for at the contract unit price per square foot for TEMPORARY SIDEWALK.

STREETSCAPE

<u>CONCRETE PAVER PAVEMENT, CONCRETE PAVER SIDEWALK, and</u> <u>DETECTABLE WARNINGS</u>

Description: This work shall consist of constructing and installing pavement, sidewalk, or detectable warnings, composed of concrete pavers, on a prepared subbase according to

Check Sheet #LRS 14, except as modified below, at locations shown on the plans or as directed by the Engineer.

General:

Submittals

- Paver manufacturer's material test data certifying pavers comply with specification.
- Paver samples representing actual size, shape, and color range.
- Detectable warning paver sample 12" X 12".
- Paver contractor's methods and quality control plan/statements identifying milestones and procedures to receive approvals and to assure adherence to this specification. This must be tailored to this specific project with actual dates for mockups, approvals and quality control meetings.

Environmental Requirements

- Do not install sand or pavers during heavy rain or snowfall.
- Do not install sand and pavers over frozen aggregate base materials.
- Do not install frozen sand or saturated sand.
- Do not install concrete pavers on frozen or saturated sand.

P.C.C. Pavers

- Acceptable Concrete P.C.C Paver suppliers include all members of UNI-Group U.S.A. who can, or do, produce a P.C.C Paver that matches the style, size and colors of the P.C.C. Pavers specified.
- Compressive Strength: Greater than 8000 psi.
- Water Absorption: Maximum of 5%; ASTM 936 and freeze-thaw testing per Section 8 of ASTM C-67.
- Basis for Design for Style, Size and Color as follows:
- A.
- Type 1: Hollandstone Paver by Unilock, Inc.; 7 7/8" X 3 7/8" X
 3 1/8"; Autumn Blend. (Holland-Stone by Romanstone Harvest Blend)
- Type 2: Hollandstone Paver by Unilock, Inc.; 7 7/8" X 3 7/8" X 3 1/8
 Prairie Blend. (Holland-Stone by Romanstone Midwest Blend #1)

Type 3: Hollandstone Paver by Unilock, Inc.; 7 7/8" X 3 7/8" X 3 1/8"; Buff.
(Holland-Stone by Romanstone – Sandstone)

Type 4: Hollandstone Paver by Unilock, Inc.; 7 7/8" X 3 7/8" X 3 1/8"; Pewter. (Holland-Stone by Romanstone – Limestone)

- Type 5: Hollandstone Paver by Unilock, Inc.; 7 7/8" X 3 7/8" X
 3 1/8"; Charcoal. (Holland-Stone by Romanstone Slate)
- Type 6: Hollandstone Paver by Unilock, Inc.; 7 7/8" X 3 7/8" X
 3 1/8"; Gold. (Holland-Stone by Romanstone Newtown Yellow)

P.C.C. Detectable Warning Pavers

- Acceptable Manufacturer: Unilock or approved equal.
- Detectable Warning Pavers in compliance with the following:
 - Comply with ADA regulations.
 - o Compressive Strength: Minimum 7,000 PSI
 - Flexural Strength: Minimum 600 PSI
 - Water Absorption: 5% to 6%
 - Freeze Thaw: Less than 1% loss of dry weight
 - Size: 11 3/4 x 11 3/4 x 3 1/8 inches.
 - o Color: Charcoal

Installation Of Pavers

- The "Aesthetic Mockup" shall be required at a variety of locations throughout the project.
 - Crosswalk Mockup: Starting at a crosswalk area, this mockup will extend from one side of the street to the other side and be placed beyond the crosswalk area by 5 feet.
 - Street Accent Band Mockup: a 10' x 10' area including the change from standard street pavers to accent paver bands.
 - Corner Sidewalk Mockup: A 10' x 10' area including detectable warning pavers
 - Flex Zone Mockup: A 10' long area from edge to edge.
- After the sand setting bed has been installed, carefully place the pavers in straight courses with "hand" tight joints and uniform top surface.
- Paver spacer bars will provide joints between pavers (joints may be between 1/16 inch and 3/16 inch wide and no more than 5% of the joints shall exceed 1/4 inch wide to achieve straight bond lines).
- Paver Joint lines shall not deviate more than ±□1/2 inch over 50 feet from string lines.

- Fill gaps at the edges of the paved area with cut pavers or edge units.
- Cut pavers, to be placed along the edge, with a double blade paver splitter or masonry saw.
- Adjust paver pattern at pavement edges such that cutting of edge pavers is minimized.
- All cut pavers exposed shall be no smaller than one-third of a whole paver measured in the long direction (approximately 2 5/8") and no smaller than two-thirds of a whole paver measured in the short direction (approximately 2 9/16").
- Cut pavers edges are to abut pavers only; a paver spacer bar must abut the cut edge of a paver.
- Do not place cut paver edges against concrete.
- Keep skid steer and forklift equipment off newly laid pavers that have not received initial compaction and joint sand.

Installation Of Detectable Warning Pavers

- Comply with specification for installation of Concrete Paver Sidewalks.
- Good alignment must be kept and the pattern shall be that shown on the plans.
- Orient truncated domes on detectable warning pavers as shown on the plans.
- Keep skid steer and forklift equipment off newly laid pavers that have not received initial compaction and joint sand.

Field Quality Control

- The surface elevation of pavers shall be 1/8 inch to 1/4 inch above adjacent drainage inlets, concrete collars or channels.
- Lippage: No greater than 1/8 inch difference in height between adjacent pavers.

Basis of Payment: This work shall be paid for at the contract unit price per square yard for CONCRETE PAVER PAVEMENT and CONCRETE PAVER SIDEWALK and at the contract unit price per square foot for DETECTABLE WARNINGS, SPECIAL.

DECORATIVE STEEL RAILING

Description: This work shall consist of constructing and installing steel railings along the edges of planting areas according to Sections 509 of the SSRBC, except as modified below, at locations shown on the plans or as directed by the Engineer.

General:

Submittals:

- Shop Drawings: Show fabrication and installation details for decorative steel railings.
- Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.
- Provide templates for anchors and bolts specified for installation under other Sections.

Coordination:

• Coordinate installation of anchorages for decorative steel railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete. Deliver such items to Project site in time for installation.

Materials:

- Steel Plates, Shapes, and Bars: ASTM A 36/A 36M.
- Steel Tubing: ASTM A 500, cold-formed steel tubing.

Finish: A high performance coating system is required as follows:

- Color to be Black submit color samples for final selection.
- As Manufactured by Tnemec Company Inc. or approved equal
- Coatings General: Provide complete multi-coat systems formulated and recommended by manufacturer for the applications indicated, in the thickness indicated; number of coats specified does not include primer or filler coat unless specifically noted.
- High Performance Coating: Aliphatic polyester polyurethane; semi-gloss finish.
 - Surface Preparation (Galvanized Steel): SSPC SP-1 Solvent Clean and light sanding to etch surface.
 - Primer for Galvanized Metal (Field-Applied): Tnemec 66 Polyamide Epoxy, 4.0 mils DFT.

- Intermediate Coat (Field Applied): Tnemec Series 1075 (Semi-gloss) Endura-Shield II; 3.0 mils DFT.
- Finish Coat (Field Applied): Tnemec Series 1075 (Semi-gloss) Endura-Shield II; 3.0 mils DFT.

Basis of Payment: This work will be paid for at the contract unit price per foot for DECORATIVE STEEL RAILING.

METAL BENCH 6' SECTION

Description: This work shall consist of installing a manufactured metal bench as detailed at locations shown on the plans or as directed by the Engineer.

General: Model CS-18 from the City Sites Series[™] by Victor Stanly, Inc., (or approved equal) 6' length with center arm. Color: VS Black. Submit color and finish samples for all products.

Basis of Payment: This work will be paid for at the contract unit price per each for METAL BENCH, 6' SECTION.

PAVE-EDGE PAVER RETAINING SYSTEM

Description: This work shall consist of constructing and installing a concrete paver sidewalk retention system at locations shown on the plans or as directed by the Engineer.

General:

Submittals

 Paver edging manufacturer's technical material data and material sample; 2'-0" length.

Paver Edging

- Material:
 - Non-rusting recycled aluminum.
 - Up to a 90 degree bends without cutting.
 - Locking joining system.
 - Heat resistant.
 - Shape: "L"
 - Material: Alloy 6063
 - Hardness: T-5
- Size:
 - Lengths: 8'-0" minimum
 - Top flange height: 4"
 - Base flange depth: 4"
 - Material thickness: 1/8" minimum

- An alternative heavy duty PVC paver edging may be used with approval by the engineer and with documentation of PVC strength and conformance to Interlocking Concrete Paving Institutes guidelines and recommendations.
- Secure to concrete subslab with stainless steel anchors as indicated on plans and following manufacturer's recommended attachment.

Basis of Payment: This work shall be paid for at the contract unit price per foot for PAVE-EDGE PAVER RETAINING SYSTEM.

PRECAST PLANTER EDGE, TYPE 1 and TYPE 2

Description: This work shall consist of constructing and installing architectural PRECAST PLANTER EDGE, TYPE 1 and TYPE 2 at locations shown on the plans or as directed by the Engineer.

General:

Submittals:

- Design Mixtures: For each precast concrete mixture. Include compressive strength and water-absorption tests.
 - Shop Drawings: Detail fabrication and installation of precast concrete units. Indicate locations, plans, elevations, dimensions, shapes, and cross sections of each unit. Indicate joints, reveals, and extent and location of each surface finish.Indicate relationship of precast concrete units to adjacent materials.
- Samples: For each type of finish indicated on exposed surfaces of precast concrete units, in sets of 3, illustrating full range of finish, color, and texture variations expected; approximately 12 by 12 by 2 inches.
- Qualification Data: For fabricator.
- Material Test Reports: For aggregates.
- Material Certificates: For the following items, signed by manufacturers:
 - o Cementitious materials.
 - Reinforcing materials.
 - o Admixtures.
- Source quality-control test reports.

Quality Assurance:

• Fabricator Qualifications: A firm that assumes responsibility for engineering precast concrete units to comply with performance requirements. This

responsibility includes preparation of Shop Drawings and comprehensive engineering analysis by a qualified professional engineer.

- Participates in PCI's plant certification program at time of bidding and is designated a PCI-certified plant for Group A, Category A1 - Architectural Cladding and Load Bearing Units or participates in APA's "Plant Certification Program for Production of Architectural Precast Concrete Products" and is designated an APA-certified plant.
- Testing Agency Qualifications: An independent testing agency, acceptable to authorities having jurisdiction, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
- Design Standards: Comply with ACI 318 and design recommendations of PCI MNL 120, "PCI Design Handbook - Precast and Prestressed Concrete," applicable to types of precast concrete units indicated.
- Quality-Control Standard: For manufacturing procedures and testing requirements, quality-control recommendations, and dimensional tolerances for types of units required, comply with PCI MNL 117, "Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products."
- Mockups: Before production of precast concrete units, construct one full-sized mockup to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - Approved mockups may become part of the completed Work if undamaged at time of Substantial Completion.
 - Approval of mockups does not constitute approval of deviations from the Contract Documents unless such deviations are specifically approved by Engineer in writing.
 - Field measure each location prior to fabrication and report any discrepancies to the Engineer. The contractor must verify size and trueness each field location to receive the precast units

Delivery, Storage, and Handling:

- Deliver precast concrete units in such quantities and at such times to limit unloading units temporarily on the ground.
- Support units during shipment on nonstaining shock-absorbing material.
- Store units with adequate dunnage and bracing and protect units to prevent contact with soil, to prevent staining, and to prevent cracking, distortion, warping or other physical damage.
- Place stored units so identification marks are clearly visible, and units can be inspected.

- Handle and transport units in a position consistent with their shape and design in order to avoid excessive stresses which would cause cracking or damage.
- Lift and support units only at designated points shown on Shop Drawings.

Sequencing:

 Furnish loose connection hardware and anchorage items to be embedded in or attached to other construction without delaying the Work. Provide locations, setting diagrams, templates, instructions, and directions, as required, for installation.

Mold Materials:

- Molds: Rigid, dimensionally stable, non-absorptive material, warp and buckle free, that will provide continuous and true precast concrete surfaces within fabrication tolerances indicated; nonreactive with concrete and suitable for producing required finishes.
 - Mold-Release Agent: Commercially produced liquid-release agent that will not bond with, stain or adversely affect precast concrete surfaces and will not impair subsequent surface or joint treatments of precast concrete.

Reinforcing Materials:

- Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
- Plain-Steel Welded Wire Reinforcement: ASTM A 185, fabricated from asdrawn steel wire into flat sheets.
- Supports: Suspend reinforcement from back of mold or use bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place according to PCI MNL 117.

Concrete Materials:

- Portland Cement: ASTM C 150, Type I or Type III, white or gray, as required to provide color indicated. Color samples to be submitted to Engineer for approval.
- Normal-Weight Aggregates: Except as modified by PCI MNL 117, ASTM C 33, with coarse aggregates complying with Class 5S. Stockpile fine and coarse aggregates for each type of exposed finish from a single source (pit or quarry) for Project.
- Coloring Admixture: ASTM C 979, synthetic or natural mineral-oxide pigments or colored water-reducing admixtures, temperature stable, and nonfading.

- Water: Potable; free from deleterious material that may affect color stability, setting, or strength of concrete and complying with chemical limits of PCI MNL 117.
- Air-Entraining Admixture: AASHTO M 154, certified by manufacturer to be compatible with other required admixtures.
- Chemical Admixtures: Certified by manufacturer to be compatible with other admixtures and to not contain calcium chloride, or more than 0.15 percent chloride ions or other salts by weight of admixture.
 - Water-Reducing Admixtures: ASTM C 494/C 494M, Type A.
 - Retarding Admixture: ASTM C 494/C 494M, Type B.
 - Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
 - Water-Reducing and Accelerating Admixture: ASTM C 494/C 494M, Type E.
 - o High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
 - High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
 - Plasticizing and Retarding Admixture: ASTM C 1017/C 1017 M.

Accessories:

- Dowels: Stainless steel, ASTM A 276, Type 304.
- Sand-Cement Grout: Portland cement, ASTM C 150, Type I, and clean, natural sand, ASTM C 144 or ASTM C 404. Mix at ratio of 1 part cement to 2-1/2 parts sand, by volume, with minimum water required for placement and hydration.
- Epoxy-Resin Grout: Two-component, mineral-filled epoxy resin; ASTM C 881/C 881M, of type, grade, and class to suit requirements.

Concrete Mixtures:

- Prepare design mixtures for each type of precast concrete required.
- Design mixtures may be prepared by a qualified independent testing agency or by qualified precast plant personnel at precast concrete fabricator's option.
- Limit water-soluble chloride ions to maximum percentage by weight of cement permitted by ACI 318 or PCI MNL 117 when tested according to ASTM C 1218/C 1218M.
- Normal-Weight Concrete Mixtures: Proportion full-depth mixture by either laboratory trial batch or field test data methods according to ACI 211.1, with materials to be used on Project, to provide normal-weight concrete with the following properties:
 - Compressive Strength (28 Days): 5000 psi minimum.
 - Maximum Water-Cementitious Materials Ratio: 0.45.

- Water Absorption: 6 percent by weight or 14 percent by volume, tested according to PCI MNL 117.
- Add air-entraining admixture at manufacturer's prescribed rate to result in concrete at point of placement having an air content complying with PCI MNL 117.
- When included in design mixtures, add other admixtures to concrete mixtures according to manufacturer's written instructions.

Mold Fabrication:

- Molds: Accurately construct molds, mortar tight, of sufficient strength to withstand pressures due to concrete-placement operations and temperature changes and for prestressing and detensioning operations. Coat contact surfaces of molds with release agent before reinforcement is placed. Avoid contamination of reinforcement and prestressing tendons by release agent.
- Maintain molds to provide completed precast concrete units of shapes, lines, and dimensions indicated, within fabrication tolerances specified.
 - Form joints are not permitted on faces exposed to view in the finished work.
 - Edge and Corner Treatment: Uniformly chamfered.

Fabrication:

- Cast-in Anchors, Inserts, and Other Anchorage Hardware: Fabricate anchorage hardware with sufficient anchorage and embedment to comply with design requirements. Accurately position for attachment of loose hardware, and secure in place during precasting operations. Locate anchorage hardware where it does not affect position of main reinforcement or concrete placement.
- Reinforcement: Comply with recommendations in PCI MNL 117 for fabricating, placing, and supporting reinforcement.
 - Clean reinforcement of loose rust and mill scale, earth, and other materials that reduce or destroy the bond with concrete.
 - Accurately position, support, and secure reinforcement against displacement during concrete-placement and consolidation operations. Completely conceal support devices to prevent exposure on finished surfaces.
 - Place reinforcement to maintain at least 1 1/2-inch minimum coverage. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position while placing concrete. Direct wire tie ends away from finished, exposed concrete surfaces.
- Reinforce precast concrete units to resist handling, transportation, and erection stresses.

- Comply with requirements in PCI MNL 117 and requirements in this Section for measuring, mixing, transporting, and placing concrete. After concrete batching, no additional water may be added.
- Place concrete in a continuous operation to prevent seams or planes of weakness from forming in precast concrete units.
- Thoroughly consolidate placed concrete by internal and external vibration without dislocating or damaging reinforcement and built-in items, and minimize pour lines, honeycombing, or entrapped air on surfaces. Use equipment and procedures complying with PCI MNL 117.
 - Place self-consolidating concrete without vibration according to PCI TR-6, "Interim Guidelines for the Use of Self-Consolidating Concrete in Precast/Prestressed Concrete Institute Member Plants."
- Comply with PCI MNL 117 for hot- and cold-weather concrete placement.
- Identify pickup points of precast concrete units and orientation in structure with permanent markings, complying with markings indicated on Shop Drawings. Imprint or permanently mark casting date on each precast concrete unit on a surface that will not show in finished structure.
- Cure concrete, according to requirements in PCI MNL 117, by moisture retention without heat or by accelerated heat curing using low-pressure live steam or radiant heat and moisture. Cure units until compressive strength is high enough to ensure that stripping does not have an effect on performance or appearance of final product.
- Discard and replace precast concrete units that do not comply with requirements, including structural, manufacturing tolerance, and appearance, unless repairs meet requirements in PCI MNL 117 and Engineer's approval.

Fabrication Tolerances:

• Fabricate precast concrete units straight and true to size and shape with exposed edges and corners precise and true so each finished panel complies with PCI MNL 117 product tolerances as well as position tolerances for cast-in items.

Finishes:

- Panel faces shall be free of joint marks, grain, and other obvious defects. Corners, including false joints shall be uniform, straight, and sharp. Finish exposed-face surfaces of precast concrete units as follows:
 - Textured-Surface Finish: Impart by form liners or inserts to provide surfaces free of pockets, streaks, and honeycombs, with uniform color and texture.
 - \circ Ease or Chamfer corners between 1/16" to 1/8".

- Finish exposed top, bottom, and back surfaces of precast concrete units to match face-surface finish.
- Finish unexposed surfaces of precast concrete units by float finish.

Source Quality Control:

- Quality-Control Testing: Test and inspect precast concrete according to PCI MNL 117 requirements. If using self-consolidating concrete, also test and inspect according to PCI TR-6, "Interim Guidelines for the Use of Self-Consolidating Concrete in Precast/Prestressed Concrete Institute Member Plants."
- Testing: If there is evidence that strength of precast concrete units may be deficient or may not comply with ACI 318 requirements, precaster shall employ an independent testing agency to obtain, prepare, and test cores drilled from hardened concrete to determine compressive strength according to ASTM C 42/C 42M.
 - A minimum of three representative cores will be taken from units of suspect strength, from locations directed by Engineer.
 - Cores will be tested in an air-dry condition.
 - Strength of concrete for each series of 3 cores will be considered satisfactory if average compressive strength is equal to at least 85 percent of 28-day design compressive strength and no single core is less than 75 percent of 28day design compressive strength.

• Test results will be made in writing on same day that tests are performed, with copies to Engineer, Contractor, and precast concrete fabricator. Test reports will include the following:

- Project identification name and number.
- Date when tests were performed.
- Name of precast concrete fabricator.
- Name of concrete testing agency.
- Identification letter, name, and type of precast concrete unit(s) represented by core tests; design compressive strength; type of break; compressive strength at breaks, corrected for length-diameter ratio; and direction of applied load to core in relation to horizontal plane of concrete as placed.
- Patching: If core test results are satisfactory and precast concrete units comply with requirements, clean and dampen core holes and solidly fill with precast concrete mixture that has no coarse aggregate, and finish to match adjacent precast concrete surfaces.

Examination:

 Examine supporting foundation and conditions for compliance with requirements for installation tolerances, true and level bearing surfaces, and other conditions affecting performance.

- Proceed with installation only after unsatisfactory conditions have been corrected.
- Do not install precast concrete units until supporting cast-in-place building structural framing has attained minimum allowable design compressive strength or supporting steel or other structure is complete.

Installation:

- Erect precast concrete level, plumb, and square within specified allowable tolerances. Provide temporary supports and bracing as required to maintain position, stability, and alignment as units are being permanently connected.
 - Install temporary steel or plastic spacing shims or bearing pads as precast concrete units are being erected.
 - Maintain horizontal and vertical joint alignment and uniform joint width as erection progresses.
 - Remove projecting lifting devices and grout fill voids within recessed lifting devices flush with surface of adjacent precast surfaces when recess is exposed.
 - Unless otherwise indicated, maintain uniform joint widths of 3/4 inch.

Erection Tolerances:

• Erect precast concrete units level, plumb, square, true, and in alignment without exceeding the noncumulative erection tolerances of PCI MNL 117, Appendix I.

Repairs:

- Repair precast concrete units if permitted by Engineer. The Engineer reserves the right to reject repaired units that do not comply with requirements.
- Mix patching materials and repair units so cured patches blend with color, texture, and uniformity of adjacent exposed surfaces and show no apparent line of demarcation between original and repaired work, when viewed in typical daylight illumination from a distance of 20 feet.
- Remove and replace damaged precast concrete units when repairs do not comply with requirements.

Cleaning:

- Clean surfaces of precast concrete units exposed to view.
- Clean mortar and other deleterious material from concrete surfaces and adjacent materials immediately.
- Clean exposed surfaces of precast concrete units after erection and completion of joint treatment to remove markings, dirt, and stains.

- Perform cleaning procedures, if necessary, according to precast concrete fabricator's recommendations. Clean soiled precast concrete surfaces with detergent and water, using stiff fiber brushes and sponges, and rinse with clean water. Protect other work from staining or damage due to cleaning operations.
- Do not use cleaning materials or processes that could change the appearance of exposed concrete finishes or damage adjacent materials.

Basis of Payment: This work will be paid for at the contract unit price per each for PRECAST PLANTER EDGE, TYPE 1 or TYPE 2.

RECYCLING RECEPTACLE

Description: This work shall consist of installing a manufactured recycling receptacle as detailed at locations shown on the plans or as directed by the Engineer.

General: Model ES-142 from the Economy Series with Recycle Package by Victor Stanley (or approved equal). Color: VS Black. Submit color and finish samples for all products.

Basis of Payment: This work will be paid for at the contract unit price per each for RECYCLING RECEPTACLE.

TRASH RECEPTACLES

Description: This work shall consist of installing a manufactured trash receptacle as detailed at locations shown on the plans or as directed by the Engineer.

General: Model ES-142 from the Economy Series with S-2A formed dome with stainless steel ashtray by Victor Stanley (or approved equal). Color: VS Black. Submit color and finish samples for all products.

Basis of Payment: This work will be paid for at the contract unit price per each for TRASH RECEPTACLES.

LANDSCAPING

The following specifications supplement Sections 253, 254 and 1081 of the SSRBC.

IRRIGATION BED 0.5 GPH

This item of work shall consist of the installation of a complete irrigation system including the connection(s) to the supply manifold, piping, emitters, fittings, valves, and appurtenances necessary for a buried drip irrigation system.

The supply manifold connection shall be through glue joint fittings and shall include any necessary adapters to transition from PVC to PE.

The drip irrigation system shall consist of an interconnected grid of 5/8" PE pipe with integral pressure compensating non clogging drip emitters located at 18" intervals creating an 18" drip grid at the rate of 0.5 Gallons per Hour (GPH) per emitter in each of the planting areas. The grids shall be constructed per the plan details. The emitter pipe shall be installed and secured at a depth of 4" in each of the planting beds. The total length of emitter pipe installed in a single planting bed shall not exceed 502 ft without the addition of a supplemental connection to the supply manifold.

Each planting bed shall have a dual connection to the supply manifold. The upstream and any necessary intermediate connections shall be direct connections and the downstream connection shall include a spring operated check valve allowing the water to flow out of the irrigation bed.

Air release valves shall be tied into the irrigation beds at high points in the system as required by the manufacturer. Air release valves will be located in planting beds per the plan details.

Flush valves shall be installed at low spots and at the end of the irrigation supply manifolds for purging the system. Flush valves will be located in planting beds per the plan details.

The irrigation bed design including supporting documentation shall be supplied by the Contractor prior to approval for construction.

Basis of Payment: This work shall be paid for at the contract price per square foot for IRRIGATION BED 0.5 GPH.

IRRIGATION PIPING

This item of work shall consist of the furnishing and placement of the irrigation manifold piping as specified in the Plans.

Pipe Materials

Piping from the curb stop to the RPZ assembly and from the RPZ assembly to the transition to PVC shall be Type K Copper. There will not be any intermediate joints between the curb stop and the RPZ assembly.

All remaining irrigation supply piping shall be PVC Schedule 40 meeting ASTM D-1785. PVC Schedule 40 pipe will utilize solvent cement joints per ASTM D2672.

Pressure Testing

All piping shall be pressure tested to 50 psi prior to connection to the irrigation beds. All tees and interconnects will be temporarily capped and the main flushed and pressurized to 50 psi and hold that pressure for 1 hour. Any loss of pressure shall be considered a failure.

Flushing

All irrigation piping shall be flushed prior to any connections to the irrigation beds.

Tracer Wire

The Contractor shall furnish and install, along the entire route of the irrigation line, #12 AWG, THW single-conductor, copper locator wire. The wire shall be installed just above the crown of the pipe, shall be brought into each junction box, flush valve box and air release box. Any necessary splicing shall be made using a direct bury splice kit such as 3M Part No. 054007-09053, or equivalent. The tracer wire shall be tested for continuity prior to final acceptance by the Owner.

The cost of the locator wire, including installation and testing, shall be incidental to the installation of the irrigation piping.

Basis of Payment: This work shall be paid for at the contract price per foot for PVC, SCHEDULE 40 PIPE, or COPPER SERVICE, TYPE K, of the size specified.

PLANT MATERIAL

Description: This work shall consist of furnishing and placing plant material, fertilizer, topsoil, and mulch as shown on the plans or as directed by the Engineer.

General: All work described in this Section is to be done by a firm specializing in such work with documented 5 years experience in similar work. The personnel of the firm shall be experienced in the work specified and shall work under the direction of a skilled foreman.

Contractor personnel engaged in herbicide application shall have an Illinois Applicator's License.

Submittals shall be as follows:

- 1. Proposed sources of plant material and digital photos of plants.
- 2. One cubic foot sample proposed topsoil.
- 3. Fertilizer composition and calculated quantities.
- 4. Peat moss composition and calculated quantities.
- 5. Composted manure composition and calculated quantities.
- 6. Herbicide composition and calculated quantities
- 7. One cubic foot sample of Medium-Textured Hardwood Mulch.
- 8. Tags from fertilizer, peat moss and manure used in the project.

Warranty

Contractor shall warranty for one year from acceptance all material and work in this project.

If at any time during the warranty period a plant dies, becomes diseased or unsightly, the Owner's Representative may request immediate or future replacement and the Contractor shall promptly comply.

Contractor shall provide one replacement in accordance with these plans and specifications.

Materials

Topsoil used to fill the excavated areas in preparation for plant material shall be loamy soil from the A horizon soil profile of local prairie-type soils, have an organic content between 10 and 15 percent, be entirely free of foreign material including construction waste, rocks and aggregate, litter and contaminating products, at least 90 percent must pass the 2.00 mm sieve and have a pH between 6.0 and 8.0.

Plant material shall be approved by the engineer prior to installation, all material shall be clearly marked as to source, species and size, be specimen quality, conform to the species and sizes specified, have a growth habit representative of that species and be free from diseases, insect pests and injuries.

Balled and Burlapped (B&B) Plants shall be grown in a nursery with climatic conditions similar those at the project site. B&B plants grown south of the St. Louis latitude will not be accepted, have a single leader unless otherwise specified, have been pruned frequently while growing in the nursery to avoid forked leaders, low or uneven branching, asymmetric growth, crossed limbs, scars from pruning, etc., be dug only when plants are dormant, be dug in accordance with best nursery practices, have solid earthen balls that encompass the fibrous and feeding roots of the plant.

Container Grown Plants shall be grown in pots of specified size with high quality rooting medium within 1 inch of the top of the container, be well grown-in with roots that fully encompass the rooting medium and have tops that are full and healthy at the time of planting.

Backfill Mixture for planting holes shall be a uniform mixture of eight (8) parts rich topsoil provided by the contractor from which all foreign material and particles greater than 1" in any dimension have been removed, one (1) part peat moss and one (1) part manure.

Peat moss shall be free from foreign material such as soil and wood and shall have uniform particle sizes not exceeding 1/4" in any dimension.

Manure shall be well rotted, unleached horse or cattle manure free from foreign material and containing no phytotoxic substances.

Wood Mulch shall be composted, shredded hardwood of particles no larger than 4" in any dimension and free of all foreign materials and approved by engineer.

Fertilizer shall be slow release granular form and contain 14% nitrogen, 14% phosphoric acid and 14% potash.

Pre-emergent herbicide shall be a slow-release granular type specifically recommended for use in new planting areas.

Water may be obtained by Contractor from the irrigation system or metered hydrants. Prior to use of hydrants, a permit shall be obtained from the City. Contractor shall provide hoses, watering apparatus, labor, etc. to water according to these specifications.

Contractor shall stake the location of each tree and the perimeter of each shrub and planting bed. Engineer shall be notified and provided an opportunity to inspect the staking. Owner's Representative may make adjustments in staking before digging operations begin.

Excavations for plants shall have near vertical sides and flat bottoms.

Excavations for trees shall be over excavated by 12" on all sides.

Shrubs shall be over excavated by 6 inches on all sides.

If the sides or bottom of the excavated hole is comprised of cinders, aggregate, rubble, clay, or other material unsuited as a growth medium for plants as determined by engineer, Contractor shall continue excavation of the pit and backfill the excavation with approved topsoil prior to planting. The excavations and backfill dimensions shall be:

For trees of all sizes, excavation and backfill shall be 6' x 6' x 4' depth. For shrubs, hedges, shrub beds and flower beds, excavation and backfill shall be 2' depth, and extend beyond the outside plants a distance of 2'.

Sites for trees in tree grates shall be excavated $6' \times 6' \times 4'$ and backfilled with topsoil. Existing excavated soil may be reused only if approved by Engineer, otherwise backfill with approved imported topsoil.

No excavations shall be left open overnight.

Planting Trees and Shrubs

Plants shall be set in excavations with topsoil fill at the same level at which they were grown and backfilled with Backfill Mixture.

Burlap around balled and burlapped (B&B) plants shall be opened completely at the top, pulled back and tucked around the sides of the ball.

10 grams (of actual fertilizer nutrients) for each $\frac{1}{2}$ " of plant diameter and 5 grams (of actual fertilizer nutrients) for every gallon of container material shall be placed uniformly in the backfill mixture.

Backfill Mixture shall be placed in lifts of 12 inches around root balls and firmly hand tamped.

Trees in tree grates shall be set 6" below the sidewalk level.

Trees. A rim of soil 4" high, 8" wide and 4 feet in diameter shall be formed around each tree to form a saucer.

Shrub masses and hedges. A rim of soil 2" high, 4" wide and 1 foot beyond the outermost stems shall be formed around shrub masses and hedges to form a saucer.

Plants shall be thoroughly watered-in within 4 hours of installation. Watering and other maintenance shall continue per these specifications.

All areas for mulch shall be treated with pre-emergent herbicide according to approved application rate prior to placement of mulch.

Trees shall be mulched 4 inches in depth with medium textured wood mulch within and overlapping the saucer of soil. Mulch shall be held back 3-4" from tree trunks.

Trees in tree grates shall be mulched 4" in depth with medium textured wood mulch within and overlapping the saucer of soil. Mulch shall be held back 3-4" from tree trunks.

Shrubs shall be mulched 4 inches in depth with medium textured wood mulch within and overlapping the saucer of soil. Mulch shall be held back 3-4" from shrub stems.

Shrub masses and hedges shall be mulched 6 inches in depth with medium textured wood mulch continuously through the area. Mulch shall be held back 3-4" from shrub stems. Existing trees shall be mulched as follows:

An area 4' surrounding trunks of existing trees shall be cleared of any other vegetation. Herbaceous plants shall be pulled. Woody vegetation will be cut at ground level and treated with herbicide to inhibit regrowth.

The 4 foot area shall be treated with pre-emergent herbicide according to product recommendations.

The prepared area shall be covered with a 6 inch depth of medium textured wood mulch. Mulch shall be held back 3-4" from tree trunks.

Pruning and limbing-up shall be done when plants are dormant, except for mechanical damage that will be repaired immediately, using good nursery practices

Plants shall be pruned to remove any damaged branches, irregular branching, crossed limbs, etc. and result in a symmetric shape typical of the species. Trimmings shall be disposed of off-site.

Trees shall be limbed-up.

Shade trees shall be limbed-up to a height of 7-8 feet above the ground.

Tree staking is not required at the time of planting.

If trees begin leaning for any reason, Contractor shall right and immediately stake those trees according to project drawings and specifications.

After the initial installation and associated watering, Contractor shall water plants an additional three (3) times, once every 14 days, unless adjusted by Owner's Representative due to weather conditions.

Planting Flowers and Ground Cover Beds

Beds shall be tilled to a depth of 8 inches forming particles no greater than 1 inch. Beds shall be covered with a 2 inch depth of peat moss and a 2 inch depth of manure, and

tilled again to a depth of 8 inches to thoroughly mix the materials.

Areas for mulch shall be treated with pre-emergent herbicide according to product recommendations prior to placement of mulch.

Beds shall be covered with 4 inches of fine textured wood mulch.

Plants shall be set on prepared soil at the elevation at which they were grown and firmly tamped-in.

Mulch shall be re-distributed uniformly over the area.

Beds shall be thoroughly watered-in within 4 hours of plant installation. Watering and other maintenance shall continue until project acceptance.

Maintenance

Contractor shall carefully monitor the condition of Plant Material for a period of 45 days or until plants are well established, whichever is longer.

During this maintenance period, Contractor shall provide the following:

An irrigation system is to be installed as part of this project. Contractor shall become familiar with the system and be responsible for its use during the maintenance period.

Amount and frequency of subsequent watering shall be scheduled to optimize the establishment and maintenance of plant material.

Plants generally shall be watered to achieve a rate of 10 gallons for each tree every 4 days, and 5 gallons for every shrub every 4 days, and 5 gallons per square yard of flower beds every 2 days.

Rainfall may relieve the contractor of watering at certain times. Contractor shall monitor conditions and resume watering when needed.

Watering shall be done with sprinklers or in a manner to achieve infiltration of water and avoid run-off.

Contractor shall weed plant material and mulched areas to keep the area weed-free.

Generally, weeding shall be done by hand pulling. Any use of herbicides must be approved by the Engineer in advance and applicator must be licensed for commercial use of herbicides.

Should problems with the plant material develop such as insect infestation, disease or fungus, Contractor shall immediately notify the Owner's Representative and discuss remedies available.

Contractor shall proceed expeditiously with selected treatment of affected areas, and continue treatment until the problem is resolved.

Contractor shall have state licensed applicators for treatment products as needed.

Basis of Payment: This work shall be paid for at the contract unit price per each for individual

plant items as specified in the plans (See Planting Plans).

Topsoil for plant material shall be paid for at the contract unit price per cubic yard for TOPSOIL (PLANTING MIXTURE).

Mulch for plant material shall be paid for at the contract unit price per square yard for SHREDDED BARK MULCH 4".

PVC CASING PIPE

This item of work consists of the installation of PVC casing pipe under road crossings to protect the irrigation manifold piping.

The PVC Casing Pipe shall be DR-18 pipe with locking joints meeting AWWA C-900.

The casing pipe ends shall be sealed with flexible rubber end seals.

The casing pipe shall be installed with a minimum of 24" from the top of pavement to the crown of the pipe.

Basis of Payment: This work shall be paid for at the contract price per foot for PVC CASING PIPE of the size specified.

RAISED URN SUPPLY

This item of work shall consist of the installation of an irrigation supply line to the concrete urns.

For urns located adjacent to a planting bed, a 5/8" PE line will be run from the irrigation bed, into a 1 $\frac{1}{2}$ " conduit installed within the urn and terminating in a 0.5 GPH emitter inside the urn. The emitter shall have a flush option to bleed air and allow for seasonal dewatering.

For urns that are not adjacent to a planting bed, an 1" by 1" tee will be installed in the supply manifold, a 1" PVC Schedule 40 supply line to the urn base, a 90 degree bend and 1" PVC Schedule 40 line installed in the $1\frac{1}{2}$ " conduit to the inside bottom of the urn. A 5/8" PE irrigation pipe and a 0.5 GPH emitter will be installed. The emitter will have a flush option to bleed air and allow for seasonal dewatering.

Basis of Payment: This work shall be paid for at the contract price per each for RAISED URN SUPPLY.

SCHEDULE 40 PIPE IN CASING

This item of work consists of the installation of pipe installed within the PVC casing pipe.

The piping shall be PVC Schedule 40 meeting ASTM D-1785. PVC Schedule 40 pipe will utilize solvent cement joints per ASTM D2672.

If multiple pipes are installed in a single casing, they shall be banded together with stainless steel band clamps.

Basis of Payment: This work shall be paid for at the contract price per foot for SCHEDULE 40 PIPE IN CASING of the size specified.

TREE FRAME AND GRATE

This item of work shall consist of supplying and installing the cast-iron tree grates as manufactured by Neenah Foundry Co. (R-8815-B) or approved equal.

The delivery time on these particular tree grates is approximately six to eight weeks. The frames for these grates can be manufactured locally by a welding shop of high grade steel, the size and dimensions of the frames shall be determined by the size of the grate. The frame shall be a complete square with anchor bolts to tie them to the proposed concrete.

This item of work shall include all materials, labor and equipment to make the tree frames and grates a complete, permanent unit, and no additional compensation will be allowed.

Basis of Payment: This work will be paid for at the contract unit price per each for TREE FRAME AND GRATE.

TREE REMOVAL, TREE PRUNING, SHREDDED BARK MULCH 4"

Description

This work consists of protection of trees to remain, removal of designated existing trees, pruning trees to remain, and mulch trees to remain.

Submittals

1. Items submitted and approved prior to operations:

- a. Equipment proposed for use.
- b. Certification of arborist pruning or supervising tree pruning.
- c. Certification of herbicide applicator(s).
- d. One cubic foot sample of Medium-Textured Hardwood Mulch.

Products and Materials

- 1 Herbicide: Non-selective, systemic glyphosate herbicide applied at manufacturerrecommended rates.
- 2 Pre-emergent Herbicide: slow-release granular type specifically recommended for use in new planting areas.
- 3 Coatings: Any of a variety of coatings manufactured specifically to protect cuts in woody vegetation and recommended by certified arborist based on conditions found at the site.
- 4 Shredded Bark Mulch 4": Medium-textured hardwood mulch, composted and shredded in particles no larger than 4" in any dimension and free of all foreign materials.

Storage and Handling

1. Store and handle herbicide according to manufacturer's recommendation and to all government safety regulations.

Construction Requirements – Tree protection, removal, pruning

- 1. Work done in accordance to IDOT Standard Specification Section 201 and project plans and specifications.
- 2. A certified arborist will prune trees or be on-site supervising others who prune. Prune trees to remain using the National Arborists Association Pruning Standards.
- An Illinois licensed herbicide applicator will apply herbicide. Herbicide application will be done to avoid damage of plant material and of the environment in general.
- 4. Protect Trees to Remain
 - a. Clearly mark each tree to remain with plastic ribbon.
 - b. Protect trees from damage during all project operations.

- 1) Avoid injury to trunk and branches during construction operations.
- 2) Avoid injury to root zone. Do not drive or park construction or personal vehicles, or store materials or equipment under the drip line of the trees to remain.
- 3) If damage occurs, erect temporary fencing as directed by the Engineer.
- c. If damage to trees occurs, provide remedial work which may include tree removal and replacement, pruning, watering, fertilizing, or other remedial work as directed by Engineer.
- 5. Tree Removal
 - a. Cut trees to be removed flush with the ground.
 - b. Remove trunk and branches and grub-out roots to a minimum depth of 24 inches below grade.
 - c. Treat exposed root cuts with herbicide.
 - d. Back fill with approved topsoil in 8 inch lifts, tamping each lift firmly.
 - e. Remove all vegetative material from the site and dispose of properly.
- 6. Tree Pruning
 - a. Remove all dead and structurally damaged limbs and branches from trees by cutting at the nearest joint.
 - b. Prune to establish structural integrity and symmetry of tree.
 - c. Limb-up canopy (shade) trees to min. 10' above the ground.
 - d. Limb-up understory (ornamental) trees to min. 6' above the ground.
 - e. If insect or disease conditions indicate, treat cuts with appropriate coating.
 - f. Remove all vegetative material from the site and dispose of properly. Alternatively, material may be chipped and stockpiled in location designated by Engineer for future use.

Construction Requirements -Mulch Existing Trees

- 1 Mulch existing remaining trees as designated on plans. Mulching is for the purpose of improving the appearance of newly landscaped areas and to reduce damage to established tree by mowers.
- 2 Lay out mulch area by measuring from each tree trunk a distance of 3 feet out to form a circular area around each trunk.
- 3 Remove all grass and other vegetation within the mulch area.
- 4 Treat area with pre-emergent herbicide at manufacturer's recommended rate.
- 5 Cover area with 4 inches tamped wood mulch, leaving 3-4 inches unmulched from the tree trunk.

Basis of Payment

- 1 Tree removal will be paid for at the contract unit price per each for TREE REMOVAL (of the size specified).
- 2 Tree pruning will be paid for at the contract unit price per each for TREE PRUNING (of the size specified).

- 3. Protection of trees to remain and remedial work to trees as a result of damage by Contractor are incidental to work in this section and will not be paid separately.
- 4. Mulching Existing Trees will be paid for at the contract unit price per sq. yd. for SHREDDED BARK MULCH 4"

TRAFFIC SIGNALS

BATTERY BACKUP SYSTEM WITH CABINET

The following models of Battery Backup Systems are approved for use:

Alpha Novus XFM 1100 Techpower Development M-E XL 1000

The Contractor shall be responsible for providing Battery Backup Systems that are sized appropriately for the intersection load. The total system load shall not exceed the manufacturer's specifications.

The battery backup system for the proposed traffic signal cabinet shall be installed as follows:

- The BBS shall be fully integrated into a separate cabinet by the cabinet supplier on site.
- The cabinet light, ventilation fans, heater strips, and service receptacle shall be wired to a separate circuit that will not be powered by the battery backup system
- A hole of sufficient size for the cables will be drilled into the side of the existing cabinet to accommodate the battery backup system cables and harnesses from the BBS cabinet. The hole shall be free of sharp edges and equipped with a plastic or rubber grommet.
- The manual by-pass switch shall be installed in the existing controller cabinet.

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

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

All Battery Backup Systems shall include four batteries.

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

The BBS shall conform to the following specifications:

1.1 OPERATION

- 1.1 The BBS shall be on line and provide voltage regulation and power conditioning when utilizing utility power.
- 1.1.1 The BBS shall provide a minimum two (2) hours of full run-time operation and four (4) hours all-red flash operation for an "LED-only" intersection (minimum 700W/1000VA active output capacity, with 80% minimum inverter efficiency).
- 1.19 The BBS shall be equipped with an integrated safety switch that will interrupt inverter output power in the event of a cabinet knockdown. The safety switch may be either internal to the inverter/charger is externally mounted inside of the BBS cabinet. The safety switch shall be designed to interrupt output power in the event that the charger/inverter is tilted more than twenty degrees on any axis. The switch shall be mechanically latching to ensure that power is not automatically restored to the BBS until the charger/inverter has been "reset". The switch shall also be resettable and reusable unless it has been physically damaged.
- 1.2 The maximum transfer time from loss of utility power to switchover to battery backed inverter power shall be 150 milliseconds.
- 1.3 The BBS shall provide the user with 4-sets of normally open (NO) and normally closed (NC) single-pole double-throw (SPDT) relay contact closures, available on a panelmounted terminal block, rated at a minimum 120V/1A, and labeled so as to identify each contact.
- 1.3.1 A first set of NO and NC contact closures shall be energized whenever the unit switches to battery power. Contact shall be labeled or marked "On Batt."
- 1.3.2 The second set of NO and NC contact closures shall be energized whenever the battery approaches approximately 40% of remaining useful capacity. Contact shall be labeled or marked "Low Batt."
- 1.3.3 The third set of NO and NC contact closures shall be energized two hours after the unit switches to battery power. Contact shall be labeled or marked "Timer."
- 1.3.4 The fourth set of NO and NC contact closures shall be energized in the event of inverter/charger failure, battery failure or complete battery discharge. Contact shall be labeled or marked "BBS Fail or Status."
- 1.3.5 A surge suppression unit shall be provided for the output power if available as an option by the BBS manufacturer.

- 1.4 Operating temperature for both the inverter/power transfer relay and manual bypass switch shall be -37 °C to +74 °C.
- 1.5 The Power Transfer Relay shall be rated at 240VAC/30AMPS minimum and Manual Bypass Switch shall be rated at 240VAC/20 amps, minimum.
- 1.55 The manual bypass switch shall be wired to provide power to the BBS when the switch is set to manual bypass.
- 1.6 The BBS shall use a temperature-compensated battery charging system. The charging system shall compensate over a range of 2.5 4.0 mV/°C per cell.
- 1.6.1 The temperature sensor shall be external to the inverter/charger unit. The temperature sensor shall come with 2 meters (6'6") of wire.
- 1.7 Batteries shall not be recharged when battery temperature exceeds $50^{\circ}C \pm 3^{\circ}C$.
- 1.8 BBS shall bypass the utility line power whenever the utility line voltage is outside of the following voltage range: 100VAC to 130VAC (± 2VAC).
- 1.9 When utilizing battery power, the BBS output voltage shall be between 110 VAC and 125 VAC, pure sine wave output, ± 3% THD, 60Hz ± 3Hz.
- 1.10 BBS shall be compatible with Illinois DOT's traffic controller assemblies utilizing NEMA TS 1 or NEMA TS 2 controllers and cabinet components for full time operation.
- 1.11 When the utility line power has been restored at above 105 VAC ± 2 VAC for more than 30 seconds, the BBS shall dropout of battery backup mode and return to utility line mode.
- 1.12 When the utility line power has been restored at below 125VAC ± 2 VAC for more than 30 seconds, the BBS shall dropout of battery backup mode and return to utility line mode.
- 1.13 BBS shall be equipped to prevent a malfunction feedback to the cabinet or from feeding back to the utility service.
- 1.14 In the event of inverter/charger failure, battery failure or complete battery discharge, the power transfer relay shall revert to the NC state, where utility line power is reconnected to the cabinet. The BBS shall always revert back to utility line power and shall be designed to revert back to utility line power in the event of a BBS fault condition.
- 1.15 Recharge time for the battery, from "protective low-cutoff" to 80% or more of full battery charge capacity, shall not exceed twenty (20) hours.
- 1.16 When the intersection is in battery operation, the BBS shall bypass all internal cabinet lights, ventilation fans, heater strips, and service receptacles.
- 1.17 The manual bypass switch shall be wired to provide power to the BBS when the switch is set to manual bypass.

- 1.18 A blue LED indicator light shall be mounted on the front of the traffic signal cabinet or on the side of the BBS cabinet facing traffic and shall turn on to indicate when the cabinet power has been disrupted and the BBS is in operation. The light shall be a minimum 1" diameter, be viewable from the driving lanes, and shall be large enough and visible enough to be seen from 200 ft. away.
- 1.19 All 36 volt and 48 volt systems shall include an external component that monitors battery charging to ensure that every battery in the string is fully charged. The device shall compensate for the effects of adding a new battery to an existing battery system by ensuring that the charge voltage is spread equally across all batteries. All cables, harnesses, cards, and other components that are required to provide the functionality described above shall be included in the unit bid price for the battery backup system. The following products are currently approved for use: Alpha Technologies: AlphaGuard with Charge Management Technology Module and Approved Equivalent
- 1.20 The BBS shall be equipped with an integrated safety switch that will interrupt inverter output power in the event of a cabinet knockdown. The safety switch may be either internal to the inverter/charger is externally mounted inside of the BBS cabinet. The safety switch shall be designed to interrupt output power in the event that the charger/inverter is tilted more than twenty degrees on any axis. The switch shall be mechanically latching to ensure that power is not automatically restored to the BBS until the charger/inverter has been "reset". The switch shall also be resettable and reusable unless it has been physically damaged.
- 2.0 MOUNTING AND CONFIGURATION
- 2.1 GENERAL
- 2.1.1 Inverter/Charger Unit shall be rack or shelf-mounted.
- 2.1.2 (Reserved).
- 2.1.3 All interconnect wiring provided between Power Transfer Relay, Bypass Switch and Cabinet Terminal Service Block shall be no greater than two (2) meters (6'6") of #10 AWG wire.
- 2.1.4 Relay contact wiring provided for each set of NO/NC relay contact closure terminals shall be #18 AWG wire.
- 2.1.5 All necessary hardware for mounting (shelf angles, rack, etc) shall be included in the bid price of the BBS. The swing-trays shall be screwed to the existing cabinets using continuous stainless steel or aluminum piano hinge. All bolts/fasteners and washers shall meet the following requirements:

2.3 EXTERNAL BATTERY CABINET

- 2.3.1 The external cabinet shall be a rated NEMA Type 3R Cabinet.
- 2.3.2 Inverter/Charger and Power Transfer Relay shall be installed inside the external battery cabinet and the manually operated Bypass Switch shall be installed inside the existing Traffic Signal Cabinet.

- 2.3.3 Batteries shall be housed in the external cabinet which shall be NEMA Standard rated cabinet mounted to the side of the Type IV or Type V Cabinet (see plan sheets for details). This external battery cabinet shall conform to the IDOT Standard Specifications for traffic signal cabinets for the construction and finish of the cabinet.
- 2.3.4 The external battery cabinet shall mount to the proposed Type C Foundation for new installations or a separate foundation tied to the existing cabinet foundation in existing installations with a minimum of four (4) bolts to the satisfaction of the Engineer.
- 2.3.5 The dimensions of the external battery cabinet shall be 25" (L) x 16" (W) x 41" (H) and installed in accordance with the plan sheet cabinet detail and this specification.
- 2.3.6 The cabinet shall include heater mats for each battery shelf and/or battery. If the BBS charger/inverter does not have facilities to accommodate heater mat connections, thermostatically controlled heater mats shall be provided with the system. The heater mat thermostat shall be a separate thermostat (from the ventilation fan thermostat) and be adjustable from 0°F to 32°F for heater mat turn-on.
- 2.3.6 A warning sticker shall be placed on the outside of the cabinet indicating that there is an Uninterruptible Power Supply inside the cabinet.
- 2.3.7 The external battery cabinet shall be ventilated through the use of louvered vents (2), filters, and one thermostatically controlled fan as per NEMA TS 2 Specifications. The cabinet shall include a cleanable or replaceable cabinet filter.
- 2.3.8 External battery cabinet fan shall be AC operated from the same line output of the Manual Bypass Switch that supplies power to the existing cabinet.
- 2.3.9 The BBS with external battery cabinet shall come with all bolts, conduits and bushings, gaskets, shelves, and hardware needed for mounting. The external battery cabinet shall have a hinged door opening to the entire cabinet. The cabinet shall include a bottom constructed from the same material as the cabinet.
- 2.3.10 The external cabinet shall be equipped with a power receptacle to accommodate the inverter/charger. The receptacle shall be wired to the line output of the manual bypass switch.
- 3.1 MAINTENANCE, DISPLAYS, CONTROLS AND DIAGNOSTICS
- 3.2 The BBS shall include a display and /or meter to indicate current battery charge status and conditions.
- 3.3 The BBS shall have lightning surge protection compliant with IEEE/ANSI C.62.41.
- 3.4 The BBS shall be equipped with an integral system to prevent battery from destructive discharge and overcharge.
- 3.5 The BBS and batteries shall be easily replaced with all needed hardware and shall not require any special tools for installation.
- 3.6 The BBS shall be equipped with an RS-232 port.

- 3.7 The BBS shall include a resettable front-panel event counter display to indicate the number of times the BBS was activated and a front-panel hour meter to display the total number of hours the unit has operated on battery power.
- 3.8 Manufacturer shall include two (2) sets of equipment lists, operation and maintenance manuals, and board-level schematic and wiring diagrams of the BBS, and the battery data sheets. Manufacturer shall include any software needed to monitor, diagnose, and operate the BBS. The manufacturer shall include any required cables to connect to a laptop computer.
- 3.8 The BBS shall include a data cable for the serial connection to the RS232 port and diagnostic software if it is available as an option with the unit.
- 3.9 Two copies of the owner/maintenance manuals shall be provided with the BBS.

4.1 <u>BATTERY SYSTEM</u>

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

5.0 QUALITY ASSURANCE

I:\02jobs\02S2041A\Admin\Specifications\11-MLK\Specifications(11-MLK).doc

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

5.4 DESIGN QUALIFICATION TESTING

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

- 5.4.1 Burn In. The sample systems shall be energized for a minimum of 5 hours, with full load of 700 watts, at temperatures of +74°C and -37°C., excluding batteries, before performing any design qualification testing.
- 5.4.2 Any failure of the BBS, which renders the unit non-compliant with the specification after burn-in, shall be cause for rejection.
- 5.4.3 For Operational Testing, all specifications may be measured including, but not limited to:
- 5.4.3.1 Run time while in battery backup mode, at full load.
- 5.4.3.2 Proper operation of all relay contact closures ("On-Batt", "Low-Batt", "Timer" and "BBS-Fail").
- 5.4.3.3 Inverter output voltage, frequency, harmonic distortion, and efficiency, when in battery backup mode.
- 5.4.3.4 All utility mode battery backup mode transfer voltage levels. See BBS Spec 1.8, 1.11 and 1.12.
- 5.4.3.5 Power transfer time from loss of utility power to switchover to battery backed inverter power.
- 5.4.3.6 Backfeed voltage to utility when in battery backup mode.

5.4.3.7 IEEE/ANSI C.62.41 compliance.

5.4.3.8 Battery charging time.

5.4.5.9 Event counter and runtime meter accuracy.

5.5 PRODUCTION QUALITY CONTROL TESTING

- 5.5.1 Production Quality Control tests shall consist of all of the above listed tests and shall be performed on each new system prior to shipment. Failure to meet requirements of any of these tests shall be cause for rejection. The manufacturer shall retain test results for seven years.
- 5.5.2 Each BBS shall be given a minimum 100-hour burn-in period to catch any premature failures.
- 5.5.3 Each system shall be visually inspected for any exterior physical damage or assembly anomalies. Any defects shall be cause for rejection.

6.0 WARRANTY

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

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

<u>Basis of Payment</u>: The above work will be paid for at the contract unit price each for BATTERY BACKUP SYSTEM WITH CABINET shall be payment in full for all labor, materials, foundations when not apart of a new installation, and equipment required to provide, install, and test the battery backup system described above, complete.

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

SPECIAL PROVISION FOR COOPERATION WITH UTILITIES

Effective: January 1, 1999 Revised: January 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.

Replace Article 105.07 of the Standard Specifications with the following:

"105.07 Cooperation with Utilities. The adjustment of utilities consists of the relocation, removal, replacement, rearrangements, reconstruction, improvement, disconnection, connection, shifting, new installation or altering of an existing utility facility in any manner.

When the plans or special provisions include information pertaining to the location of underground utility facilities, such information represents only the opinion of the Department as to the location of such utilities and is only included for the convenience of the bidder. The Department assumes no responsibility in respect to the sufficiency or the accuracy of the information shown on the plans relative to the location of the underground utility facilities.

Utilities which are to be adjusted shall be adjusted by the utility owner or the owner's representative or by the Contractor as a contract item. Generally, arrangements for adjusting existing utilities will be made by the Department prior to project construction; however, utilities will not necessarily be adjusted in advance of project construction and, in some cases, utilities will not be removed from the proposed construction limits. When utility adjustments must be performed in conjunction with construction, the utility adjustment work will be shown on the plans and/or covered by Special Provisions.

When the Contractor discovers a utility has not been adjusted by the owner or the owner's representative as indicated in the contract documents, or the utility is not shown on the plans or described in the Special Provisions as to be adjusted in conjunction with construction, the Contractor shall not interfere with said utility, and shall take proper precautions to prevent damage or interruption of the utility and shall promptly notify the Engineer of the nature and location of said utility.

All necessary adjustments, as determined by the Engineer, of utilities not shown on the plans or not identified by markers, will be made at no cost to the Contractor except traffic structures, light poles, etc., that are normally located within the proposed construction limits as hereinafter defined will not be adjusted unless required by the proposed improvement.

- (a) Limits of Proposed Construction for Utilities Paralleling the Roadway. For the purpose of this Article, limits of proposed construction for utilities extending in the same longitudinal direction as the roadway, shall be defined as follows:
 - (1) The horizontal limits shall be a vertical plane, outside of, parallel to, and 600 mm (2 ft) distant at right angles from the plan or revised slope limits.
 - In cases where the limits of excavation for structures are not shown on the plans, the horizontal limits shall be a vertical plane 1.2 m (4 ft) outside the edges of structure footings or the structure where no footings are required.
 - (2) The upper vertical limits shall be the regulations governing the roadbed clearance for the specific utility involved.
 - (3) The lower vertical limits shall be the top of the utility at the depth below the proposed grade as prescribed by the governing agency or the limits of excavation, whichever is less.
- (b) Limits of Proposed Construction for Utilities Crossing the Roadway. For the purpose of this Article, limits of proposed construction for utilities crossing the roadway in a generally transverse direction shall be defined as follows:
 - (1) Utilities crossing excavations for structures that are normally made by trenching such as sewers, underdrains, etc. and all minor structures such as manholes, inlets, foundations for signs, foundations for traffic signals, etc., the limits shall be the space to be occupied by the proposed permanent construction unless otherwise required by the regulations governing the specific utility involved.
 - (2) For utilities crossing the proposed site of major structures such as bridges, sign trusses, etc., the limits shall be as defined above for utilities extending in the same general direction as the roadway.

The Contractor may make arrangements for adjustment of utilities outside of the limits of proposed construction provided the Contractor furnishes the Department with a signed agreement with the utility owner covering the adjustments to be made. The cost of any adjustments made outside the limits of proposed construction shall be the responsibility of the Contractor unless otherwise provided.

The Contractor shall request all utility owners to field locate their facilities according to Article 107.31. The Engineer may make the request for location from the utility after receipt of notice from the Contractor. On request, the Engineer will make an inspection to verify that the utility company has field located its facilities, but will not assume responsibility for the accuracy of such work. The Contractor shall be responsible for maintaining the excavations or markers provided by the utility owners. This field location procedure may be waived if the utility owner has stated in writing to the Department it is satisfied the construction plans are sufficiently accurate. If the utility owner does not submit such statement to the Department, and they do not field locate their facilities in both horizontal and vertical alignment, the Engineer will authorize the Contractor in writing to proceed to locate the facilities in the most economical and reasonable manner, subject to the approval of the Engineer, and be paid according to Article 109.04.

The Contractor shall coordinate with any planned utility adjustment or new installation and the Contractor shall take all precautions to prevent disturbance or damage to utility facilities. Any failure on the part of the utility owner, or their representative, to proceed with any planned utility adjustment or new installation shall be reported promptly by the Contractor to the Engineer orally and in writing.

The Contractor shall take all necessary precautions for the protection of the utility facilities. The Contractor shall be responsible for any damage or destruction of utility facilities resulting from neglect, misconduct, or omission in the Contractor's manner or method of execution or nonexecution of the work, or caused by defective work or the use of unsatisfactory materials. Whenever any damage or destruction of a utility facility occurs as a result of work performed by the Contractor, the utility company will be immediately notified. The utility company will make arrangements to restore such facility to a condition equal to that existing before any such damage or destruction was done.

It is understood and agreed that the Contractor has considered in the bid all of the permanent and temporary utilities in their present and/or adjusted positions.

No additional compensation will be allowed for any delays, inconvenience, or damage sustained by the Contractor due to any interference from the said utility facilities or the operation of relocating the said utility facilities.

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:

City of Springfield

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

ALKALI-SILICA REACTION FOR PRECAST AND PRECAST PRESTRESSED CONCRETE (BDE)

Effective: January 1, 2009

<u>Description</u>. This special provision is intended to reduce the risk of a deleterious alkali-silica reaction in precast and precast prestressed concrete exposed to humid or wet conditions. The special provision is not intended or adequate for concrete exposed to potassium acetate, potassium formate, sodium acetate or sodium formate. The special provision shall not apply to the dry environment (humidity less than 60 percent) found inside buildings for residential or commercial occupancy. The special provision shall also not apply to cast-in-place concrete.

<u>Aggregate Expansion Values</u>. Each coarse and fine aggregate will be tested by the Department for alkali reaction according to ASTM C 1260. The test will be performed with Type I or II cement having a total equivalent alkali content (Na₂O + $0.658K_2O$) of 0.90 percent or greater. The Engineer will determine the assigned expansion value for each aggregate, and these values will be made available on the Department's Alkali-Silica Potential Reactivity Rating List. The Engineer may differentiate aggregate based on ledge, production method, gradation number, or other factors. An expansion value of 0.05 percent will be assigned to limestone or dolomite coarse aggregates and 0.03 percent to limestone or dolomite fine aggregates (manufactured stone sand); however the Department reserves the right to perform the ASTM C 1260 test.

<u>Aggregate Groups</u>. Each combination of aggregates used in a mixture will be assigned to an aggregate group. The point at which the coarse aggregate and fine aggregate expansion values intersect in the following table will determine the group.

| AGGREGATE GROUPS | | | | | |
|--|--|-----------|-----------|--|--|
| Coarse Aggregate or Coarse Aggregate Blend | Fine Aggregate or Fine Aggregate Blend | | | | |
| ASTM C 1260 Expansion | ASTM C 1260 Expansion ≤ 0.16% > 0.16% - 0.27% > 0.27% | | | | |
| ≤ 0.16% | Group I | Group II | Group III | | |
| > 0.16% - 0.27% | Group II | Group II | Group III | | |
| > 0.27% | Group III | Group III | Group IV | | |

<u>Mixture Options</u>. Based upon the aggregate group, the following mixture options shall be used; however, the Department may prohibit a mixture option if field performance shows a deleterious alkali-silica reaction or Department testing indicates the mixture may experience a deleterious alkali-silica reaction.

- Group I Mixture options are not applicable. Use any cement or finely divided mineral.
- Group II Mixture options 1, 2, 3, 4, or 5 shall be used.
- Group III Mixture options 1, 2 and 3 combined, 4, or 5 shall be used.

Group IV - Mixture options 1, 2 and 4 combined, or 5 shall be used.

a) Mixture Option 1. The coarse or fine aggregates shall be blended to place the material in a group that will allow the selected cement or finely divided mineral to be used.

When a coarse or fine aggregate is blended, the weighted expansion value shall be calculated separately for the coarse and fine aggregate as follows:

Weighted Expansion Value = $(a/100 \times A) + (b/100 \times B) + (c/100 \times C) + \dots$

Where: a, b, c... = percentage of aggregate in the blend; A, B, C...= expansion value for that aggregate.

- b) Mixture Option 2. A finely divided mineral shall be used as described in 1), 2), 3), or 4) that follow. The replacement ratio is defined as "finely divided mineral:portland cement".
 - 1) Class F Fly Ash. For Class PC concrete, precast products, and PS concrete, Class F fly ash shall replace 15 percent of the portland cement at a minimum replacement ratio of 1.5:1.
 - 2) Class C Fly Ash. For Class PC Concrete, precast products, and Class PS concrete, Class C fly ash with 18 percent to less than 26.5 percent calcium oxide content, and less than 2.0 percent loss on ignition, shall replace 20 percent of the portland cement at a minimum replacement ratio of 1:1; or at a minimum replacement ratio of 1.25:1 if the loss on ignition is 2.0 percent or greater. Class C fly ash with less than 18 percent calcium oxide content shall replace 20 percent of the portland cement at a minimum replacement ratio of 1.25:1.
 - 3) Ground Granulated Blast-Furnace Slag. For Class PC concrete, precast products, and Class PS concrete, ground granulated blast-furnace slag shall replace 25 percent of the portland cement at a minimum replacement ratio of 1:1.
 - Microsilica or High Reactivity Metakaolin. Microsilica solids or high reactivity metakaolin shall be added to the mixture at a minimum 25 lb/cu yd (15 kg/cu m) or 27 lb/cu yd (16 kg/cu m) respectively.
- c) Mixture Option 3. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.60 percent. When aggregate in Group II is involved, any finely divided mineral may be used with a portland cement.
- d) Mixture Option 4. The cement used shall have a maximum total equivalent alkali content (Na₂O + 0.658K₂O) of 0.45 percent. When aggregate in Group II or III is involved, any finely divided mineral may be used with a portland cement.
- e) Mixture Option 5. The proposed cement or finely divided mineral may be used if the ASTM C 1567 expansion value is ≤ 0.16 percent when performed on the aggregate in

the concrete mixture with the highest ASTM C 1260 test result. The ASTM C 1567 test will be valid for two years, unless the Engineer determines the materials have changed significantly. The 0.20 percent autoclave expansion limit in ASTM C 1567 shall not apply.

If during the two year time period the Contractor needs to replace the cement, and the replacement cement has an equal or lower total equivalent alkali content $(Na_2O + 0.658K_2O)$, a new ASTM C 1567 test will not be required.

<u>Testing</u>. If an individual aggregate has an ASTM C 1260 expansion value > 0.16 percent, an ASTM C 1293 test may be performed by the Contractor to evaluate the Department's ASTM C 1260 test result. The ASTM C 1293 test shall be performed with Type I or II cement having a total equivalent alkali content (Na₂O + 0.658K₂O) of 0.80 percent or greater. The interior vertical wall of the ASTM C 1293 recommended container (pail) shall be half covered with a wick of absorbent material consisting of blotting paper. If the testing laboratory desires to use an alternate container or wick of absorbent material, ASTM C 1293 test results with an alkali-reactive aggregate of known expansion characteristics shall be provided to the Engineer for review and approval. If the expansion is less than 0.040 percent after one year, the aggregate will be assigned an ASTM C 1260 expansion value of 0.08 percent that will be valid for two years, unless the Engineer determines the aggregate has changed significantly.

The Engineer reserves the right to verify a Contractor's ASTM C 1293 or 1567 test result. The Engineer will not accept the result if the precision and bias for the test methods are not met.

The laboratory performing the ASTM C 1567 test shall either be accredited by the AASHTO Materials Reference Laboratory (AMRL) for ASTM C 227 under Portland Cement or Aggregate; or shall be inspected for Hydraulic Cement - Physical Tests by the Cement and Concrete Reference Laboratory (CCRL) and shall be approved by the Department. The laboratory performing the ASTM C 1293 test shall be inspected for Portland Cement Concrete by CCRL and shall be approved by the Department.

APPROVAL OF PROPOSED BORROW AREAS, USE AREAS, AND/OR WASTE AREAS (BDE)

Effective: November 1, 2008 Revised: November 1, 2010

Replace the first paragraph of Article 107.22 of the Standard Specifications with the following:

"All proposed borrow areas, including commercial borrow areas; use areas, including, but not limited to temporary access roads, detours, runarounds, plant sites, and staging and storage areas; and/or waste areas are to be designated by the Contractor to the Engineer and approved prior to their use. Such areas outside the State of Illinois shall be evaluated, at no additional cost to the Department, according to the requirements of the state in which the area lies; and approval by the authority within that state having jurisdiction for such areas shall be forwarded to the Engineer. Such areas within Illinois shall be evaluated as described herein.

A location map delineating the proposed borrow area, use area, and/or waste area shall be submitted to the Engineer for approval along with an agreement from the property owner granting the Department permission to enter the property and conduct cultural and biological resource reconnaissance surveys of the site for archaeological resources, threatened or endangered species or their designated essential habitat, wetlands, prairies, and savannahs. The type of location map submitted shall be a topographic map, a plat map, or a 7.5 minute quadrangle map. Submittals shall include the intended use of the site and provide sufficient detail for the Engineer to determine the extent of impacts to the site. The Engineer will initiate cultural and biological resource reconnaissance surveys of the site, as necessary, at no cost to the Contractor. The Engineer will advise the Contractor of the expected time required to complete all surveys. If the proposed area is within 150 ft (45 m) of the highway right-of-way, a topographic map of the proposed site will be required as specified in Article 204.02."

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

Effective: November 2, 2006 Revised: April 1, 2009

<u>Description</u>. Bituminous material cost adjustments will be made to provide additional compensation to the Contractor, or credit to the Department, for fluctuations in the cost of bituminous materials when optioned by the Contractor. The adjustments shall apply to permanent and temporary hot-mix asphalt (HMA) mixtures, bituminous surface treatments (cover and seal coats), and pavement preservation type surface treatments. The adjustments shall not apply to bituminous prime coats, tack coats, crack filling/sealing, or joint filling/sealing.

The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments.

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

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

Where: CA = Cost Adjustment, \$.

- BPI_P = Bituminous Price Index, as published by the Department for the month the work is performed, \$/ton (\$/metric ton).
- BPI_L = Bituminous Price Index, as published by the Department for the month prior to the letting, \$/ton (\$/metric ton).
- $%AC_V =$ Percent of virgin Asphalt Cement in the Quantity being adjusted. For HMA mixtures, the % AC_V will be determined from the adjusted job mix formula. For bituminous materials applied, a performance graded or cutback asphalt will be considered to be 100% AC_V and undiluted emulsified asphalt will be considered to be 65% AC_V.
- Q = Authorized construction Quantity, tons (metric tons) (see below).

For HMA mixtures measured in square yards: Q, tons = $A \times D \times (G_{mb} \times 46.8) / 2000$. For HMA mixtures measured in square meters: Q, metric tons = $A \times D \times (G_{mb} \times 24.99) / 1000$. 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 x 8.33 lb/gal x SG / 2000 |
|---|--|
| For bituminous materials measured in liters: | Q, metric tons = $V \times 1.0 \text{ kg/L} \times \text{SG} / 1000$ |

| Where: | А | = | Area of the HMA mixture, sq yd (sq m). |
|--------|-----------------|---|---|
| | D | Ξ | Depth of the HMA mixture, in. (mm). |
| | G _{mb} | = | Average bulk specific gravity of the mixture, from the approved mix design. |
| | V | Ξ | 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 DEPARTMENTOPTION FOROF TRANSPORTATIONBITUMINOUS MATERIALS COST ADJUSTMENTS

The bidder shall submit this completed form with his/her bid. Failure to submit the form, or failure to fill out the form completely, shall make this contract exempt of bituminous materials cost adjustments. After award, this form, when submitted, shall become part of the contract.

Contract No.: _______
Company Name: ______
Contractor's Option:
Is your company opting to include this special provision as part of the contract?
Yes No Date: _____
80173

CEMENT (BDE)

Effective: January 1, 2007 Revised: April 1, 2011

Revise Section 1001 of the Standard Specifications to read:

"SECTION 1001. CEMENT

1001.01 Cement Types. Cement shall be according to the following.

(a) Portland Cement. Acceptance of portland cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland cement shall be according to AASHTO M 85, and shall meet the standard physical and chemical requirements. The Contractor has the option to use any type of portland cement listed in AASHTO M 85 unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C or F fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust.

(b) Portland-Pozzolan Cement. Acceptance of portland-pozzolan cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland-pozzolan cement shall be according to AASHTO M 240 and shall meet the standard physical and chemical requirements. The Contractor has the option to use portland-pozzolan cement unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blast-furnace slag according to the chemical requirements of AASHTO M 302, Class C or F fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust. The pozzolan constituent for Type IP using Class F fly ash shall be a maximum of 25 percent of the weight (mass) of the portland-pozzolan cement. The pozzolan constituent for Type IP using Class C fly ash shall be a maximum of 30 percent of the weight (mass) of the portland-pozzolan constituent for Type IP using microsilica or high-reactivity metakaolin shall be a maximum of ten percent. The pozzolan constituent for Type IP using other materials shall have the approval of the Engineer.

Portland-pozzolan cement may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

(c) Portland Blast-Furnace Slag Cement. Acceptance of portland blast-furnace slag cement shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Portland or Blended Cement Acceptance Procedure for Qualified and Non-Qualified Plants".

Portland blast-furnace slag cement shall be according to AASHTO M 240 and shall meet the standard physical and chemical requirements. The Contractor has the option to use portland blast-furnace slag cement unless a specific cement is specified for a construction item. Inorganic processing additions shall be limited to granulated blastfurnace slag according to the chemical requirements of AASHTO M 302, Class C or F fly ash according to the chemical requirements of AASHTO M 295, and cement kiln dust. The blast-furnace slag constituent for Type IS shall be a maximum of 35 percent of the weight (mass) of the portland blast-furnace slag cement.

Portland blast-furnace slag cement may be used in concrete mixtures when the air temperature is below 40 °F (4 °C), but the Engineer may request a trial batch of the concrete mixture to show the mix design strength requirement will be met.

- (d) Rapid Hardening Cement. Rapid hardening cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall be on the Department's current "Approved List of Packaged, Dry, Rapid Hardening Cementitious Materials for Concrete Repairs", and shall be according to the following.
 - (1) The cement shall have a maximum final set of 25 minutes, according to Illinois Modified AASHTO T 131.
 - (2) The cement shall have a minimum compressive strength of 2000 psi (13,800 kPa) at 3.0 hours, 3200 psi (22,100 kPa) at 6.0 hours, and 4000 psi (27,600 kPa) at 24.0 hours, according to Illinois Modified AASHTO T 106.
 - (3) The cement shall have a maximum drying shrinkage of 0.050 percent at seven days, according to Illinois Modified ASTM C 596.
 - (4) The cement shall have a maximum expansion of 0.020 percent at 14 days, according to Illinois Modified ASTM C 1038.
 - (5) The cement shall have a minimum 80 percent relative dynamic modulus of elasticity; and shall not have a weight (mass) gain in excess of 0.15 percent or a weight (mass) loss in excess of 1.0 percent, after 100 cycles, according to Illinois Modified AASHTO T 161, Procedure B.
- (e) Calcium Aluminate Cement. Calcium aluminate cement shall be used according to Article 1020.04 or when approved by the Engineer. The cement shall meet the standard physical requirements for Type I cement according to AASHTO M 85, except the time of setting shall not apply. The chemical requirements shall be determined according to AASHTO T 105 and shall be as follows: minimum 38 percent aluminum oxide (Al₂O₃), maximum 42 percent calcium oxide (CaO), maximum 1 percent magnesium oxide

(MgO), maximum 0.4 percent sulfur trioxide (SO₃), maximum 1 percent loss on ignition, and maximum 3.5 percent insoluble residue.

1001.02 Uniformity of Color. Cement contained in single loads or in shipments of several loads to the same project shall not have visible differences in color.

1001.03 Mixing Brands and Types. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall not be mixed or used alternately in the same item of construction unless approved by the Engineer.

1001.04 Storage. Cement shall be stored and protected against damage, such as dampness which may cause partial set or hardened lumps. Different brands or different types of cement from the same manufacturing plant, or the same brand or type from different plants shall be kept separate."

60

CERTIFICATION OF METAL FABRICATOR (BDE)

Effective: July 1, 2010

Revise Article 106.08 of the Standard Specifications to read:

"**106.08 Certification of Metal Fabricator.** All fabricators performing work on metal components of structures shall be certified under the appropriate category of the AISC Quality Certification Program as follows.

- (a) Fabricators of the main load carrying steel components of welded plate girder, box girder, truss, and arch structures shall be certified under Category MBr (Major Steel Bridges).
- (b) Fabricators of the main load carrying steel components of rolled beam structures, either simple span or continuous, and overhead sign structures shall be certified under Category SBr (Simple Steel Bridges).

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

101

CONCRETE ADMIXTURES (BDE)

Effective: January 1, 2003 Revised: April 1, 2009

Replace the first paragraph of Article 1020.05(b) of the Standard Specifications to read:

"(b) Admixtures. The use of admixtures to increase the workability or to accelerate the hardening of the concrete will be permitted when approved by the Engineer. Admixture dosages shall result in the mixture meeting the specified plastic and hardened properties. The Department will maintain an Approved List of Corrosion Inhibitors. Corrosion inhibitor dosage rates shall be according to Article 1020.05(b)(12). The Department will also maintain an Approved List of Concrete Admixtures, and an admixture technical representative shall be consulted when determining an admixture dosage from this list. The dosage shall be within the range indicated on the approved list unless the influence by other admixtures, jobsite conditions (such as a very short haul time), or other circumstances warrant a dosage outside the range. The Engineer shall be notified when a dosage is proposed outside the range. To determine an admixture dosage, air temperature, concrete temperature, cement source and quantity, finely divided mineral sources(s) and quantity, influence of other admixtures, haul time, placement conditions, and other factors as appropriate shall be considered. The Engineer may request the Contractor to have a batch of concrete mixed in the lab or field to verify the admixture dosage is correct. An admixture dosage or combination of admixture dosages shall not delay the initial set of concrete by more than one hour. When a retarding admixture is required or appropriate for a bridge deck or bridge deck overylay pour, the initial set time shall be delayed until the deflections due to the concrete dead load are no longer a concern for inducing cracks in the completed work. However, a retarding admixture shall not be used to further extend the pour time and justify the alteration of a bridge deck pour sequence.

When determining water in admixtures for water/cement ratio, the Contractor shall calculate 70 percent of the admixture dosage as water, except a value of 50 percent shall be used for a latex admixture used in bridge deck latex concrete overlays."

Revise Section 1021 of the Standard Specifications to read:

"SECTION 1021. CONCRETE ADMIXTURES

1021.01General. Admixtures shall be furnished in liquid form ready for use. The admixtures shall be delivered in the manufacturer's original containers, bulk tank trucks or such containers or tanks as are acceptable to the Engineer. Delivery shall be accompanied by a ticket which clearly identifies the manufacturer and trade name of the material. Containers shall be readily identifiable as to manufacturer and trade name of the material they contain.

Corrosion inhibitors will be maintained on the Department's Approved List of Corrosion Inhibitors. All other concrete admixture products will be maintained on the Department's

(2)

Approved List of Concrete Admixtures. For the admixture submittal, a report prepared by an independent laboratory accredited by the AASHTO Materials Reference Laboratory (AMRL) for Portland Cement Concrete shall be provided. The report shall show the results of physical tests conducted no more than five years prior to the time of submittal, according to applicable specifications. However, for corrosion inhibitors the ASTM G 109 test information specified in ASTM C 1582 is not required to be from and independent lab. All other information in ASTM C 1582 shall be from and independent lab.

Tests shall be conducted using materials and methods specified on a "test" concrete and a "reference" concrete, together with a certification that no changes have been made in the formulation of the material since the performance of the tests. Per the manufacturer's option, the cement content for all required tests shall either be according to applicable specifications or 5.65 cwt/cu yd (335 kg/cu m). Compressive strength test results for six months and one year will not be required.

Prior to the approval of an admixture, the Engineer reserves the right to request a sample for testing. The test and reference concrete mixtures tested by the Engineer will contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). For freeze-thaw testing, the Department will perform the test according to AASHTO T 161, Procedure B. The flexural strength test will be performed according to AASHTO T 177. If the Engineer decides to test the admixture, the manufacturer shall submit AASHTO T 197 water content and set time test results on the standard cement used by the Department. The test and reference concrete mixture shall contain a cement content of 5.65 cwt/cu yd (335 kg/cu m). The manufacturer may select their lab or an independent lab to perform this testing. The laboratory is not required to be accredited by AASHTO.

The manufacturer shall include in the submittal the following admixture information: the manufacturing range for specific gravity, the midpoint and manufacturing range for residue by oven drying, and the manufacturing range for pH. The submittal shall also include an infrared spectrophotometer trace no more than five years old.

For air-entraining admixtures according to Article 1021.02, the specific gravity allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM C 494. For residue by oven drying and pH, the allowable manufacturing range and test methods shall be according to ASTM C 260.

For admixtures according to Articles 1021.03, 1021.04, 1021.05, 1021.06, and 1021.07, the pH allowable manufacturing range shall be established by the manufacturer and the test method shall be according to ASTM E 70. For specific gravity and residue by oven drying, the allowable manufacturing range and test methods shall be according to ASTM C 494.

When test results are more than seven years old, the manufacturer shall re-submit the infrared spectrophotometer trace and the report prepared by an independent laboratory accredited by AASHTO.

All admixtures, except chloride-based accelerators, shall contain a maximum of 0.3 percent chloride by weight (mass).

Random field samples may be taken by the Department to verify an admixture meets specification. A split sample will be provided to the manufacturer if requested. Admixtures that do not meet specification requirements or an allowable manufacturing range established by the manufacturer shall be replaced with new material.

1021.02Air-Entraining Admixtures. Air-entraining admixtures shall be according to AASHTO M 154.

1021.03 Retarding and Water-Reducing Admixtures. The admixture shall be according to the following.

- (a) The retarding admixture shall be according to AASHTO M 194, Type B (retarding) or Type D (water-reducing and retarding).
- (b) The water-reducing admixture shall be according to AASHTO M 194, Type A.
- (c) The high range water-reducing admixture shall be according to AASHTO M 194, Type F (high range water-reducing) or Type G (high range water-reducing and retarding).

1021.04Accelerating Admixtures. The admixture shall be according to AASHTO M 194, Type C (accelerating) or Type E (water reducing and accelerating).

1021.05Self-Consolidating Admixtures. The self-consolidating admixture system shall consist of either a high range water-reducing admixture only or a high range water-reducing admixture combined with a separate viscosity modifying admixture. The one or two component admixture system shall be capable of producing a concrete mixture that can flow around reinforcement and consolidate under its own weight without additional effort and without segregation.

The high range water-reducing admixture shall be according to AASHTO M 194, Type F.

The viscosity modifying admixture shall be according to ASTM C 494, Type S (specific performance).

1021.06Rheology-Controlling Admixture. The rheology-controlling admixture shall be capable of producing a concrete mixture with a lower yield stress that will consolidate easier for slipform applications used by the Contractor. The rheology-controlling admixture shall be according to ASTM C 494, Type S (specific performance).

1021.07 Corrosion Inhibitor. The corrosion inhibitor shall be according to one of the following.

(a) Calcium Nitrite. The corrosion inhibitor shall contain a minimum 30 percent calcium nitrite by weight (mass) of solution, and shall comply with the requirements of AASHTO M 194, Type C (accelerating).

(b) Other Materials. The corrosion inhibitor shall be according to ASTM C 1582."

CONSTRUCTION AIR QUALITY - DIESEL VEHICLE EMISSIONS CONTROL (BDE)

Effective: April 1, 2009 Revised: July 1, 2009

<u>Diesel Vehicle Emissions Control</u>. The reduction of construction air emissions shall be accomplished by using cleaner burning diesel fuel. The term "equipment" refers to any and all diesel fuel powered devices rated at 50 hp and above, to be used on the project site in excess of seven calendar days over the course of the construction period on the project site (including any "rental" equipment).

All equipment on the jobsite, with engine ratings of 50 hp and above, shall be required to: use Ultra Low Sulfur Diesel fuel (ULSD) exclusively (15 ppm sulfur content or less).

Diesel powered equipment in non-compliance will not be allowed to be used on the project site, and is also subject to a notice of non-compliance as outlined below.

The Contractor shall submit copies of monthly summary reports and include certified copies of the ULSD diesel fuel delivery slips for diesel fuel delivered to the jobsite for the reporting time period, noting the quantity of diesel fuel used.

If any diesel powered equipment is found to be in non-compliance with any portion of this specification, the Engineer will issue the Contractor a notice of non-compliance and identify an appropriate period of time, as outlined below under environmental deficiency deduction, in which to bring the equipment into compliance or remove it from the project site.

Any costs associated with bringing any diesel powered equipment into compliance with these diesel vehicle emissions controls shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall also not be grounds for a claim.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists, he/she will notify the Contractor in writing, and direct the Contractor to correct the deficiency within a specified time period. The specified time-period, which begins upon Contractor notification, will be from 1/2 hour to 24 hours long, based on the urgency of the situation and the nature of the deficiency. The Engineer shall be the sole judge regarding the time period.

The deficiency will be based on lack of repair, maintenance and diesel vehicle emissions control.

If the Contractor fails to correct the deficiency within the specified time frame, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end

Lole

with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

If a Contractor or subcontractor accumulates three environmental deficiency deductions in a contract period, the Contractor will be shutdown until the deficiency is corrected. Such a shutdown will not be grounds for any extension of contract time, waiver of penalties, or be grounds for any claim.

CONSTRUCTION AIR QUALITY - IDLING RESTRICTIONS (BDE)

Effective: April 1, 2009

<u>Idling Restrictions</u>. The Contractor shall establish truck-staging areas for all diesel powered vehicles that are waiting to load or unload material at the jobsite. Staging areas shall be located where the diesel emissions from the equipment will have a minimum impact on adjacent sensitive receptors. The Department will review the selection of staging areas, whether within or outside the existing highway right-of-way, to avoid locations near sensitive areas or populations to the extent possible. Sensitive receptors include, but are not limited to, hospitals, schools, residences, motels, hotels, daycare facilities, elderly housing and convalescent facilities. Diesel powered engines shall also be located as far away as possible from fresh air intakes, air conditioners, and windows. The Engineer will approve staging areas before implementation.

Diesel powered vehicle operators may not cause or allow the motor vehicle, when it is not in motion, to idle for more than a total of 10 minutes within any 60 minute period, except under any of the following circumstances:

- 1) The motor vehicle has a gross vehicle weight rating of less than 8000 lb (3630 kg).
- 2) The motor vehicle idles while forced to remain motionless because of on-highway traffic, an official traffic control device or signal, or at the direction of a law enforcement official.
- 3) The motor vehicle idles when operating defrosters, heaters, air conditioners, or other equipment solely to prevent a safety or health emergency.
- 4) A police, fire, ambulance, public safety, other emergency or law enforcement motor vehicle, or any motor vehicle used in an emergency capacity, idles while in an emergency or training mode and not for the convenience of the vehicle operator.
- 5) The primary propulsion engine idles for maintenance, servicing, repairing, or diagnostic purposes if idling is necessary for such activity.
- 6) A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order, provided idling is required as part of the inspection.
- 7) When idling of the motor vehicle is required to operate auxiliary equipment to accomplish the intended use of the vehicle (such as loading, unloading, mixing, or processing cargo; controlling cargo temperature; construction operations, lumbering operations; oil or gas well servicing; or farming operations), provided that this exemption does not apply when the vehicle is idling solely for cabin comfort or to operate non-essential equipment such as air conditioning, heating, microwave ovens, or televisions.
- 8) When the motor vehicle idles due to mechanical difficulties over which the operator has no control.
- 9) The outdoor temperature is less than 32 °F (0 °C) or greater than 80 °F (26 °C).

When the outdoor temperature is greater than or equal to 32 °F (0 °C) or less than or equal to 80 °F (26 °C), a person who operates a motor vehicle operating on diesel fuel shall not cause or allow the motor vehicle to idle for a period greater than 30 minutes in any 60 minute period while waiting to weigh, load, or unload cargo or freight, unless the vehicle is in a line of vehicles that regularly and periodically moves forward.

The above requirements do not prohibit the operation of an auxiliary power unit or generator set as an alternative to idling the main engine of a motor vehicle operating on diesel fuel.

<u>Environmental Deficiency Deduction</u>. When the Engineer is notified, or determines that an environmental control deficiency exists based on non-compliance with the idling restrictions, he/she will notify the Contractor, and direct the Contractor to correct the deficiency.

If the Contractor fails to correct the deficiency a monetary deduction will be imposed. The monetary deduction will be \$1,000.00 for each deficiency identified.

DETERMINATION OF THICKNESS (BDE)

Effective: April 1, 2009

Revise Articles 353.12 and 353.13 of the Standard Specifications to Articles 353.13 and 353.14 respectively.

Add the following Article to the Standard Specifications:

"353.12 Tolerance in Thickness. The thickness of base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction, bike paths, and individual locations less than 500 ft (150 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness.

The procedure described in Article 407.10(b) will be followed, except the option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 354.09 of the Standard Specifications to read:

"354.09 Tolerance in Thickness. The thickness of base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated. Temporary construction is defined as those areas constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course widening thickness.

The procedure described in Article 407.10(b) will be followed, except:

(a) The width of a unit shall be the width of the widening along one edge of the pavement.

(b) The length of the unit shall be 1000 ft (300 m).

(c) The option of correcting deficient pavement with additional lift(s) shall not apply."

Revise Article 355.09 of the Standard Specifications to read:

"355.09 Tolerance in Thickness. The thickness of HMA base course pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 500 ft (150 m) long, will be evaluated according to Article 407.10(b). Temporary construction is defined as those areas constructed and removed under the same contract. If the base course cannot be cored for thickness prior to

placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s), and subtract them from the measured core thickness to determine the base course thickness."

Revise Article 356.07 of the Standard Specifications to read:

"356.07 Tolerance in Thickness. The thickness of HMA base course widening pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous area, except for temporary construction; bike paths and individual locations less than 3 ft (1 m) wide or 1000 ft (300 m) long, will be evaluated according to Article 407.10(b) except, the width of a unit shall be the width of the widening along one edge of the pavement and the length of a unit shall be 1000 ft (300 m). Temporary locations are defined as those constructed and removed under the same contract. If the base course widening cannot be cored for thickness prior to placement of the cover layer(s), the Engineer will determine the thickness of the cover layer(s) and subtract them from the measured core thickness to determine the base course widening thickness."

Revise Article 407.10 of the Standard Specifications to read:

"407.10 Tolerance in Thickness. Determination of pavement thickness shall be performed after the pavement surface tests and corrective action have been completed according to Article 407.09. Pay adjustments made for pavement thickness will be in addition to and independent of those made for pavement smoothness. Pavement pay items that individually contain at least 1000 sq yd (840 sq m) of contiguous pavement shall be evaluated with the following exclusions: temporary pavements; variable width pavements; radius returns; short lengths of contiguous pavements less than 500 ft (125 m) in length; and constant width portions of turn lanes less than 500 ft (125 m) in length. Temporary pavements are defined as pavements constructed and removed under the same contract.

The method described in Article 407.10(a), shall be used except for those pavements constructed in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m). The method described in Article 407.10(b) shall be used in areas where access to side streets and entrances necessitates construction in segments less than 1000 ft (300 m).

(a) Percent Within Limits. The percent within limits (PWL) method shall be as follows.

(1) Lots and Sublots. The pavement will be divided into approximately equal lots of not more than 5000 ft (1500 m) in length. When the length of a continuous strip of pavement is 500 ft (150 m) or greater but less than 5000 ft (1500 m), these short lengths of pavement, ramps, turn lanes, and other short sections of continuous pavement will be grouped together to form lots approximately 5000 ft (1500 m) in length. Short segments between structures will be measured continuously with the structure segments omitted. Each lot will be subdivided into ten equal sublots. The width of a sublot and lot will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements. (2) Cores. Cores 2 in. (50 mm) in diameter shall be taken from the pavement by the Contractor, at locations selected by the Engineer. The exact location for each core will be selected at random, but will result in one core per sublot. Core locations will be specified prior to beginning the coring operations.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the core lengths. The cores will be measured with a device supplied by the Department immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples shall be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

(3) Deficient Sublot. When the length of the core in a sublot is deficient by more than ten percent of plan thickness, the Contractor may take three additional cores within that sublot at locations selected at random by the Engineer. If the Contractor chooses not to take additional cores, the pavement in that sublot shall be removed and replaced.

When the three additional cores are taken, the length of those cores will be averaged with the original core length. If the average shows the sublot to be deficient by ten percent or less, no additional action is necessary. If the average shows the sublot to be deficient by more than ten percent, the pavement in that sublot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient sublots to remain in place. For deficient sublots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient sublot is removed and replaced, or additional lifts are placed, the corrected sublot shall be retested for thickness. The length of the new core taken in the sublot will be used in determining the PWL for the lot.

When a deficient sublot is left in place, and no additional lift(s) are placed, no payment will be made for the deficient sublot. The length of the original core taken in the sublot will be used in determining the PWL for the lot.

(4) Deficient Lot. After addressing deficient sublots, the PWL for each lot will be determined. When the PWL of a lot is 60 percent or less, the pavement in that lot shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such deficient lots to remain in place.

 \sum

For deficient lots allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When a deficient lot is removed and replaced, or additional lifts are placed, the corrected lot shall be retested for thickness. The PWL for the lot will then be recalculated based upon the new cores; however, the pay factor for the lot shall be a maximum of 100 percent.

When a deficient lot is left in place, and no additional lift(s) are placed, the PWL for the lot will not be recalculated.

(5) Right of Discovery. When the Engineer has reason to believe the random core selection process will not accurately represent the true conditions of the work, he/she may order additional cores. The additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action. The need for, and location of, additional cores will be determined prior to commencement of coring operations.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, more additional cores shall be taken to determine the limits of the deficient pavement and that area shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the sublot. An acceptable core is a core with a length of at least 90 percent of plan thickness.

For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement.

When the additional cores show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

- (6) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are placed, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness.
- (7) Determination of PWL. The PWL for each lot will be determined as follows.

Definitions:

| <i>xi</i> = | Individual | values | (core | lengths) | under | consideration |
|-------------|------------|--------|-------|----------|-------|---------------|
|-------------|------------|--------|-------|----------|-------|---------------|

n = Number of individual values under consideration (10 per lot)

 \overline{x} = Average of the values under consideration

LSL = Lower Specification Limit (98% of plan thickness)

 Q_{I} = Lower Quality Index

s = Sample Standard Deviation

PWL = Percent Within Limits

Determine \bar{x} for the lot to the nearest two decimal places.

Determine *s* for the lot to the nearest three decimal places using:

$$S = \sqrt{\frac{\sum (x_i - \bar{x})^2}{n-1}} \quad \text{where} \qquad \sum (x_i - \bar{x})^2 = (x_1 - \bar{x})^2 + (x_2 - \bar{x})^2 + \dots + (x_{10} - \bar{x})^2$$

Determine Q_L for the lot to the nearest two decimal places using:

$$\mathbf{Q}_{\mathrm{L}} = \frac{\left(\overline{x} - LSL\right)}{S}$$

Determine PWL for the lot using the Q_L and the following table. For Q_L values less than zero the value shown in the table must be subtracted from 100 to obtain PWL.

(8) Pay Factors. The pay factor (PF) for each lot will be determined, to the nearest two decimal places, using:

PF (in percent) = 55 + 0.5 (PWL)

If \bar{x} for a lot is less than the plan thickness, the maximum PF for that lot shall be 100 percent.

(9) Payment. Payment of incentive or disincentive for pay items subject to the PWL method will be calculated using:

Payment = (((TPF/100)-1) x CUP) x (TOTPAVT - DEFPAVT)

TPF = Total Pay Factor

CUP = Contract Unit Price TOTPAVT = Area of Pavement Subject to Coring DEFPAVT = Area of Deficient Pavement

The TPF for the pavement shall be the average of the PF for all the lots; however, the TPF shall not exceed 102 percent.

Area of Deficient pavement (DEFPAVT) is defined as an area of pavement represented by a sublot deficient by more than ten percent which is left in place with no additional thickness added.

Area of Pavement Subject to Coring (TOTPAVT) is defined as those pavement areas included in lots for pavement thickness determination.

| | PERCENT WITHIN LIMITS | | | | | | |
|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|--|--------------------------------------|
| Quality Index (Q _L)* | Percent Within Limits (PWL) | Quality Index (Q _L)* | Percent Within Limits (PWL) | Quality Index (Q _L)* | Percent Within Limits (PWL) | Quality Index (Q ₁)* | Percent Within Limits (PWL) |
| 0.00 | 50.00 | 0.40 | 65.07 | 0.80 | 78.43 | 1.20 | 88.76 |
| 0.01 | 50.38 | 0.41 | 65.43 | 0.81 | 78.72 | 1.21 | 88.97 |
| 0.02 | 50.77 | 0.42 | 65.79 | 0.82 | 79.02 | 1.22 | 89.17 |
| 0.03 | 51.15 | 0.43 | 66.15 | 0.83 | 79.31 | 1.23 | 89.38 |
| 0.04 | 51.54 | 0.44 | 66.51 | 0.84 | 79.61 | 1.24 | 89.58 |
| 0.05 | 51.92 | 0.45 | 66.87 | · 0.85 | 79.90 | 1.25 | 89.79 |
| 0.06 | 52.30 | 0.46 | 67.22 | 0.86 | 80.19 | 1.26 | 89.99 |
| 0.07 | 52.69 | 0.47 | 67.57 | 0.87 | 80.47 | 1.27 | 90.19 |
| 0.08 | 53.07 | 0.48 | 67.93 | 0.88 | 80.76 | 1.28 | 90.38 |
| 0.09 | 53.46 | 0.49 | 68.28 | 0.89 | 81.04 | 1.29 | 90.58 |
| 0.10 | 53.84 | 0.50 | 68.63 | 0.90 | 81.33 | 1.30 | 90.78 |
| 0.11 | 54.22 | 0.51 | 68.98 | 0.91 | 81.61 | 1.31 | 90.96 |
| 0.12 | 54.60 | 0.52 | 69.32 | 0.92 | 81.88 | 1.32 | 91.15 |
| 0.13 | 54.99 | 0.53 | 69.67 | 0.93 | 82.16 | 1.33 | 91.33 |
| 0.14 | 55.37 | 0.54 | 70.01 | 0.94 | 82.43 | 1.34 | 91.52 |
| 0.15 | 55.75 | 0.55 | 70.36 | 0.95 | 82.71 | 1.35 | 91.70 |
| 0.16 | 56.13 | 0.56 | 70.70 | 0.96 | 82.97 | 1.36 | 91.87 |
| 0.17 | 56.51 | 0.57 | 71.04 | 0.97 | 83.24 | 1.37 | 92.04 |
| 0.18 | 56.89 | 0.58 | 71.38 | 0.98 | 83.50 | 1.38 | 92.22 |
| 0.19 | 57.27 | 0.59 | 71.72 | 0.99 | 83.77 | 1.39 | 92.39 |
| 0.20 | 57.65 | 0.60 | 72.06 | 1.00 | 84.03 | 1.40 | 92.56 |
| 0.21 | 58.03 | 0.61 | 72.39 | 1.01 | 84.28 | 1.41 | 92.72 |
| 0.22 | 58.40 | 0.62 | 72.72 | 1.02 | 84.53 | 1.42 | 92.88 |
| 0.23 | 58.78 | 0.63 | 73.06 | 1.03 | 84.79 | 1.43 | 93.05 |
| 0.24 | 59.15 | 0.64 | 73.39 | 1.04 | 85.04 | 1.44 | 93.21 |
| 0.25 | 59.53 | 0.65 | 73.72 | 1.05 | 85.29 | 1.45 | 93.37 |
| 0.26 | 59.90 | 0.66 | 74.04 | 1.06 | 85.53 | 1.46 | 93.52 |
| 0.27 | 60.28 | 0.67 | 74.36 | 1.07 | 85.77 | 1.47 | 93.67 |
| 0.28 | 60.65 | 0.68 | 74.69 | 1.08 | 86.02 | 1.48 | 93.83 |
| 0.29 | 61.03 | 0.69 | 75.01 | 1.09 | 86.26 | 1.49 | 93.98 |
| 0.30 | 61.40 | 0.70 | 75.33 | 1.10 | 86.50 | 1.50 | 94.13 |
| 0.31 | 61.77 | 0.71 | 75.64 | 1.11 | 86.73 | 1.51 | 94.27 |
| 0.32 | 62.14 | 0.72 | 75.96 | 1.12 | 86.96 | 1.52 | 94.41 |
| 0.33 | 62.51 | 0.73 | 76.27 | 1.13 | 87.20 | 1.53 | 94.54 |
| 0.34 | 62.88 | 0.74 | 76.59 | 1.14 | 87.43 | 1.54 | 94.68 |
| 0.35 | 63.25 | 0.75 | 76.90 | 1.15 | 87.66 | 1.55 | 94.82 |
| 0.36 | 63.61 | 0.76 | 77.21 | 1.16 | 87.88 | 1.56 | 94.95 |
| 0.37 | 63.98 | 0.77 | 77.51 | 1.17 | 88.10 | 1.57 | 95.08 |
| 0.38 | 64.34 | 0.78 | 77.82 | 1.18 | 88.32 | 1.58 | 95.20 |
| 0.39 | 64.71 | 0.79 | 78.12 | 1.19 | 88.54 | 1.59 | 95.33 |

*For Q_L values less than zero, subtract the table value from 100 to obtain PWL

| PERCENT WITHIN LIMITS (continued) | | | | | |
|--|---|--------------------------------------|---|--------------------------------------|--|
| Quality Index (Q _L)* | Percent Within Limits (PWL) | Quality Index (Q∟)* | Percent Within Limits (PWL) | Quality Index (Q∟)* | Percent Within Limits (PWL) |
| 1.60 1.61 1.62 1.63 1.64 | 95.46 95.58 95.70 95.81 95.93 | 2.00 2.01 2.02 2.03 2.04 | 98.83 98.88 98.92 98.97 99.01 | 2.40 2.41 2.42 2.43 2.44 | 99.89 99.90 99.91 99.91 99.92 |
| 1.65 1.66 1.67 1.68 1.69 | 96.05 96.16 96.27 96.37 96.48 | 2.05 2.06 2.07 2.08 2.09 | 99.06 99.10 99.14 99.18 99.22 | 2.45 2.46 2.47 2.48 2.49 | 99.93 99.94 99.94 99.95 99.95 |
| 1.70 1.71 1.72 1.73 1.74 | 96.59 96.69 96.78 96.88 96.97 | 2.10 2.11 2.12 2.13 2.14 | 99.26 99.29 99.32 99.36 99.39 | 2.50 2.51 2.52 2.53 2.54 | 99.96 99.96 99.97 99.97 99.98 |
| 1.75 1.76 1.77 1.78 1.79 | 97.07 97.16 97.25 97.33 97.42 | 2.15 2.16 2.17 2.18 2.19 | 99.42 99.45 99.48 99.50 99.53 | 2.55 2.56 2.57 2.58 2.59 | 99.98 99.98 99.98 99.99 99.99 99.99 |
| 1.80 1.81 1.82 1.83 1.84 | 97.51 97.59 97.67 97.75 97.83 | 2.20 2.21 2.22 2.23 2.22 | 99.56 99.58 99.61 99.63 99.66 | 2.60 2.61 2.62 2.63 2.64 | 99.99 99.99 99.99 100.00 100.00 |
| 1.85 1.86 1.87 1.88 1.89 | 97.91 97.98 98.05 98.11 98.18 | 2.25 2.26 2.27 2.28 2.29 | 99.68 99.70 99.72 99.73 99.75 | ≥ 2.65 | 100.00 |
| 1.90 1.91 1.92 1.93 1.94 | 98.25 98.31 98.37 98.44 98.50 | 2.30 2.31 2.32 2.33 2.34 | 99.77 99.78 99.80 99.81 99.83 | | |
| 1.95 1.96 1.97 1.98 1.99 | 98.56 98.61 98.67 98.72 98.78 | 2.35 2.36 2.37 2.38 2.39 | 99.84 99.85 99.86 99.87 99.88 | | |

*For Q_{L} values less than zero, subtract the table value from 100 to obtain PWL

- (b) Minimum Thickness. The minimum thickness method shall be as follows.
 - (1) Length of Units. The length of a unit will be a continuous strip of pavement 500 ft (150 m) in length.
 - (2) Width of Units. The width of a unit will be the width from the pavement edge to the adjacent lane line, from one lane line to the next, or between pavement edges for single-lane pavements.
 - (3) Thickness Measurements. Pavement thickness will be based on 2 in. (50 mm) diameter cores.

Cores shall be taken from the pavement by the Contractor at locations selected by the Engineer. When determining the thickness of a unit, one core shall be taken in each unit.

The Contractor and the Engineer shall witness the coring operations, as well as the measuring and recording of the cores. Core measurements will be determined immediately upon removal from the core bit and prior to moving to the next core location. Upon concurrence of the length, the core samples may be disposed of according to Article 202.03.

Upon completion of each core, all water shall be removed from the hole and the hole then filled with a rapid hardening mortar or concrete. The material shall be mixed in a separate container, placed in the hole, consolidated by rodding, and struck-off flush with the adjacent pavement.

- (4) Unit Deficient in Thickness. In considering any portion of the pavement that is deficient, the entire limits of the unit will be used in computing the deficiency or determining the remedial action required.
- (5) Thickness Equals or Exceeds Specified Thickness. When the thickness of a unit equals or exceeds the specified plan thickness, payment will be made at the contract unit price per square yard (square meter) for the specified thickness.
- (6) Thickness Deficient by Ten Percent or Less. When the thickness of a unit is less than the specified plan thickness by ten percent or less, a deficiency deduction will be assessed against payment for the item involved. The deficiency will be a percentage of the contract unit price as given in the following table.

| Percent Deficiency (of Plan Thickness) | Percent Deduction (of Contract Unit Price) | | |
|---|---|--|--|
| 0.0 to 2.0 | 0 | | |
| 2.1 to 3.0 | 20 | | |
| 3.1 to 4.0 | 28 | | |
| 4.1 to 5.0 | 32 | | |
| 5.1 to 7.5 | 43 | | |
| 7.6 to 10.0 | 50 | | |

(7) Thickness Deficient by More than Ten Percent. When a core shows the pavement to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient pavement. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient pavement. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient pavement will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient pavement shall be removed and replaced; however, when requested in writing by the Contractor, the Engineer may permit in writing such areas of deficient pavement to remain in place. For deficient areas allowed to remain in place, additional lift(s) may be placed, at no additional cost to the Department, to bring the deficient pavement to plan thickness when the Engineer determines grade control conditions will permit such lift(s). The area(s) to be overlaid, material to be used, thickness(es) of the lift(s), and method of placement will be approved by the Engineer.

When an area of deficient pavement is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness. The thickness of the new core will be used to determine the pay factor for the corrected area.

When an area of deficient pavement is left in place, and no additional lift(s) are placed, no payment will be made for the deficient pavement. In addition, an amount equal to two times the contract cost of the deficient pavement will be deducted from the compensation due the Contractor.

The thickness of the first acceptable core on each side of the core more than ten percent deficient will be used to determine any needed pay adjustments for the remaining areas on each side of the area deficient by more than ten percent. The pay adjustment will be determined according to Article 407.10(b)(6).

(8) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. These additional cores shall be taken at specific locations determined by the Engineer. The Engineer will provide notice to the Contractor containing an explanation of the reasons for his/her action.

When the additional cores show the pavement to be deficient by more than ten percent of plan thickness, the procedures outlined in Article 407.10(b)(7) shall be followed, except the Engineer will determine the additional core locations.

When the additional cores, ordered by the Engineer, show the pavement to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04.

(9) Profile Index Adjustment. After any area of pavement is removed and replaced or any additional lifts are added, the corrected areas shall be retested for pavement smoothness and any necessary profile index adjustments and/or corrections will be made based on these final profile readings prior to retesting for thickness."

Revise Article 482.06 of the Standard Specifications to read:

"482.06 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. When the contract includes square yards (square meters) as the unit of measurement for HMA shoulder, thickness determinations shall be made according to Article 407.10(b)(3) and the following.

- (a) Length of the Units. The length of a unit shall be a continuous strip of shoulder 2500 ft (750 m) long.
- (b) Width of the Units. The width of the unit shall be the full width of the shoulder.
- (c) Thickness Deficient by More than Ten Percent. When a core shows the shoulder to be deficient by more than ten percent of plan thickness, additional cores shall be taken on each side of the deficient core, at stations selected by the Contractor and offsets selected by the Engineer, to determine the limits of the deficient shoulder. No core shall be located within 5 ft (1.5 m) of a previous core obtained for thickness determination. The first acceptable core obtained on each side of a deficient core will be used to determine the length of the deficient shoulder. An acceptable core is a core with a thickness of at least 90 percent of plan thickness. The area of deficient shoulder will be defined using the length between two acceptable cores and the full width of the unit. The area of deficient shoulder shall be brought to specified thickness by the addition of the applicable mixture, at no additional cost to the Department and subject to the lift thickness requirements of Article 312.05, or by removal and replacement with a new mixture. However, the surface elevation of the completed shoulder shall not exceed by more than 1/8 in. (3 mm) the surface elevation of the adjacent pavement. When requested in writing by the Contractor, the Engineer may permit in writing such thin shoulder to remain in place. When an area of thin shoulder is left in place, and no additional lift(s) are placed, no payment will be made for the thin shoulder. In addition,

an amount equal to two times the contract unit price of the shoulder will be deducted from the compensation due the Contractor.

When an area of deficient shoulder is removed and replaced, or additional lifts are placed, the corrected pavement shall be retested for thickness.

(d) Right of Discovery. When the Engineer has reason to believe any core location does not accurately represent the true conditions of the work, he/she may order additional cores. When the additional cores, ordered by the Engineer, show the shoulder to be at least 90 percent of plan thickness, the additional cores will be paid for according to Article 109.04. When the additional core shows the shoulder to be less than 90 percent of plan thickness, the procedure in (c), above shall be followed."

Revise Article 483.07 of the Standard Specifications to read:

"483.07 Tolerance in Thickness. The shoulder shall be constructed to the thickness shown on the plans. Thickness determinations shall be made according to Article 482.06 except the option of correcting deficient pavement with additional lift(s) shall not apply."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000 Revised: January 1, 2011

<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.

<u>STATE OBLIGATION</u>. 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.

<u>OVERALL GOAL SET FOR THE DEPARTMENT</u>. 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.

<u>CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR</u>. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of

DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform <u>20.00</u>% of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set forth in this Special Provision:

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

<u>DBE LOCATOR REFERENCES</u>. Bidders may consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217)785-4611, or by visiting the Department's web site at www.dot.il.gov.

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

- (a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.
- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:

(1) The names and addresses of DBE firms that will participate in the contract;

- (2) A description, including pay item numbers, of the work each DBE will perform;
- (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
- (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
- (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
- (6) If the contract goal is not met, evidence of good faith efforts.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document the good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere pro forma efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.

- (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
- (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
- (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

(7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

(8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

(b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination.

(c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217)785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation and/or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for reconsideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

questions of commercially useful functions as it affects the work. Specific counting guidelines are provided in 49 CFR part 26.55, the provisions of which govern over the summary contained herein.

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.
- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contact. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owneroperator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials or supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

<u>CONTRACT COMPLIANCE</u>. Compliance with this Special Provision is an essential part of the contract. The Department is prohibited by federal regulations from crediting the participation of a DBE included in the Utilization Plan toward either the contract goal or the Department's overall

goal until the amount to be applied toward the goals has been paid to the DBE. The following administrative procedures and remedies govern the compliance by the Contractor with the contractual obligations established by the Utilization Plan. After approval of the Utilization Plan and award of the contract, the Utilization Plan and individual DBE Participation Statements become part of the contract. If the Contractor did not succeed in obtaining enough DBE participation to achieve the advertised contract goal, and the Utilization Plan was approved and contract awarded based upon a determination of good faith, the total dollar value of DBE work calculated in the approved Utilization Plan as a percentage of the awarded contract value shall become the amended contract goal.

- (a) No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) The Contractor must notify and obtain written approval from the Department's Bureau of Small Business Enterprises prior to replacing a DBE or making any change in the participation of a DBE. Approval for replacement will be granted only if it is demonstrated that the DBE is unable or unwilling to perform. The Contractor must make every good faith effort to find another certified DBE subcontractor to substitute for the original DBE. The good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the original DBE, to the extent needed to meet the contract goal.
- (c) Any deviation from the DBE condition-of-award or contract specifications must be approved, in writing, by the Department. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract.
- (d) In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
 - (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (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 reasonably competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted.
- (f) If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (g) All work indicated for performance by an approved DBE shall be performed, managed, and supervised by the DBE executing the Participation Statement. The Contractor shall not terminate for convenience a DBE listed in the Utilization Plan and then perform the work of the terminated DBE with its own forces, those of an affiliate or those of another subcontractor, whether DBE or not, without first obtaining the written consent of the Bureau of Small Business Enterprises to amend the Utilization Plan. The Contractor shall notify the Bureau of Small Business Enterprises of any termination for reasons other than convenience, and shall obtain approval for inclusion of the substitute DBE in the Utilization Plan. If good faith efforts following a termination of a DBE for cause are not successful, the Contractor shall contact the Bureau of Small Business Enterprises and provide a full accounting of the efforts undertaken to obtain substitute DBE participation. The Bureau of Small Business Enterprises will evaluate the good faith efforts in light of all circumstances surrounding the performance status of the contract, and determine whether the contract goal should be amended.
- (h) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (i) of this part.

- (i) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (j) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (BDE)

Effective: April 1, 2011

Add the following to Article 603.02 of the Standard Specifications:

- (i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note 1)1030
- (j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

| Property | Test Method | Requirement |
|-----------------------------|-------------|----------------|
| Durometer Hardness, Shore A | ASTM D 2240 | 75 ±15 |
| Tensile Strength, psi (kPa) | ASTM D 412 | 300 (2000) min |
| Elongation, percent | ASTM D 412 | 90 min |
| Specific Gravity | ASTM D 792 | 1.0 - 1.3 |
| Brittleness, °F (°C) | ASTM D 746 | -40 (-40)" |

Note 2. The rubber material shall be according to the following.

Revise Article 603.07 of the Standard Specifications to read:

"603.07 Protection Under Traffic. After the casting has been adjusted and Class SI concrete has been placed, the work shall be protected by a barricade and two lights for at least 72 hours.

When castings are under traffic before the final surfacing operation has been started, properly sized temporary ramps shall be placed around the drainage and/or utility castings according to the following methods.

- (a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

| Dimension | Requirement |
|---------------------|---|
| Inside Opening | Outside dimensions of casting + 1 in. (25 mm) |
| Thickness at inside | Height of casting \pm 1/4 in. (6 mm) |

| edge | |
|---------------------|------------------------|
| Thickness at | 1/4 in. (6 mm) max. |
| outside edge | |
| Width, measured | 8 1/2 in. (215 mm) min |
| from inside opening | |
| to outside edge | |

Placement shall be according to the manufacturer's specifications.

Temporary ramps for castings shall remain in place until surfacing operations are undertaken within the immediate area of the structure. Prior to placing the surface course, the temporary ramp shall be removed. Excess material shall be disposed of according to Article 202.03."

EQUIPMENT RENTAL RATES (BDE)

Effective: August 2, 2007 Revised: January 2, 2008

Replace the second and third paragraphs of Article 105.07(b)(4)a. of the Standard Specifications with the following:

"Equipment idled which cannot be used on other work, and which is authorized to standby on the project site by the Engineer, will be paid for according to Article 109.04(b)(4)."

Replace Article 109.04(b)(4) of the Standard Specifications with the following:

- "(4) Equipment. Equipment used for extra work shall be authorized by the Engineer. The equipment shall be specifically described, be of suitable size and capacity for the work to be performed, and be in good operating condition. For such equipment, the Contractor will be paid as follows.
 - a. Contractor Owned Equipment. Contractor owned equipment will be paid for by the hour using the applicable FHWA hourly rate from the "Equipment Watch Rental Rate Blue Book" (Blue Book) in effect when the force account work begins. The FHWA hourly rate is calculated as follows.

FHWA hourly rate = (monthly rate/176) x (model year adj.) x (Illinois adj.) + EOC

Where: EOC = Estimated Operating Costs per hour (from the Blue Book)

The time allowed will be the actual time the equipment is operating on the extra work. For the time required to move the equipment to and from the site of the extra work and any authorized idle (standby) time, payment will be made at the following hourly rate: 0.5 x (FHWA hourly rate - EOC).

All time allowed shall fall within the working hours authorized for the extra work.

The rates above include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul and maintenance of any kind, depreciation, storage, overhead, profits, insurance, and all incidentals. The rates do not include labor.

The Contractor shall submit to the Engineer sufficient information for each piece of equipment and its attachments to enable the Engineer to determine the proper equipment category. If a rate is not established in the Blue Book for a particular piece of equipment, the Engineer will establish a rate for that piece of equipment that is consistent with its cost and use in the industry. b. Rented Equipment. Whenever it is necessary for the Contractor to rent equipment to perform extra work, the rental and transportation costs of the equipment plus five percent for overhead will be paid. In no case shall the rental rates exceed those of established distributors or equipment rental agencies.

All prices shall be agreed to in writing before the equipment is used."

FRICTION AGGREGATE (BDE)

Effective: January 1, 2011

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

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

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

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

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

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

| Use | Mixture | Aggregates Allowed | 1 | |
|------------------|------------------------------------|--|---|---|
| HMA | Binder | Allowed Alone or in | Combination: | |
| High ESAL | IL-25.0, IL-19.0, or IL-19.0L | Crushed Gravel | 21 | |
| | SMA Binder | Carbonate Crushed Crystalline Crushed | | |
| | | Crushed Sandstone Crushed Slag (ACB | | |
| | | Crushed Concrete ^{3/} | •) | _ |
| HMA High ESAL | C Surface and | Allowed Alone or in | Combination: | |
| Low ESAL | Leveling Binder IL-12.5,IL-9.5, | Crushed Gravel Carbonate Crushed | Stone ^{2/} | |
| | or IL-9.5L | Crystalline Crushed | Stone | |
| | SMA Ndesign 50 | Crushed Sandstone Crushed Slag (ACB | F) | |
| | Surface | Crushed Steel Slag | | |
| HMA | D Surface and | Allowed Alone or in | Combination: | |
| High ESAL | Leveling Binder | Crushed Gravel | | |
| | IL-9.5 | Carbonate Crushed | · | |
| | SMA | Crystalline Crushed | | |
| | Ndesign 50 Surface | Crushed Slag (ACE Crushed Steel Slag | 5 ^{5/} | |
| | | Crushed Concrete ^{3/} | | |
| | | | - All | |
| | | Other Combinations | | |
| | | Up to 25% Limestone | With Dolomite | |
| | | 50% Limestone | Any Mixture D | - |
| | | | aggregate other than Dolomite | |
| | | 75% Limestone | Crushed Slag (ACBF) ^{5/} or | |

96

•

•

| Use | Mixture | Aggregates Allowed | |
|------------------|---|--|--|
| HMA High ESAL | E Surface IL-12.5 or IL-9.5 SMA Ndesign 80 Surface | Allowed Alone or in Combination: Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) ^{5/} Crushed Steel Slag ^{5/} Crushed Concrete ^{3/} No Limestone. | |
| | | <u>Up to</u> 50% Dolomite ^{2/} | <i>With</i> Any Mixture E |
| | | 75% Dolomite ^{2/} | aggregate Crushed Sandstone, Crushed Slag (ACBF) ^{5/} , Crushed Steel Slag ^{5/} , or Crystalline Crushed Stone |
| | | 75% Crushed Gravel or Crushed Concrete ^{3/} | Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF) ^{5/} , or Crushed Steel Slag ^{5/} |
| HMA High ESAL | F Surface IL-12.5 or IL-9.5 SMA Ndesign 80 Surface | Allowed Alone or in Combination:Crystalline Crushed StoneCrushed SandstoneCrushed Slag (ACBF) ^{5/} Crushed Steel Slag ^{5/} No Limestone.Other Combinations Allowed:Up toWith | |
| | | | |

| Use | Mixture | Aggregates Allowed | Aggregates Allowed | | | |
|-----|---------|---|---|--|--|--|
| | | 50% Crushed Gravel, Crushed Concrete ^{3/} , or Dolomite ^{2/} | Crushed Sandstone, Crushed Slag (ACBF) ^{5/} , Crushed Steel Slag ^{5/} , or Crystalline Crushed Stone | | | |

1/ Crushed steel slag allowed in shoulder surface only.

2/ Carbonate crushed stone shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.

3/ Crushed concrete will not be permitted in SMA mixes.

4/ Crushed steel slag shall not be used as leveling binder.

5/ When either slag is used, the blend percentages listed shall be by volume."

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

Effective: April 1, 2009 Revised: July 1, 2009

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

<u>General</u>. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and work added by adjusted unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Added work paid for by time and materials will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

- (a) Categories of Work.
 - (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
 - (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
 - (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.
- (b) Fuel Usage Factors.

| English Units | | |
|--|--------|---------------------|
| Category | Factor | Units |
| A - Earthwork | 0.34 | gal / cu yd |
| B – Subbase and Aggregate Base courses | 0.62 | gal / ton |
| C – HMA Bases, Pavements and Shoulders | 1.05 | gal / ton |
| D – PCC Bases, Pavements and Shoulders | 2.53 | gal / cu yd |
| E – Structures | 8.00 | gal / \$1000 |
| Metric Units | | |
| Category | Factor | Units |
| A - Earthwork | 1.68 | liters / cu m |
| B – Subbase and Aggregate Base courses | 2.58 | liters / metric ton |
| C – HMA Bases, Pavements and Shoulders | 4.37 | liters / metric ton |
| D – PCC Bases, Pavements and Shoulders | 12.52 | liters / cu m |
| E – Structures | 30.28 | liters / \$1000 |
| | | |

(c) Quantity Conversion Factors.

| Category | Conversion | Factor |
|----------|------------------------------------|--|
| В | sq yd to ton sq m to metric ton | 0.057 ton / sq yd / in depth 0.00243 metric ton / sq m / mm depth |
| C | sq yd to ton sq m to metric ton | 0.056 ton / sq yd / in depth 0.00239 m ton / sq m / mm depth |
| D | sq yd to cu yd sq m to cu m | 0.028 cu yd / sq yd / in depth 0.001 cu m / sq m / mm depth |

Method of Adjustment. Fuel cost adjustments will be computed as follows.

 $CA = (FPI_P - FPI_L) \times FUF \times Q$

- Where: CA = Cost Adjustment, \$
 - FPI_P = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)
 - FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting, \$/gal (\$/liter)
 - FUF = Fuel Usage Factor in the pay item(s) being adjusted
 - Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

Progress Payments. Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Final Quantities. Upon completion of the work and determination of final pay quantities, an adjustment will be prepared to reconcile any differences between estimated quantities previously paid and the final quantities. The value for the balancing adjustment will be based on a weighted average of FPI_P and Q only for those months requiring the cost adjustment. The cost adjustment will be applicable to the final measured quantities of all applicable pay items.

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

Ó2

Percent Difference = $\{(FPI_L - FPI_P) \div FPI_L\} \times 100$

Return With Bid

ILLINOIS DEPARTMENT OF TRANSPORTATION

OPTION FOR FUEL COST ADJUSTMENT

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

Contract No.:

Company Name:_____

Contractor's Option:

Is your company opting to include this special provision as part of the contract plans for the following categories of work?

| Signature: | | | Date: |
|------------|-------------------------------------|-----|-------|
| Category E | Structures | Yes | |
| Category D | PCC Bases, Pavements and Shoulders | Yes | |
| Category C | HMA Bases, Pavements and Shoulders | Yes | |
| Category B | Subbases and Aggregate Base Courses | Yes | |
| Category A | Earthwork. | Yes | |

HOT-MIX ASPHALT – ANTI-STRIPPING ADDITIVE (BDE)

Effective: November 1, 2009

Revise the first and second paragraphs of Article 1030.04(c) of the Standard Specifications to read:

"(c) Determination of Need for Anti-Stripping Additive. The mixture designer shall determine if an additive is needed in the mix to prevent stripping. The determination will be made on the basis of tests performed according to Illinois Modified AASHTO T 283. To be considered acceptable by the Department as a mixture not susceptible to stripping, the conditioned to unconditioned split tensile strength ratio (TSR) shall be equal to or greater than 0.85 for 6 in. (150 mm) specimens. Mixtures, either with or without an additive, with TSRs less than 0.85 for 6 in. (150 mm) specimens will be considered unacceptable. Also, the conditioned tensile strength for mixtures containing an anti-strip additive shall not be lower than the original conditioned tensile strength determined for the same mixture without the anti-strip additive.

If it is determined that an additive is required, the additive may be hydrated lime, slaked quicklime, or a liquid additive, at the Contractor's option."

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

<u>Description</u>. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

<u>Quality Control/Quality Assurance (QC/QA)</u>. Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 2 in. (50 mm), from each pavement edge. (i.e. for a 4 in. (100 mm) lift the near edge of the density gauge or core barrel shall be within 4 in. (100 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. Confined Edge. Each confined edge density shall be represented by a oneminute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

| "Mixture Composition | Parameter | Individual Test (includes confined edges) | Unconfined Edge Joint Density Minimum |
|-------------------------------|-------------------|--|---|
| IL-9.5, IL-12.5 | Ndesign ≥ 90 | 92.0 - 96.0% | 90.0% |
| IL-9.5,IL-9.5L, IL-12.5 | Ndesign < 90 | 92.5 – 97.4% | 90.0% |
| IL-19.0, IL-25.0 | Ndesign ≥ 90 | 93.0 - 96.0% | 90.0% |
| IL-19.0, IL-19.0L, IL-25.0 | Ndesign < 90 | 93.0 – 97.4% | 90.0% |
| SMA | Ndesign = 50 & 80 | 93.5 - 97.4% | 91.0% |
| All Other | Ndesign = 30 | 93.0 - 97.4% | 90.0%" |

HOT-MIX ASPHALT – DROP-OFFS (BDE)

Effective: January 1, 2010

Revise the third paragraph of Article 701.07 of the Standard Specifications to read:

"At locations where construction operations result in a differential in elevation exceeding 3 in. (75 mm) between the edge of pavement or edge of shoulder within 3 ft (900 mm) of the edge of the pavement and the earth or aggregate shoulders, Type I or II barricades or vertical panels shall be placed at 100 ft (30 m) centers on roadways where the posted speed limit is 45 mph or greater and at 50 ft (15 m) centers on roadways where the posted speed limit is less than 45 mph."

100

HOT-MIX ASPHALT - FINE AGGREGATE (BDE)

Effective: April 1, 2010

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

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

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

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

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

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

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

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

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

LIQUIDATED DAMAGES (BDE)

Effective: April 1, 2009 Revised: April 1, 2011

Revise the table in Article 108.09 of the Standard Specifications to read:

| "Schedule of Deductions for Each Day of Overrun in Contract Time | | | |
|---|--|---|---|
| Original Contract Amount | | Daily Charges | |
| From More Than | To and Including | Calendar Day | Work Day |
| \$0 100,000 500,000 1,000,000 3,000,000 6,000,000 | \$ 100,000 500,000 1,000,000 3,000,000 6,000,000 12,000,000 | \$ 475 750 1,025 1,275 1,425 2,300 | \$ 675 1,050 1,425 1,725 2,000 3,450 |
| 12,000,000 | And over | 5,800 | 8,125" |

102

METAL HARDWARE CAST INTO CONCRETE (BDE)

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

Add the following to Article 503.02 of the Standard Specifications:

"(g) Metal Hardware Cast into Concrete......1006.13"

Add the following to Article 504.02 of the Standard Specifications:

"(j) Metal Hardware Cast into Concrete......1006.13"

Revise Article 1006.13 of the Standard Specifications to read:

"1006.13 Metal Hardware Cast into Concrete. Unless otherwise noted, all steel hardware cast into concrete, such as inserts, brackets, cable clamps, metal casings for formed holes, and other miscellaneous items, shall be galvanized according to AASHTO M 232 or AASHTO M 111. Aluminum inserts will not be allowed. Zinc alloy inserts shall be according to ASTM B 86, Alloys 3, 5, or 7.

The inserts shall be UNC threaded type anchorages having the following minimum certified proof load.

| Insert Diameter | Proof Load |
|-----------------|--------------------|
| 5/8 in. (16 mm) | 6600 lb (29.4 kN) |
| 3/4 in. (19 mm) | 6600 lb (29.4 kN) |
| 1 in. (25 mm) | 9240 lb (41.1 kN)" |

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM / EROSION AND SEDIMENT CONTROL DEFICIENCY DEDUCTION (BDE)

Effective: April 1, 2007 Revised: November 1, 2009

Revise Article 105.03(a) of the Standard Specifications to read:

"(a) National Pollutant Discharge Elimination System (NPDES) / Erosion and Sediment Control Deficiency Deduction. When the Engineer is notified or determines an erosion and/or sediment control deficiency(s) exists, or the Contractor's activities represents a violation of the Department's NPDES permits, the Engineer will notify and direct the Contractor to correct the deficiency within a specified time. The specified time, which begins upon notification to the Contractor, will be from 1/2 hour to 1 week based on the urgency of the situation and the nature of the work effort required. The Engineer will be the sole judge.

A deficiency may be any lack of repair, maintenance, or implementation of erosion and/or sediment control devices included in the contract, or any failure to comply with the conditions of the Department's NPDES permits. A deficiency may also be applied to situations where corrective action is not an option such as the failure to participate in a jobsite inspection of the project, failure to install required measures prior to initiating earth moving operations, disregard of concrete washout requirements, or other disregard of the NPDES permit.

If the Contractor fails to correct a deficiency within the specified time, a daily monetary deduction will be imposed for each calendar day or portion of a calendar day until the deficiency is corrected to the satisfaction of the Engineer. The calendar day(s) will begin with notification to the Contractor and end with the Engineer's acceptance of the correction. The base value of the daily monetary deduction is \$1000.00 and will be applied to each location for which a deficiency exists. The value of the deficiency deduction assessed for each infraction will be determined by multiplying the base value by a Gravity Adjustment Factor provided in Table A. Except for failure to participate in a required jobsite inspection of the project prior to initiating earthmoving operations which will be based on the total acreage of planned disturbance at the following multipliers: <5 Acres: 1; 5-10 Acres: 2; >10-25 Acres: 3; >25 Acres: 5. For those deficiencies where corrective action was not an option, the monetary deduction will be immediate and will be valued at one calendar day multiplied by a Gravity Adjustment Factor.

| Table A | | | | |
|---|------------------------------------|--|-----------|------------|
| Deficiency Deduction Gravity Adjustment Factors | | | | |
| Types of Violations | Soil Disturbed and Not Permanently | | | |
| | Stabilized At Time of Violation | | | • |
| | < 5 | 5 - 10 | >10 - 25 | > 25 |
| | Acres | Acres | Acres | Acres |
| Failure to Install or Properly | 0.1 - 0.5 | 0.2 - 1.0 | 0.5 - 2.5 | 1.0 - 5 |
| Maintain BMP | | | · · | |
| Careless Destruction of BMP | 0.2 - 1 | 0.5 - 2.5 | 1.0 - 5. | 1.0 - 5 |
| Intrusion into Protected Resource | 1.0 - 5 | 1.0 - 5 | 2.0 - 10 | 2.0 - 10 |
| Failure to properly manage | 0.2 - 1 | 0.2 - 1 | 0.5 - 2.5 | 1.0 - 5 |
| Chemicals, Concrete Washouts or | | | | |
| Residuals, Litter or other Wastes | | | | |
| Improper Vehicle and Equipment | 0.1 - 0.5 | 0.2 - 1 | 0.2 - 1 | 0.5 - 2.5 |
| Maintenance, Fueling or Cleaning | | | | |
| Failure to Provide or Update | 0.2 - 1 | 0.5 - 2.5 | 1.0 - 5 | 1.0 - 5 |
| Written or Graphic Plans Required | | 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1 | | |
| by SWPPP | | | | |
| Failure to comply with Other | 0.1 - 0.5 | 0.2 - 1 | 0.2 - 1 | 0.5 - 2.5" |
| Provisions of the NPDES Permit | | | · . | |

PAVEMENT MARKING REMOVAL (BDE)

Effective: April 1, 2009

Add the following to the end of the first paragraph of Article 783.03(a) of the Standard Specifications:

"The use of grinders will not be allowed on new surface courses."

į

PAYMENTS TO SUBCONTRACTORS (BDE)

Effective: June 1, 2000 Revised: January 1, 2006

Federal regulations found at 49 CFR §26.29 mandate the Department to establish a contract clause to require Contractors to pay subcontractors for satisfactory performance of their subcontracts and to set the time for such payments.

State law also addresses the timing of payments to be made to subcontractors and material suppliers. Section 7 of the Prompt Payment Act, 30 ILCS 540/7, requires that when a Contractor receives any payment from the Department, the Contractor shall make corresponding, proportional payments to each subcontractor and material supplier performing work or supplying material within 15 calendar days after receipt of the Department payment. Section 7 of the Act further provides that interest in the amount of two percent per month, in addition to the payment due, shall be paid to any subcontractor or material supplier by the Contractor if the payment required by the Act is withheld or delayed without reasonable cause. The Act also provides that the time for payment required and the calculation of any interest due applies to transactions between subcontractors and lower-tier subcontractors and material suppliers throughout the contracting chain.

This Special Provision establishes the required federal contract clause, and adopts the 15 calendar day requirement of the State Prompt Payment Act for purposes of compliance with the federal regulation regarding payments to subcontractors. This contract is subject to the following payment obligations.

When progress payments are made to the Contractor according to Article 109.07 of the Standard Specifications, the Contractor shall make a corresponding payment to each subcontractor and material supplier in proportion to the work satisfactorily completed by each subcontractor and for the material supplied to perform any work of the contract. The proportionate amount of partial payment due to each subcontractor and material supplier throughout the contracting chain shall be determined by the quantities measured or otherwise determined as eligible for payment by the Department and included in the progress payment to the Contractor. Subcontractors and material suppliers shall be paid by the Contractor within 15 calendar days after the receipt of payment from the Department. The Contractor shall not hold retainage from the subcontractors. These obligations shall also apply to any payments made by subcontractors and material suppliers to their subcontractors and material suppliers; and to all payments made to lower tier subcontractors and material suppliers throughout the contracting chain. Any payment or portion of a payment subject to this provision may only be withheld from the subcontractor or material supplier to whom it is due for reasonable cause.

This Special Provision does not create any rights in favor of any subcontractor or material supplier against the State or authorize any cause of action against the State on account of any payment, nonpayment, delayed payment, or interest claimed by application of the State Prompt Payment Act. The Department will not approve any delay or postponement of the 15 day requirement except for reasonable cause shown after notice and hearing pursuant to Section

7(b) of the State Prompt Payment Act. State law creates other and additional remedies available to any subcontractor or material supplier, regardless of tier, who has not been paid for work properly performed or material furnished. These remedies are a lien against public funds set forth in Section 23(c) of the Mechanics Lien Act, 770 ILCS 60/23(c), and a recovery on the Contractor's payment bond according to the Public Construction Bond Act, 30 ILCS 550.

PLANTING PERENNIAL PLANTS (BDE)

Effective: January 1, 2011

Revise Section 254 of the Standard Specifications to read:

"SECTION 254. PLANTING PERENNIAL PLANTS

254.01 Description. This work shall consist of furnishing, transporting, and planting perennial plants.

254.02 Materials. Materials shall be according to the following.

| Item | Article/Section |
|---------------------------|-----------------|
| (a) Bulb Type | 1081.02(a) |
| (b) Ornamental Type | 1081.02(b) |
| (c) Prairie Type | |
| (d) Wetland Emergent Type | |
| (e) Sedge Meadow Type | |
| (f) Woodland Type | |
| (g) Mulch | |

254.03 Planting Time. Planting times for the various types of perennial plants shall be as follows.

- (a) Bulb Type. Bulb Type plants shall be planted between October 15 and November 15.
- (b) Ornamental Type, Prairie Type, Wetland Emergent Type, and Sedge Meadow Type plants shall be planted between May 1 and June 15 or between August 15 and September 15.
- (c) Woodland Type plants shall be planted between April 1 and May 15.

254.04 Transporting and Storing Plants. The Engineer will inspect the plants at the work site at the beginning of each planting day and reject any material that is not properly packaged (including clear labeling by species) or that is not in a firm, moist, or viable condition. Any plants remaining at the end of the day shall be removed from the work site and properly stored by the Contractor. Before planting, sufficient water shall be added to potted plants to insure that the soil around the roots is not dry and crumbly when the plants are removed from the pots.

254.05 Layout of Planting. When plants are specified to be planted in prepared soil planting beds, the planting bed shall be approved by the Engineer prior to planting. If no prepared soil planting bed is specified, the plants shall be planted in areas that have existing cover or have been seeded and mulched or sodded. Where perennial plants, except bulb type plants, shall be planted, the planting beds shall be delineated with selective mowing stakes. Selective mowing stakes shall be according to Article 250.08.

254.06 Planting Procedures. The spacing of the plants shall be as shown on the plans, or as directed by the Engineer, to uniformly fill the planting beds. Individual plants within the beds shall be planted as follows.

- (a) Bulb Type. Bulb type plants shall be planted to a depth of 6 in. (150 mm) in turf areas or prepared beds.
- (b) Ornamental Type, Prairie Type, Wetland Emergent Type, Sedge Meadow Type, and Woodland Type. When planted in prepared soil planting beds, these plants shall be planted by a hand method approved by the Engineer.

When planted in existing turf, the planting area shall be mowed to a maximum height of 2 in. (50 mm).

In existing cover, or seeded and mulched or sodded planting areas, a 12 in. (300 mm) diameter planting area for individual plants shall be prepared. The existing cover, or seed and mulch shall be cut and removed from the 12 in. (300 mm) diameter planting area and the soil within the planting area loosened to a depth of 6 in. (150 mm). The plants shall be planted within the planting area and immediately watered with at least 1 gal (5 L) of water per plant.

254.07 Mulching. Within 24 hours, the plants shall be mulched with 2 in. (50 mm) of a fine grade mulch meeting the approval of the Engineer. Care shall be taken to place the mulch in a way that does not smother the plants. When plants are planted in prepared soil planting beds, the entire bed shall be mulched. Bulb type plants planted in existing turf need not be mulched.

254.08 Period of Establishment. Period of Establishment for the various types of perennial plants shall be as follows.

- (a) No period of establishment will be required for bulb type plants.
- (b) Perennial plants must undergo a 30 day period of establishment. Additional waterings shall be performed at least once within every seven days for four weeks following installation. Water shall be applied at the rate of 2 gal/sq yd (9 L/sq m). Should excess moisture prevail, the Engineer may delete any or all of the additional watering cycles. In severe weather, the Engineer may require additional waterings.

Watering of plants in beds shall be applied in such a manner that all plant holes are uniformly saturated without allowing the water to flow beyond the periphery of the bed.

At the end of the period of establishment, the Contractor will be permitted to replace any unacceptable plants and shall thoroughly weed all the beds.

254.09 Method of Measurement. This work will be measured for payment in units of 100 perennial plants of the type and size specified. Measurement for payment of this work will not

) | b

be performed until at the end of the 30 day establishment period for the replacement planting. Only plants that are in place and alive at the time of measurement will be measured for payment, except that if fewer than 25 percent of the plants are acceptable, a quantity equal to 25 percent of the number of units of plants originally planted will be considered measured for payment. Selective mowing stakes will be measured for payment as each in place.

254.10 Basis of Payment. This work will be paid for at the contract unit price per unit for PERENNIAL PLANTS, of the type and size specified.

Selective mowing stakes will be paid for at the contract unit price per each for SELECTIVE MOWING STAKES."

Revise Article 1081.02 of the Standard Specifications to read:

"1081.02 Perennial Plants. Perennial plants shall be as follows.

- (a) Bulb Type. Bulb type plants shall include bulbs, tubers, rhizomes, and corms. Bulb type plants shall meet the current standards adopted by the ANLA. The Contractor shall furnish the Engineer a shipping ticket or label documenting that the variety, color, and size of the bulb type plants supplied are as specified in the plans.
- (b) Ornamental Type, Prairie Type, Wetland Emergent Type, Sedge Meadow Type, and Woodland Type. These plants shall meet the current standards adopted by the ANLA. Flats or lots of plants shall be clearly labeled by variety, and the Contractor shall furnish the Engineer a shipping ticket or label documenting that the plants supplied are of the variety specified in the plans."

POST MOUNTING OF SIGNS (BDE)

Effective: January 1, 2011

Revise the second paragraph of Article 701.14 of the Standard Specifications to read:

"Post mounted signs shall be a breakaway design. The sign shall be within five degrees of vertical. Two posts shall be used for signs greater than 16 sq ft (1.5 sq m) in area or where the height between the sign and the ground exceeds 7 ft (2.1 m)."

118

PRECAST CONCRETE HANDLING HOLES (BDE)

Effective: January 1, 2007

Add the following to Article 540.02 of the Standard Specifications:

"(g) Handling Hole Plugs......1042.16"

Add the following paragraph after the sixth paragraph of Article 540.06 of the Standard Specifications:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar, or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Article 542.02 of the Standard Specifications:

"(ee) Handling Hole Plugs1042.16"

Revise the fifth paragraph of Article 542.04(d) of the Standard Specifications to read:

"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 550.02 of the Standard Specifications:

"(o) Handling Hole Plugs......1042.16"

Replace the fourth sentence of the fifth paragraph of Article 550.06 of the Standard Specifications with the following:

"Handling holes in concrete pipe shall be filled with a precast concrete plug and sealed with mastic or mortar; or filled with a polyethylene plug. The plug shall not project beyond the inside surface after installation."

Add the following to Article 602.02 of the Standard Specifications:

"(p) Handling Hole Plugs...... 1042.16(a)"

Replace the fifth sentence of the first paragraph of Article 602.07 of the Standard Specifications with the following:

"Handling holes shall be filled with a precast concrete plug and sealed with mastic or mortar. The plug shall not project beyond the inside surface after installation. When metal lifting inserts are used, their sockets shall be filled with mastic or mortar."

Add the following to Section 1042 of the Standard Specifications:

***1042.16** Handling Hole Plugs. Plugs for handling holes in precast concrete products shall be as follows.

- (a) Precast Concrete Plug. The precast concrete plug shall have a tapered shape and shall have a minimum compressive strength of 3000 psi (20,700 kPa) at 28 days.
- (b) Polyethylene Plug. The polyethylene plug shall have a "mushroom" shape with a flat round top and a stem with three different size ribs. The plug shall fit snuggly and cover the handling hole.

The plug shall be according to the following.

| Mechanical Properties | Test Method | Value (min.) |
|--------------------------|-------------|-----------------------|
| Flexural Modulus | ASTM D 790 | 3300 psi (22,750 kPa) |
| Tensile Strength (Break) | ASTM D 638 | 1600 psi (11,030 kPa) |
| Tensile Strength (Yield) | ASTM D 638 | 1200 psi (8270 kPa) |

| Thermal Properties | Test Method | Value (min.) |
|-----------------------|-------------|-----------------|
| Brittle Temperature | ASTM D 746 | -49 °F (-45 °C) |
| Vicat Softening Point | ASTM D 1525 | 194 °F (90 °C)" |

120

RECLAIMED ASPHALT PAVEMENT (RAP) (BDE)

Effective: January 1, 2007 Revised: January 1, 2011

In Article 1030.02(g), delete the last sentence of the first paragraph in (Note 2).

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT

1031.01 Description. Reclaimed asphalt pavement (RAP) is reclaimed asphalt pavement resulting from cold milling or crushing of an existing dense graded hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

1031.02 Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District to provide verification of the quality of the RAP to clarify appropriate stockpile.

- (a) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave (High ESAL), HMA (High 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 fractionated prior to testing by screening into a minimum of two size fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass one sieve size larger than the maximum sieve size specified for the mix the RAP will be used in.
- (b) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High ESAL), or equivalent mixtures and represent:
 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag);
 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (c) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave (High ESAL), HMA (High 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 prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.

- (d) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, Superpave (High or Low ESAL), HMA (High or Low ESAL), or equivalent mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (e) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

1031.03 Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after 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).

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 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.

Evaluation of Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

| Parameter | FRAP/Homogeneous /Conglomerate | Conglomerate "D" Quality |
|---------------|-----------------------------------|-----------------------------|
| 1 in. (25 mm) | | ± 5 % |

22

| 1/2 in. (12.5 mm) | ±8% | ± 15 % |
|-------------------|-----------------------|---------------|
| No. 4 (4.75 mm) | ±6% | ± 13 % |
| No. 8 (2.36 mm) | ± 5 % | |
| No. 16 (1.18 mm) | | <u>± 15 %</u> |
| No. 30 (600 μm) | ±5% | |
| No. 200 (75 μm) | ± 2.0 % | ± 4.0 % |
| Asphalt Binder | ± 0.4 % ^{1/} | ± 0.5 % |
| G _{mm} | ± 0.03 | |

1/ The tolerance for FRAP shall be ± 0.3 %.

If more than 20 percent of the individual sieves are out of the gradation tolerances, or if more than 20 percent of the asphalt binder content test results fall outside the appropriate tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

1031.04 Quality Designation of Aggregate in RAP/FRAP.

- (a) The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
 - (1) RAP from Class I, Superpave (High ESAL)/HMA (High ESAL), or HMA (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
 - (2) RAP from Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
 - (3) RAP from Class I, Superpave (High ESAL), or 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.

123

(b) The aggregate quality of FRAP shall be determined as follows.

- (1) 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 according to Article 1031.04(b)(2).
- (2) Fractionated stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5000 tons (4500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications."

1031.05 Use of RAP/FRAP in HMA. The use of RAP/FRAP shall be a Contractor's option when constructing HMA in all contracts. The use of RAP/FRAP in HMA shall be as follows.

- (a) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (b) Steel Slag Stockpiles. RAP 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) surface mixtures only.
- (c) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better.
- (d) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
- (e) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.
- (f) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in the table below for a given N Design.

Max RAP Percentage

| HMA Mixtures ^{1/, 3/} | Max | kimum % RAP | |
|--------------------------------|-----------------|-------------|---------|
| Ndesign | Binder/Leveling | Surface | Polymer |

| | Binder | | Modified |
|-----|-----------------------|------------|----------|
| 30 | 30 | 30 | 10 |
| 50 | 25 | 15 | 10 |
| 70 | 15 / 25 ^{2/} | 10 / 15 2/ | 10 |
| 90 | 10 | 10 | 10 |
| 105 | 10 | 10 | 10 |

- 1/ For HMA shoulder and stabilized subbase (HMA) N-30, the amount of RAP shall not exceed 50% of the mixture.
- 2/ Value of Max % RAP if homogeneous RAP stockpile of IL-9.5 RAP is utilized.
- 3/ When RAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275°°F (135 °C) the grades shall be reduced as follows:

Overlays:

When WMA contains between 20 and 30 percent RAP the high temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

Full Depth:

When WMA contains between 20 and 30 percent RAP, the low temperature shall be reduced by one grade (i.e. 25 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more RAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent RAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

(g) When the Contractor chooses the FRAP option, the percentage of FRAP shall not exceed the amounts indicated in the table below for a given N Design.

| HMA Mixtures ^{1/, 2/} | Maximum % FRAP | | | | | | | | | |
|--------------------------------|---------------------------|---------|---------------------|--|--|--|--|--|--|--|
| Ndesign | Binder/Leveling Binder | Surface | Polymer Modified | | | | | | | |
| 30 | 35 | 35 | 10 | | | | | | | |
| 50 | 30 | 25 | 10 | | | | | | | |
| 70 | 25 | 20 | 10 | | | | | | | |

Max FRAP Percentage

| 90 | 20 | 15 | 10 |
|-----|----|----|----|
| 105 | 10 | 10 | 10 |

- 1/ For HMA shoulder and stabilized subbase (HMA) N30, the amount of FRAP shall not exceed 50 percent of the mixture.
- 2/ When FRAP exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275°°F (135 °C) the grades shall be reduced as follows:

Overlays:

When WMA contains between 20 and 30 percent FRAP the high temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-22). When WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

Full Depth:

When WMA contains between 20 and 30 percent FRAP, the low temperature shall be reduced by one grade (i.e. 25 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG64-28). When the WMA contains 30 percent or more FRAP the high and low temperature grades shall each be reduced by one grade (i.e. 35 percent FRAP would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

1031.06 HMA Mix Designs. At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP material meeting the above detailed requirements.

RAP/FRAP designs shall be submitted for volumetric verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix design at the percent previously verified.

1031.07 HMA Production. The coarse aggregate in all RAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

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

26

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

HMA plants utilizing RAP/FRAP shall be capable of automatically recording and printing the following information.

(a) Dryer Drum Plants.

- (1) Date, month, year, and time to the nearest minute for each print.
- (2) HMA mix number assigned by the Department.
- (3) Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- (4) Accumulated dry weight of RAP/FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- (5) Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- (6) Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- (7) Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
- (8) Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
- (b) Batch Plants.
 - (1) Date, month, year, and time to the nearest minute for each print.
 - (2) HMA mix number assigned by the Department.
 - (3) Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - (4) Mineral filler weight to the nearest pound (kilogram).
 - (5) RAP/FRAP weight to the nearest pound (kilogram).
 - (6) Virgin asphalt binder weight to the nearest pound (kilogram).

(7) Residual asphalt binder in the RAP/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.

1031.08 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP 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.
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

SELF-CONSOLIDATING CONCRETE FOR PRECAST PRODUCTS (BDE)

Effective: July 1, 2004 Revised: July 1, 2010

<u>Definition</u>. Self-consolidating concrete is a flowable mixture that does not require mechanical vibration for consolidation.

Usage. Self-consolidating concrete may be used for precast concrete products.

Materials. Materials shall be according to Section 1021 of the Standard Specifications.

Mix Design Criteria. The mix design criteria shall be as follows:

- (a) The minimum cement factor shall be according to Article 1020.04 of the Standard Specifications. If the maximum cement factor is not specified, it shall not exceed 7.05 cwt/cu yd (418 kg/cu m).
- (b) The maximum allowable water/cement ratio shall be according to Article 1020.04 of the Standard Specifications or 0.44, whichever is lower.
- (c) The slump requirements of Article 1020.04 of the Standard Specifications shall not apply.
- (d) The coarse aggregate gradations shall be CA 13, CA 14, CA 16, or a blend of these gradations. CA 11 may be used when the Contractor provides satisfactory evidence to the Engineer that the mix will not segregate. The fine aggregate proportion shall be a maximum 50 percent by weight (mass) of the total aggregate used.
- (e) The slump flow range shall be ± 2 in. (± 50 mm) of the Contractor target value, and within the overall Department range of 20 in. (510 mm) minimum to 28 in. (710 mm) maximum.
- (f) The visual stability index shall be a maximum of 1.
- (g) The J-ring value shall be a maximum of 4 in. (100 mm). The Contractor may specify a lower maximum in the mix design.
- (h) The L-box blocking ratio shall be a minimum of 60 percent. The Contractor may specify a higher minimum in the mix design.
- (i) The hardened visual stability index shall be a maximum of 1.

Mixing Portland Cement Concrete. In addition to Article 1020.11 of the Standard Specifications, the mixing time for central-mixed concrete shall not be reduced as a result of a mixer

performance test. Truck-mixed or shrink-mixed concrete shall be mixed in a truck mixer for a minimum of 100 revolutions.

Wash water, if used, shall be completely discharged from the drum or container before the succeeding batch is introduced.

The batch sequence, mixing speed, and mixing time shall be appropriate to prevent cement balls and mix foaming for central-mixed, truck-mixed, and shrink-mixed concrete.

<u>Placing and Consolidating</u>. The maximum distance of horizontal flow from the point of deposit shall be 25 ft (7.6 m), unless approved otherwise by the Engineer.

Concrete shall be rodded with a piece of lumber, conduit, or vibrator if the material has lost its fluidity prior to placement of additional concrete. The vibrator shall be the pencil head type with a maximum diameter or width of 1 in. (25 mm). Any other method for restoring the fluidity of the concrete shall be approved by the Engineer.

<u>Mix Design Approval</u>. The Contractor shall obtain mix design approval according to the Department's Policy Memorandum "Quality Control/Quality Assurance Program for Precast Concrete Products".

STORM SEWERS (BDE)

Effective: April 1, 2009 Revised: April 1, 2010

Add the following to Article 550.02 of the Standard Specifications:

| "(p) | Polyvinyl Chloride (PVC) Profile Wall Pipe-304 | 1040.03 |
|------|--|----------|
| (q) | Polyethylene (PE) Pipe with a Smooth Interior | 1040.04 |
| (r) | Corrugated Polyethylene (PE) Pipe with a Smooth Interior | 1040.04 |
| (s) | Polyethylene (PE) Profile Wall Pipe | 1040.04" |

Add the following to the list of flexible pipes under Class B storm sewers in the first table of Article 550.03 of the Standard Specifications:

"Polyvinyl Chloride (PVC) Profile Wall Pipe-304 Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polyethylene (PE) Pipe with a Smooth Interior Polyethylene (PE) Profile Wall Pipe"

Revise the 2nd - 7th tables of Article 550.03 of the Standard Specifications to read:

| | <u>.</u> | | | | FOR A | | F MATER | IAL P | ERMI | | ND ST | | | | | IPE | | | | |
|--------------|---|----------|----------|---------|-------|--------------------------|---------|---------|---------|------|---------------|--------------|-------------|--------|----------|--------------------------|---------------|---------|---------|------|
| | Type 1 | | | | | | | | | | | | | | т | ype 2 | | | | |
| Nom. Dia. | , | | | | | t: 3' and I inimum co | | | | | | | | Fill H | | Greater th ceeding 10 | | | | |
| in. | RCCP CSP ESCP PVC CPVC PVCPW PVCPV Class Class -794 -304 | | | | | | | PE | CPE | PEPW | RCCP Class | CSP Class | | PVC | | PVCPW -794 | PVCPW -304 | PE | | PEPW |
| 10 | NA | 3 | X | X | NA | NA | NA | Х | NA | NA | NA | 1 | *X | Х | ** | NA | NA | Х | NA | NA |
| 12 | IV | NA | NA | X | X | X | Х | Х | X | NA | 111 | 1 | *X | X | X | X | X | X | X | NA |
| 15 | IV | NA | NA_ | X | X | X | X | X | X | NA | | 2 | X | X | <u>X</u> | <u> </u> | X | X | X | NA |
| 18 | | NA | NA | X | X | X | X | Х | X | X | | 2 | X | X | X | X | X | X NA | X NA | X |
| 21 | | NA NA | NA NA | ·X X | X | X X | X | NA X | NA X | X | | 2 | X | X | X | X X | Â | | X | Ŷ |
| 24 | | NA | NA | X | x | X | X | Â. | Â | Â | | NA | <u>−</u> x− | -Â | x | x | $\frac{2}{x}$ | - Â | Â | X |
| 30 | | NA | | Î | ÎÂ | Â | Â | Â | Â | Â | | NA | Â | Â | x | Â | Â | Â | Î | x |
| 33 | | NA | Îx | Î | NA NA | x x | Â | Â | ÎŶ | x | | NA | Ι Â. | Â | NA | Â | Â | x | Îx | Â |
| 36 | | NA | X | Î | X | X | X | x | X | x | | NA | X | X | X | X | X | X | X | X |
| 42 | | NA | NA | NA NA | NA | x x | X | x | X | x | iii iii | NA | NA | NA | NA | X | X | X | X | X |
| 48 | l ii | NA | NA | NA | NA | X | X | X | X | x | 111 | NA | NA | NA | NA | X | X | X | X | X |
| 54 | 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 111 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 60 | 1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 66 | i | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 72 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 1 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 78 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 84 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 90 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 96 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 102 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| 108 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

RCCP CSP

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

Concrete Sewer, Storm Drain, and Culvert Pipe

ESCP Extra Strength Clay Pipe PVC Polyvinyl Chloride (PVC) Pipe

PVC CPVC

Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior

| PVCPW-794 | Polyvinyl Chloride (PVC) Profile Wall Pipe-794 |
|-----------|--|
| PVCPW-304 | Polyvinyl Chloride (PVC) Profile Wall Pipe-304 |
| PE | Polyethylene (PE) Pipe with a Smooth Interior |
| CPE | Corrugated Polyethylene (PE) Pipe with a Smooth Interior |
| PEPW | Polyethylene (PE) Profile Wall Pipe |
| Х | This material may be used for the given pipe diameter and fill height. |
| NA | This material is Not Acceptable for the given pipe diameter and fill height. |
| * | May also use standard strength Clay Sewer Pipe |
| ** | May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification. |

| | STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE | | | | | | | | | | | | | |
|--------------|--|--|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|---------------|----------|
| Nom. Dia. | | Type 3Type 4Fill Height: Greater than 10', not exceeding 15'Fill Height: Greater than 15', not exceeding 20' | | | | | | | | | | | | 5', |
| in. | RCCP CSP ESCP PVC CPVC PVCPW PE PEPW RCCP PVC CPVC PVCPW PVCF | | | | | | | | | | | | PVCPW -304 | |
| 10 | NA | 3 | Х | Х | ** | NA | NA | Х | NA | NA | X | ** | NA | NA |
| 12 | IV | NA | X | Х | X | X | X | X | NA NA | V V | X | X | X | X |
| 15 | IV · | NA | NA | X | X | X | X X | <u> </u> | X | V | X | X | - Â | x |
| 18 | IV IV | NA NA | NA NA | X | x | x | x l | NA | Â | v | Â | Â | ÎÂ | X |
| 24 | | NA | NA | Â | Â | ÎÂ | Â | X | ÎÂ | ĺv | ÎÂ | x | ÎÂ | x |
| 27 | | NA | NA | x | X | X | X | X | X | v | X | X | X | X |
| 30 | iv i | NA | NA | x | X | x | x | x | X | V. | X | X | X | X |
| 33 | l iv | NA | NA | X | NA | X | X | х | X | ١٧ | х | NA | X | X |
| 36 | ١٧ | NA | NA | X | Х | X | Х | Х | X | IV | X | X | X | X |
| 42 | ١V | NA | NA | NA | NA | X | X | Х | X | IV | NA | NA | X | X |
| 48 | IV | NA | NA | NA | NA | X | Х | Х | X | IV | NA | NA | X | X |
| 54 | I IV | NA | NA | NA | NA | NA | NA | NA | NA | ١V | NA | NA | NA | NA |
| 60 | IV I | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 66 | | NA | NA | NA | NA_ | NA | NA | NA | NA | <u>IV</u> | NA | NA | NA | NA |
| 72 | ш | NA | NA | NA | NA | NA | NA | NA | NA | I IV | NA | NA | NA | NA |
| 78 | 111 | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 84 | - 111 | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 90 | III | NA | NA | NA | NA | NA | NA | NA | NA NA | | NA | NA | NA | NA NA |
| 96 | III | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA NA | NA NA |
| 102 | | NA NA | NA NA | NA NA | NA NA | NA NA | NA NA | ŅA NA | NA NA | IV IV | NA NA | NA NA | NA | NA |
| 108 | 111 | INA | NA | | INA | | ARI I | | I INA | IV | | | 11/1 | |

RCCPReinforced Concrete Culvert, Storm Drain, and Sewer PipeCSPConcrete Sewer, Storm Drain, and Culvert PipeESCPExtra Strength Clay PipePVCPolyvinyl Chloride (PVC) PipeCPVCCorrugated Polyvinyl Chloride (PVC) Pipe with a Smooth InteriorPVCPW-794Polyvinyl Chloride (PVC) Profile Wall Pipe-794PVCPW-304Polyvinyl Chloride (PVC) Profile Wall Pipe-304PEPolyethylene (PE) Pipe with a Smooth InteriorPEPWPolyethylene (PE) Profile Wall PipeXThis material may be used for the given pipe diameter and fill height.NAThis material is Not Acceptable for the given pipe diameter and fill height.**May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification.

| | STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE | | | | | | | | | | | | | | | |
|--------------|--|------------|----------------------------------|---------------|---------------|--|----------|----------------------------------|----------|---|--------------------|----------|--|--|--|--|
| Nom. Dia. | F | | Type 5 it: Greate exceedir | er than 20' | 1 | F | | Type 6 it: Greate exceedir | , , | Type 7 Fill Height: Greater than 30', not exceeding 35' | | | | | | |
| in. | RCCP Class | PVC | CPVC | PVCPW -794 | PVCPW -304 | RCCP PVC CPVC PVCPW RCCP PVC Class -794 -304 Class PVC | | | | | | | | | | |
| 10 | NA | X | ** | NA | NA | NA | X | ** | NA | NA | NA | Х | | | | |
| 12 15 | V-3160D V-3080D | X X | X | X X | X X | V-3790D V-3390D | X X | X NA | X NA | X NA | V-4000D V-3575D | X X | | | | |
| 18 | V-3000D | - <u>x</u> | x | X | X | V-3115D | X | NA | NA | NA | V-3300D | X | | | | |
| 21 | v | x | ÎÂ | x | x | V X NA NA NA V-3110D X | | | | | | | | | | |
| 24 | V V | X | X | X | X | v | X | NA | NA | NA | V | X X | | | | |
| 27 | V | X | NA | NA | NA | V | Х | NA | NA | NA | V | Х | | | | |
| 30 | V | Х | NA | NA | NA | V | X | NA | NA | NA | V | X | | | | |
| 33 | V | <u> </u> | NA | NA | NA | V | X | NA | NA | NA | V | Х | | | | |
| 36 | V | х | NA | NA | NA | V | X | NA | NA | NA | V | X | | | | |
| 42 | V | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | | | | |
| 48 | V | NA | NA | NA | NA | V | NA | NA | NA | NA | <u>V</u> | NA | | | | |
| 54 | V | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | | | | |
| 60 | V | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | | | | |
| 66 | IV | NA | NA | NA | NA | <u>v</u> | NA | NA | NA · | NA | V | NA | | | | |
| 72 | | NA | NA | NA | NA | | NA | NA | NA | NA | V | NA | | | | |
| 78 | | NA | NA | NA | NA | | NA | NA | NA | NA | | NA | | | | |
| 84 | | NA | NA | NA | NA | | NA NA | NA | NA | NA NA | V | NA | | | | |
| 90 96 | | NA | NA NA | NA NA | NA NA | V V | NA NA | NA NA | NA NA | NA NA | | NA NA | | | | |
| 102 | | NA NA | NA NA | NA NA | NA NA | | NA NA | NA NA | NA NA | NA NA | V | NA NA | | | | |
| 102 | IV IV | NA | NA | NA | NA NA | V V | NA | NA | NA | NA NA | V V | NA NA | | | | |
| | 10 | | | | NA | <u> </u> | | | I INA | | | | | | | |

RCCP PVC CPVC PVCPW-794 PVCPW-304 x

NA

Note

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Polyvinyl Chloride (PVC) Pipe Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior Polyvinyl Chloride (PVC) Profile Wall Pipe-794 Polyvinyl Chloride (PVC) Profile Wall Pipe-304 This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification. RCCP Class V - 3160D, etc. shall be furnished according to AASHTO M 170 Section 6. These loads are D loads to produce a 0.01 in. crack.

| | | | | | | FOR A | | F MATER | IAL P | ERMI | TTED A | | RÉNGI | | | | IPE | | | | |
|---|--|---------------|--------------|---------|-------------------------------|--------|---|---|--------|------|--------------------|---------------|--------------|------|----------|------|---------------|---------------|----|-----|------|
| | Nom. Dia. | | | Height: | ype 1 1 m and minimum c | | Type 2 Fill Height: Greater than 1 m, not exceeding 3 m | | | | | | | | | | | | | | |
| | mm | RCCP Class | CSP Class | ESCP | PVC | CPVC | PVCPW -794 | PVCPW -304 | PE | CPE | PEPW | RCCP Class | CSP Class | ESCP | PVC | CPVC | PVCPW -794 | PVCPW -304 | PE | CPE | PEPW |
| [| 250 | NA | 3 | Х | Х | NA | NA | NA | Х | NA | NA | NA | 1 | *X | Х | ** | NA | NA . | Х | NA | NA |
| | 300 | IV | NA | NA | X | X | Х | X | Х | X | NA | III | 1 | *X | X | Х | Х | Х | X | X | NA |
| ļ | 375 | IV | NA | NA | X | X | <u>X</u> | X | X | X | NA | | 2 | X | <u>X</u> | Х | <u>X</u> | X | X | X | NA |
| | 450 IV NA NA X X X X X X X III 2 X X X | | | | | | | | X | X | X | X | X | | | | | | | | |
| | 525 | | | | | | | | | | | X | X | NA | NA | XX | | | | | |
| | 600 | | | | | X X | X | III 2 X | | | | | | | | X | | | | | |
| | 675 750 | IV III | NA NA | NA X | X X | X | XX | X X | X X | x | x | | NA NA | ×× | X X | X | X | Ŷ | X | XX | Ŷ |
| | 825 | | NA | Â | Â | NA | x | Â | Â | Ŷ | Â | | | | | | | | | Â | |
| | 900 | 111 | NA | x | x | X | X | x | x | Ŷ | $\hat{\mathbf{x}}$ | | NA | X | X | X | X | x | X | x | x |
| | 1050 | 11 | NA | NA | NA | ŇĂ | x | I | ÎÂ | Ŷ | x | iii | NA | NA | ŇĂ | NA | x | X | Â | Â | x |
| | 1200 | ü | NA | NA | NA | NA | x | I | ÎÂ | Ŷ | ÎÂ | iii | NA | NA | NA | NA | x | x | ÎX | x I | x |
| | 1350 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | 111 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | 1500 | Ï | NA | NA | NA | NA | NA | NA | NA | NA | NA | ü | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | 1650 | 1 | NA | NA | NA | NA | NA | NA | NA | NA | NA | 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | 1800 | I | NA | NA | NA | NA | NA | NA | NA | NA | NA | - 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | 1950 | l | NA | NA | NA | NA | NA | NA | NA | NA | NA | 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | 2100 | I | NA | NA | NA | NA | NA | NA | NA | NA | NA | | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | 2250 | | | | | | | | NA | 11 | NA | NA | NA | NA | NA | NA | NA | NA | NA | | |
| | 2400 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | П | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | 2550 | | NA | NA | NA | NA | NA | NA | NA | NA | NA | II. | NA | NA | NA | NA | NA | NA | NA | NA | NA |
| | 2700 | | NA | NA | NA | NA_ | NA | NA | NA | NA | NA | | NA | NA | NA | NA | NA | NA | NA | NA | NA |

| RCCP | Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe |
|-----------|---|
| CSP | Concrete Sewer, Storm Drain, and Culvert Pipe |
| ESCP | Extra Strength Clay Pipe |
| PVC | Polyvinyl Chloride (PVC) Pipe |
| CPVC | Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior |
| PVCPW-794 | Polyvinyl Chloride (PVC) Profile Wall Pipe-794 |

PVCPW-794 PVCPW-304 PE CPE PEPW X NA

**

Polyvinyl Chloride (PVC) Profile Wall Pipe-794 Polyvinyl Chloride (PVC) Profile Wall Pipe-304 Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polyethylene (PE) Pipe with a Smooth Interior Polyethylene (PE) Profile Wall Pipe This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. May also use standard strength Clay Sewer Pipe May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification.

| STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE | | | | | | | | | | | | | | |
|---|---------------|--------------|----------|----------|----------|---------------|---|----------|----------|---------------|----------|----------|---------------|---------------|
| Туре 3 Туре 4 | | | | | | | | | 4 | | | | | |
| Nom. Dia. | | | | | | | Fill Height: Greater than 4.5 m, not exceeding 6 m | | | | | | | |
| mm | RCCP Class | CSP Class | ESCP | PVC | CPVC | PVCPW -794 | PVCPW -304 | PE | PEPW | RCCP Class | PVC | CPVC | PVCPW -794 | PVCPW -304 |
| 250 | NA | 3 | Х | X | ** | NA | NA | Х | NA | NA | Х | ** | NA | NA |
| 300 | IV | NA | X | Х | X | Х | Х | х | NA | V | Х | X | Х | X |
| 375 | IV | NA | NA | Х | X | Х | X | X | NA | V | X | X | Х | Х |
| 450 | IV | NA | NA | X | Х | Х | Х | Х | X | V | Х | X | Х | Х |
| 525 | IV | NA | NA | X | X | X | Х | NA | X | V | X | х | X | Х |
| 600 | IV | NA | NA | Х | X | X | Х | Х | X | V | <u> </u> | X | <u> </u> | X |
| 675 | IV | NA | NA | Х | Х | X | Х | Х | Х | V | Х | Х | X | Х |
| 750 | IV | NA | NA | х | X | X | Х | Х | X | V | X | Х | X | X |
| 825 | IV | NA | NA | X | NA | X | X | X | X | IV | X | NA | X | X |
| 900 | IV | NA | NA | X | X | X | Х | Х | X | IV | Х | Х | X | Х |
| 1050 | IV | NA | NA | NA | NA | X | Х | Х | X | IV | NA | NA | X | X |
| 1200 | IV | NA | NA | NA | NA | X | ·X | X | X | IV | NA | NA | X | X |
| 1350 | IV | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 1500 | IV | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 1650 | | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 1800 | 111 | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 1950 | | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 2100 | 111 | NA | NA | NA | NA | NA | NA | NA | NA | IV | NA | NA | NA | NA |
| 2250 | 111 | NA | NA NA | NA | NA | NA | NA | NA | NA | IV IV | NA | NA NA | NA NA | NA NA |
| 2400 | | NA NA | NA NA | NA NA | NA NA | NA NA | NA NA | NA NA | NA NA | | NA NA | I NA | NA NA | NA NA |
| 2700 | | NA | NA NA | NA | NA NA | NA NA | NA | NA | NA NA | | NA NA | | NA | NA |
| 2700 | | INA | I NA | | INA | NA | INA | INA | | IV | | | I INA | |

RCCP CSP ESCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

PVC CPVC

PVCPW-794 PVCPW-304

PVCPV PE PEPW X NA

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Concrete Sewer, Storm Drain, and Culvert Pipe Extra Strength Clay Pipe Polyvinyl Chloride (PVC) Pipe Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior Polyvinyl Chloride (PVC) Profile Wall Pipe-794 Polyvinyl Chloride (PVC) Profile Wall Pipe-304 Polyethylene (PE) Profile Wall Pipe This material may be used for the given pipe diameter and fill height. This material is Not Acceptable for the given pipe diameter and fill height. May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification.

| STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE | | | | | | | | | | | | | |
|---|--|----------|------|---------------|-------------------|--|----------|-------|---------------|----------------------|--|-----|--|
| Nom. | Type 5 Fill Height: Greater than 6 m, | | | | | Type 6 Fill Height: Greater than 7.5 m, | | | | | Type 7 Fill Height: Greater than 9 m, | | |
| Dia. not exceeding 7.5 m | | | | | not exceeding 9 m | | | | | not exceeding 10.5 m | | | |
| mm | RCCP Class | PVC | CPVC | PVCPW -794 | PVCPW -304 | RCCP Class | PVC | CPVC | PVCPW -794 | PVCPW -304 | RCCP Class | PVC | |
| 250 | NA | Х | ** | NA | NA | NA | Х | ** | NA | NA | NA | Х | |
| 300 | V-150D | Х | X | X | Х | V-180D | Х | X | X | X | V-190D | X | |
| 375 | V-145D | X | X | X | X | V-160D | X | NA | NA | NA | V-170D | X | |
| 450 | V | Х | X | X | Х | V-150D | X | NA | NA | NA | V-160D | Х | |
| 525 | V | Х | X | X | X | V | Х | NA | NA | NA | V-150D | X | |
| 600 | V | X | X | X | X | V | X | NA | NA | NA | V | X | |
| 675 | V | Х | NA | NA | NA | V | X | NA | NA | NA | V | X | |
| 750 | V | Х | NA | NA | NA | V | X | NA | NA | NA | | X | |
| 825 | <u> </u> | <u>X</u> | NA | NA | NA | <u>V</u> | <u>X</u> | NA | NA . | NA | <u>v</u> | X | |
| 900 | V | X | NA | NA | NA | V | Х | NA | NA | NA | V | X | |
| 1050 | V | NA | NA | NA | NA | V | NA | NA | NA | NA | l V | NA | |
| 1200 | V | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | |
| 1350 | V | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | |
| 1500 | V | NA | NA | NA | NA | V | NA | NA NA | NA | NA | V V | NA | |
| 1650 | IV | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | |
| 1800 | IV | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | |
| 1950 | IV | NA | NA | NA | NA | N N | NA | NA | NA | NA | V | NA | |
| 2100 | IV | NA | NA | NA | NA | <u>v</u> | NA | NA | NA | NA | <u>v</u> | NA | |
| 2250 | | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | |
| 2400 | IV | NA | NA | NA | NA | V | NA | NA | NA | NA | V | NA | |
| 2550 | IV | NA | NA | NA | NA | V | NA | NA | NA | NA | V V | NA | |
| 2700 | IV | NA | NA | NA | NA | V . | NA | NA | NA | NA | V | NA | |

RCCP PVC CPVC PVCPW-794 PVCPW-304 X NA ** Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

Polyvinyl Chloride (PVC) Pipe

Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior

7794 Polyvinyl Chloride (PVC) Profile Wall Pipe-794

-304 Polyvinyl Chloride (PVC) Profile Wall Pipe-304

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

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

May be used if Bureau of Materials and Physical Research approves and with manufacturer's certification.

RCCP Class V - 150D, etc. shall be furnished according to AASHTO M 170M Section 6.

These loads are D loads to produce a 0.3 mm crack."

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

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

Revise the second paragraph of Article 550.07 of the Standard Specifications to read:

"When using flexible pipe, as listed in the first table of Article 550.03, the aggregate shall be continued to a height of at least 1 ft (300 mm) above the top of the pipe and compacted to a minimum of 95 percent of standard lab density by mechanical means."

Revise Article 550.08 of the Standard Specifications to read:

***550.08 Deflection Testing for Storm Sewers.** All PVC and PE storm sewers shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

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

Where the mandrel is used, the mandrel shall be furnished by the Contractor and pulled by hand through the pipeline with a suitable rope or cable connected to each end. Winching or other means of forcing the deflection gauge through the pipeline will not be allowed.

The mandrel shall be of a shape similar to that of a true circle enabling the gauge to pass through a satisfactory pipeline with little or no resistance. The mandrel shall be of a design to prevent it from tipping from side to side and to prevent debris build-up from occurring between the channels of the adjacent fins or legs during operation. Each end of the core of the mandrel shall have fasteners to which the pulling cables can be attached. The mandrel shall have nine, various sized fins or legs of appropriate dimension for various diameter pipes. Each fin or leg shall have a permanent marking that states its designated pipe size and percent of deflection allowable.

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

If the pipe is found to have a deflection greater than that specified, that pipe section shall be removed, replaced, and retested."

Revise Article 1040.04(b) of the Standard Specifications to read:

"(b) Corrugated PE Pipe with a Smooth Interior. The pipe shall be according to AASHTO M 294 (nominal size – 12 to 48 in. (300 to 1200 mm)). The pipe shall be Type S or D."

Revised the first and second paragraphs of Article 1040.04(c) to read:

- "(c) PE Profile Wall Pipe. The pipe shall be according to ASTM F 894 and shall have a minimum ring stiffness constant of 160. The pipe shall also have a minimum cell classification of PE 334433C as defined in ASTM D 3350.
 - (1) Pipe Culverts and Storm Sewers. When used for pipe culverts and storm sewers, the section properties shall be according to AASHTO's Section 17. The manufacturer shall submit written certification that the material meets AASHTO's Section 17 properties."

SUBCONTRACTOR MOBILIZATION PAYMENTS (BDE)

Effective: April 2, 2005

To account for the preparatory work and operations necessary for the movement of subcontractor personnel, equipment, supplies, and incidentals to the project site and for all other work or operations that must be performed or costs incurred when beginning work approved for subcontracting in accordance with Article 108.01 of the Standard Specifications, the Contractor shall make a mobilization payment to each subcontractor.

This mobilization payment shall be made at least 14 days prior to the subcontractor starting work. The amount paid shall be equal to 3 percent of the amount of the subcontract reported on form BC 260A submitted for the approval of the subcontractor's work.

This provision shall be incorporated directly or by reference into each subcontract approved by the Department.

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002 Revised: January 1, 2011

Add the following to Article 280.02 of the Standard Specifications to read:

| "(k) | Filter Fabric1 | 080.03 |
|------|--------------------------|----------|
| (I) | Urethane Foam/Geotextile | 1.15(i)" |

Revise the third paragraph of Article 280.03 of the Standard Specifications to read:

"Erosion control systems shall be installed prior to beginning any activities which will potentially create erodible conditions. Erosion control systems for areas outside the limits of construction such as storage sites, plant sites, waste sites, haul roads, and Contractor furnished borrow sites shall be installed prior to beginning soil disturbing activities at each area. These offsite systems shall be designed by the Contractor and be subject to the approval of the Engineer."

Add the following paragraph after the third paragraph of Article 280.03 of the Standard Specifications:

"The temporary erosion and sediment control systems shown on the plans represent the minimum systems anticipated for the project. Conditions created by the Contractor's operations, or for the Contractor's convenience, which are not covered by the plans, shall be protected as directed by the Engineer at no additional cost to the Department. Revisions or modifications of the erosion and sediment control systems shall have the Engineer's written approval."

Revise Article 280.04(a) of the Standard Specifications to read:

"(a) Temporary Ditch Checks. This system consists of the construction of temporary ditch checks to prevent siltation, erosion, or scour of ditches and drainage ways. Temporary ditch checks shall be constructed with products from the Department's approved list, rolled excelsior, or with aggregate placed on filter fabric when specified. Filter fabric shall be installed according to the requirements of Section 282. Riprap shall be placed according to Article 281.04. Manufactured ditch checks shall be installed according to the manufacturer's specifications. Spacing of ditch checks shall be such that the low point in the center of one ditch check is at the same elevation as the base of the ditch check immediately upstream. Temporary ditch checks shall be sufficiently long enough that the top of the device in the middle of the ditch is 6 in. (150 mm) lower than the bottom of the terminating ends of the ditch side slopes.

When rolled excelsior is used, each ditch check shall be installed and maintained such that the device is no less than 10 in. (250 mm) high at the point of overflow. Units installed at a spacing requiring a height greater than 10 in. (250 mm) shall be maintained at the height for the spacing at which they were originally installed."

Revise the last sentence of the first paragraph Article 280.04(b) of the Standard Specifications to read:

"The barrier shall be constructed with rolled excelsior, silt filter fence, or urethane foam/geotextiles."

Revise the last sentence of the first paragraph of Article 280.04(g) of the Standard Specifications to read:

"The temporary mulch cover shall be installed according to Article 251.03 except for any reference to seeding."

Add the following to Article 280.04 of the Standard Specifications:

(h) Temporary Erosion Control Blanket. This system consists of temporarily installing erosion control blanket or heavy duty erosion control blanket over areas that are to be reworked during a later construction phase. Work shall be according to Article 251.04 except references to seeding and fertilizer shall not apply. When an area is to be reworked more than once, the blanket shall be carefully removed, properly stored, and then reinstalled over the same area."

Revise Article 280.07(b) of the Standard Specifications to read:

"(b) Temporary Ditch Checks. This work will be measured for payment along the long axis of the device in place in feet (meters) except for aggregate ditch checks which will be measured for payment in tons (metric tons). Payment will not be made for aggregate in excess of 108 percent of the amount specified by the Engineer."

Revise Article 280.07(f) of the Standard Specifications to read:

"(f) Temporary Mulch. This work will be measured for payment according to Article 251.05(b)."

Add the following to Article 280.07 of the Standard Specifications:

"(g) Temporary Erosion Control Blanket. This work will be measured for payment in place in square yards (square meters) of actual surface covered.

Add the following paragraph after the ninth paragraph of Article 280.07 of the Standard Specifications:

"Temporary or permanent erosion control systems required for areas outside the limits of construction will not be measured for payment."

Revise Article 280.08(b) of the Standard Specifications to read:

"(b) Temporary Ditch Checks. This work will be paid for at the contract unit price per foot (meter) for TEMPORARY DITCH CHECKS except for aggregate ditch checks which will be paid for at the contract unit price per ton (metric ton) for AGGREGATE DITCH CHECKS."

Revise Article 280.08(f) of the Standard Specifications to read:

"(f) Temporary Mulch. Temporary Mulch will be paid for according to Article 251.06."

Add the following to Article 280.08 of the Standard Specifications:

"(g) Temporary Erosion Control Blanket. Temporary Erosion Control Blanket will be paid for at the contract unit price per square yard (square meter) for TEMPORARY EROSION CONTROL BLANKET or TEMPORARY HEAVY DUTY EROSION CONTROL BLANKET.

The work of removing, storing, and reinstalling the blanket over areas to be reworked more than once will not be paid for separately but shall be included in the cost of the temporary erosion control blanket or temporary heavy duty erosion control blanket."

Delete the tenth (last) paragraph of Article 280.08 of the Standard Specifications.

Revise the second sentence of the first paragraph of Article 1081.15(e) of the Standard Specifications to read:

"The upstream facing of the aggregate ditch check shall be constructed of gradation CA 3. The remainder of the ditch check shall be constructed of gradation RR 3."

Revise Article 1081.15(f) of the Supplemental Specifications to read:

"(f) Rolled Excelsior. Rolled excelsior shall consist of an excelsior fiber filling totally encased inside netting and sealed with metal clips or knotted at the ends. The fiber density shall be a minimum of 1.24 lb/cu ft (20 kg/cu m) based on a moisture content of 22 percent at manufacturing. The netting shall be composed of a polyester or polypropylene material which retains 70 percent of its strength after 500 hours of exposure to sunlight. The maximum opening of the net shall be 1 x 1 in. (25 x 25 mm)."

Add the following to Article 1081.15 of the Standard Specifications:

"(i) Urethane Foam/Geotextile. Urethane foam/geotextile shall be triangular shaped having a minimum height of 10 in. (250 mm) in the center with equal sides and a minimum 20 in. (500 mm) base. The triangular shaped inner material shall be a low density urethane foam. The outer cover shall be a woven geotextile fabric placed around the inner material and allowed to extend beyond both sides of the triangle a minimum of 18 in. (450 mm).

(1) The geotextile shall meet the following properties:

| Property | Value | Test Method |
|--|-----------------|-------------|
| Grab Tensile Strength Ib (N) (min.) | 124 (550) min. | ASTM D 4632 |
| Grab Elongation @ Brake (percent) | 15 min. | ASTM D 4632 |
| Burst Strength psi (kPa) | 280 (1930) min. | ASTM D 3786 |
| AOS (Sieve No.) | 30 min. | ASTM D 4751 |
| UV Resistance (500 hours) (percent) | 80 min. | ASTM D 4355 |

(2) The urethane foam shall meet the following properties:

| Property | Value | Test Method |
|----------------------------|------------------------|--------------|
| Density lb/cu ft (kg/cu m) | 1.0 ± 0.1 (16.0 ± 1.6) | ASTM D 3574 |
| Tensile Strength psi (kPa) | 10 (70) min. | ASTM D 3574 |
| Elongation (percent) | 125 min. | ASTM D 3574 |
| Tear Resistance lb/in. | 1.25 (0.22) | ASTM D 3574" |
| (N/mm) | | |

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 2. 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 The Illinois Department of Transportation and the Federal Highway Administration. 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.

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

| | | Page |
|-------|---|------|
| Ι. | General | ī |
| II. | Nondiscrimination | 1 |
| III. | Nonsegregated Facilities | 3 |
| IV. | Payment of Predetermined Minimum Wage | 3 |
| V. | Statements and Payrolls | 5 |
| VI. | Record of Materials, Supplies, and Labor | 6 |
| VII. | Subletting or Assigning the Contract | 6 |
| VIII. | Safety: Accident Prevention | 7 |
| IX. | False Statements Concerning Highway Projects | 7 |
| Х. | Implementation of Clean Air Act and Federal | |
| | Water Pollution Control Act | 7 |
| XI. | Certification Regarding Debarment, Suspension, | |
| | Ineligibility, and Voluntary Exclusion | 8 |
| XII. | Certification Regarding Use of Contract Funds for | |
| | Lobbying | 9 |
| | | |

ATTACHMENTS

A. Employment Preference for Appalachian Contracts (included in Appalachian contracts only)

I. GENERAL

1. These contract provisions shall apply to all word 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.

2. Except as otherwise provided for in each section, the contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The prime contractor shall be responsible for compliance by any subcontract or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

Section I, paragraph 2; Section IV, paragraphs 1, 2, 3, 4 and 7; Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 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 DOL, or the contractor's employees or their representatives.

6. Selection of Labor: During the performance of this contract, the contractor shall not:

a. Discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. Employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

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 and 41 CFR 60 (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 Equal Opportunity Construction Contract Specifications set forth under 14 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 <u>et seq</u>.) 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 State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the contract.

b. The contractor will accept as his 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, preapprenticeship, and/or on-the-job-training."

2. EEO Officer: The contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for an must be capable of effectively administering and promoting an active contractor program of EEO 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 minority group employees.
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 minority groups 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 employees referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish which such identified sources procedures whereby minority group 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, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group 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 his 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 his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

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. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision.

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 minority group and women employees 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 his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. 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 best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women

for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best 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 SHA 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 minority and women 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 minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) 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 SHA.

8. 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.

a. The contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this contract.
b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the contractor enters into pursuant to this contract. The contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. 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 completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the contractor shall document the following:
(1) The number of minority and non-minority group members and women employed in each work classification on the project;
(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees; and
(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The contractors will submit an annual report to the SHA 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. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers 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 (29 CFR 3) issued by the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) 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. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, 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 paragraphs 4 and 5 of this Section IV.

b. 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.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this contract.

2. Classification:

a. The SHA contracting officer shall require that any class of laborers or mechanics employed under the contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification 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 DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour 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.

d. In the event the contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional 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 question, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advised the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. 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 or subcontractors, as

appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any cost 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.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) 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 DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/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 Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees 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 employee 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 listed in 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 or subcontractor 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-level hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

(3) 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 journeyman-level 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 for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) 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 DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. 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.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level 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-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which cases such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the contractor or subcontractor 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. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV. 2. Any worker listed on a payroll at a helper wage rate, who is not a helper under a approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. 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.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the contractor or subcontractor under this contract or any other Federal contract with the same prime contractor or any other Federallyassisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same prime contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainee's and helpers, employed by the contract 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 SHA contracting officer 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.

7. Overtime Requirements:

No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her 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, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall; upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies 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 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of

contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof 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. In addition, for Appalachian contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found 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 and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs. c. Each contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for submitting payroll copies of all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;
(2) that such 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 the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less that the applicable wage rate and fringe benefits or cash equivalent for the classification of worked performed, as specified in the applicable wage determination incorporated into the contract.

e. 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 2d of this Section V.
f. The falsification of any of the above certifications may subject the contractor to civil or criminal prosecution under 18 U/S. C. 1001 and 31 U.S.C. 231.

g. The contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, 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 SHA, the FHWA, the DOL, or all may, after written notice to the contractor, sponsor, applicant, or owner, take such

actions 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.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all federal-aid contracts on the national highway system, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification contracts, and contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.
c. Furnish, upon the completion of the contract, to the SHA resident engineer on /Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the prime contractor's option, either a single report covering all contract work or separate reports for the contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

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 State. 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 contractors' own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly 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, assignee, or agent of the prime contractor.

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 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 VII 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 SHA 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 SHA 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 SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

VIII. SAFETY: ACCIDENT PREVENTION

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 SHA 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. 333).

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. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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, the following notice 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:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

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 not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more).

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 <u>et seq.</u>, as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 <u>et seq.</u>, as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary 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 participant shall submit an 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 primary 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 department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary 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,""lower tier covered transaction," "participant,"
"person," "primary covered transaction," "principal,"
"proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.
f. The prospective primary 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 primary 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 Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded from Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. 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.

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.

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from

covered transactions by any Federal department or agency; **b.** Have not within a 3-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;

c. 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 1b of this certification; and
d. Have not within a 3-year period preceding this

application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary 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 Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)
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," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tie 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.

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 may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not

required to, check the Nonprocurement List.

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 dealing.

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 Covered Transactions:

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 participation in this transaction 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.

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(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 his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.

NOTICE

The most current **General Wage Determination Decisions** (wage rates) are available on the IDOT web site. They are located on the Letting and Bidding page at <u>http://www.dot.state.il.us/desenv/delett.html</u>.

In addition, ten (10) days prior to the letting, the applicable Federal wage rates will be e-mailed to subscribers. It is recommended that all contractors subscribe to the Federal Wage Rates List or the Contractor's Packet through IDOT's subscription service.

PLEASE NOTE: if you have already subscribed to the Contractor's Packet you will automatically receive the Federal Wage Rates.

The instructions for subscribing are at http://www.dot.state.il.us/desenv/subsc.html.

If you have any questions concerning the wage rates, please contact IDOT's Chief Contract Official at 217-782-7806.