

BID PROPOSAL INSTRUCTIONS

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

PREQUALIFICATION

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

WHO CAN BID ?

Bids will be accepted from only those companies that request and receive written Authorization to Bid from IDOT's Central Bureau of Construction.

REQUESTS FOR AUTHORIZATION TO BID

Contractors wanting to bid on items included in a particular letting must submit the properly completed "Request for Authorization to Bid/or Not For Bid Status" (BDE 124) and the ORIGINAL "Affidavit of Availability" (BC 57) to the proper office no later than 4:30 p.m. prevailing time, three (3) days prior to the letting date.

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?

When a prospective prime bidder submits a "Request for Authorization to Bid/or Not For Bid Status"(BDE 124) he/she must indicate at that time which items are being requested For Bidding purposes. Only those items requested For Bidding will be analyzed. After the request has been analyzed, the bidder will be issued an **Authorization to Bid or Not for Bid Report**, approved by the Central Bureau of Construction and the Chief Procurement Officer that indicates which items have been approved For Bidding. If **Authorization to Bid** cannot be approved, the **Authorization to Bid or Not for Bid Report** will indicate the reason for denial.

ABOUT AUTHORIZATION TO BID

Firms that have not received an Authorization to Bid or Not For Bid Report within a reasonable time of complete and correct original document submittal should contact the Department as to the status. Firms unsure as to authorization status should call the Prequalification Section of the Bureau of Construction at the number listed at the end of these instructions.

ADDENDA AND REVISIONS

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

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

The Internet is the Department's primary way of doing business. The subscription service emails are an added courtesy the Department provides. It is suggested that bidders check IDOT's website at <http://www.idot.illinois.gov/doing-business/procurements/construction-services/construction-bulletins/transportation-bulletin/index#TransportationBulletin> before submitting final bid information.

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

Addenda questions may be directed to the Contracts Office at (217)782-7806 or DOT.DE-Contracts@Illinois.gov

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

STANDARD GUIDELINES FOR SUBMITTING PAPER BIDS

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

BID SUBMITTAL CHECKLIST

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

- Proposal Bid Bond** – (Insert after the proposal signature page) Submit your Proposal Bid Bond (if applicable) using the current Proposal Bid Bond form provided in the proposal package. The Power of Attorney page should be stapled to the Proposal Bid Bond. If you are using an electronic bond, include your bid bond number on the Proposal Bid Bond and attach the Proof of Insurance printed from the Surety’s Web Site.
- Disadvantaged Business Utilization Plan and/or Good Faith Effort – Do Not Submit with Bid** The bidder shall submit a Disadvantaged Business Utilization Plan on completed Department forms SBE 2025 and 2026. (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting. (2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to DOT.DBE.UP@illinois.gov or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation
 Bureau of Small Business Enterprises
 Contract Compliance Section
 2300 South Dirksen Parkway, Room 319
 Springfield, Illinois 62764

The Bid Letting is now available in streaming Audio/Video from the IDOT Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 10 AM.

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

QUESTIONS: pre-letting up to execution of the contract

Contractor pre-qualification	217-782-3413
Small Business, Disadvantaged Business Enterprise (DBE)	217-785-4611
Contracts, Bids, Letting process or Internet downloads	217-782-7806
Estimates Unit.....	217-785-3483
Aeronautics.....	217-785-8515
IDNR (Land Reclamation, Water Resources, Natural Resources).....	217-782-6302

QUESTIONS: following contract execution

Subcontractor documentation, payments	217-782-3413
Railroad Insurance	217-785-0275

RETURN WITH BID

1X

Proposal Submitted By
Name
Address
City

Letting April 28, 2017

NOTICE TO PROSPECTIVE BIDDERS
This proposal is for
REVIEW AND INSPECTION ONLY

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



**Illinois Department
of Transportation**

Springfield, Illinois 62764

Contract No. 64C08
ROCK ISLAND County
Section (81-1)R & 81-1HVBR
Route FAI 74
Project NHPP-0074(324)
District 2 Construction Funds

--

Prepared by	
Checked by	F

(Printed by authority of the State of Illinois)

Page intentionally left blank

RETURN WITH BID



PROPOSAL

TO THE DEPARTMENT OF TRANSPORTATION

1. Proposal of _____

Taxpayer Identification Number (Mandatory) _____

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

**Contract No. 64C08
ROCK ISLAND County
Section (81-1)R & 81-1HVBR
Project NHPP-0074(324)
Route FAI 74
District 2 Construction Funds**

Reconstruction of I-74 from the Mississippi River to 7th Avenue in Moline.

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

RETURN WITH BID

3. **ASSURANCE OF EXAMINATION AND INSPECTION/WAIVER.** The undersigned bidder further declares that he/she has carefully examined the proposal, plans, specifications, addenda form of contract and contract bond, and special provisions, and that he/she has inspected in detail the site of the proposed work, and that he/she has familiarized themselves with all of the local conditions affecting the contract and the detailed requirements of construction, and understands that in making this bid proposal he/she waives all right to plead any misunderstanding regarding the same.

4. **EXECUTION OF CONTRACT AND CONTRACT BOND.** The undersigned bidder further agrees to execute a contract for this work and present the same to the department within fifteen (15) days after the contract has been mailed to him/her. The undersigned further agrees that he/she and his/her surety will execute and present within fifteen (15) days after the contract has been mailed to him/her contract bond satisfactory to and in the form prescribed by the Department of Transportation, in the penal sum of the full amount of the contract, or as specified in the special provisions, guaranteeing the faithful performance of the work in accordance with the terms of the contract.

5. **PROPOSAL GUARANTY.** Accompanying this proposal is either a bid bond on the department form, executed by a corporate surety company satisfactory to the department, or a proposal guaranty check consisting of a bank cashier's check or a properly certified check for not less than 5 per cent of the amount bid or for the amount specified in the following schedule:

<u>Amount of Bid</u>		<u>Proposal Guaranty</u>	<u>Amount of Bid</u>		<u>Proposal 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 bid proposals will be made payable to the Treasurer, State of Illinois.

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

The amount of the proposal guaranty check is _____ \$(_____). If this proposal is accepted and the undersigned will fail to execute a contract bond as required herein, it is hereby agreed that the amount of the proposal guaranty will become the property of the State of Illinois, and shall be considered as payment of damages due to delay and other causes suffered by the State because of the failure to execute said contract and contract bond; otherwise, the bid bond will become void or the proposal guaranty check will 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 bid proposals, the amount must be equal to the sum of the proposal guaranties which would be required for each individual bid proposal. If the guaranty check is placed in another bid proposal, state below where it may be found.

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

Item _____

Section No. _____

County _____

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

RETURN WITH BID

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

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

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

Schedule of Combination Bids

Combination No.	Sections Included in Combination	Combination Bid	
		Dollars	Cents

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

Check box Yes
 Check box No

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

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER - 64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X0301852	DEWATERING STRUCT N1	EACH	1.000				
X0301853	DEWATERING STRUCT N2	EACH	1.000				
X0320050	CONSTRUCTN LAYOUT SPL	L SUM	1.000				
X0322281	W A VID DET SYS COM	EACH	6.000				
X0322352	SEEDING MOBILIZATION	EACH	2.000				
X0322936	REMOV EX FLAR END SEC	EACH	1.000				
X0325206	RELOC INTERCONT CABLE	FOOT	163.000				
X0325482	REM EXIST ITS EQUIPMT	EACH	11.000				
X0326263	EQUIPMENT CABINET	EACH	2.000				
X0326357	ROADWAY LIGHT MODIFY	L SUM	1.000				
X0326382	CONC BARRIER BASE SPL	FOOT	1,284.000				
X0326694	PLUG EX STORM SEWERS	CU YD	8.000				
X0327006	ROADWAY LT POLE IO	EACH	41.000				
X0327008	REM/REL SIGN SPECIAL	EACH	1.000				
X0327070	REMOV EXISTG FLAGPOLE	EACH	3.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X0327139	AGG COLUMN GRND IMPRV	L SUM	1.000				
X0327727	PLANTER REMOVAL	L SUM	1.000				
X0327980	PAVMT MRKG REM WTR BL	SQ FT	38,415.000				
X0800004	AGG SUB IMPR 13 1/2	SQ YD	8,185.000				
X0839900	SAN SEW REMOV 6	FOOT	105.000				
X0931400	INLET BOX ADJ SPL	EACH	2.000				
X1200100	STORM SEW REM 31X20	FOOT	69.000				
X1400128	REM/RPL CTBRKR W40A2P	EACH	2.000				
X1400226	POWER INSTALLED FDN	EACH	1.000				
X1400227	ROADWAY LUM SPL IO	EACH	59.000				
X1400228	UNDERPASS LUM IO	EACH	25.000				
X1400229	MVDS COMM CABLE IO	FOOT	1,960.000				
X1400230	MVDS POWER CABLE IO	FOOT	980.000				
X1400231	45 STL ITS P BLK PT	EACH	3.000				
X1400232	AESTHETIC LUM IO	EACH	71.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X2200019	FENCE PERFORATED ALUM	FOOT	570.000				
X2300012	STR STL RAIL TR/BIKE	FOOT	703.000				
X2503110	MOWING SPL	ACRE	7.000				
X2600021	P M SIGN SUPPORT ASSY	EACH	5.000				
X4400110	TEMP PAVT REMOVAL	SQ YD	5,065.000				
X4402805	ISLAND REMOVAL	SQ FT	12,418.000				
X5210130	HLMR BRG GUID EXP 300	EACH	32.000				
X5210170	HLMR BRG GUID EXP 500	EACH	31.000				
X5210190	HLMR BRG GUID EXP 600	EACH	20.000				
X5210350	HLMR BRNG FIXED 600K	EACH	20.000				
X5210355	HLMR BRNG FIXED 650K	EACH	29.000				
X5210360	HLMR BRNG FIXED 700K	EACH	26.000				
X5210365	HLMR BRNG FIXED 750K	EACH	4.000				
X5509900	ABANDON FILL SS	FOOT	418.000				
X5620122	WATER SERV REMOVAL	EACH	2.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X5860110	GRANULAR BACKFILL STR	CU YD	540.000				
X6029000	JUNCTION BOX	L SUM	1.000				
X6029001	JUNCTION BOX N1	L SUM	1.000				
X6029002	JUNCTION BOX N2	L SUM	1.000				
X6029003	JUNCTION BOX N3	L SUM	1.000				
X6029004	JUNCTION BOX N4	L SUM	1.000				
X6029005	JUNCTION BOX N5	L SUM	1.000				
X6060714	CONC MEDIAN SPL	SQ FT	1,430.000				
X6061100	CONC MED TSB SPL	SQ FT	1,648.000				
X6061902	CONC MED TSM SPL	SQ FT	6,876.000				
X6062700	CONC GUTTER TA SPL	FOOT	1,220.000				
X6370279	CONC BAR 1F 42HT SPL	FOOT	975.000				
X6370700	CONC BAR TRANS SPL	FOOT	408.000				
X6640200	TEMP CH LK FENCE	FOOT	160.000				
X6640210	TEMP CH LK FENCE PORT	FOOT	90.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X7010216	TRAF CONT & PROT SPL	L SUM	1.000				
X7010410	SPEED DISPLAY TRAILER	CAL MO	4.000				
X7040125	PIN TEMP CONC BARRIER	EACH	153.000				
X7260100	MILE POST MKR ASSY SP	EACH	2.000				
X7830070	GRV RCSD PVT MRKG 5	FOOT	9,223.000				
X7830072	GRV RCSD PVT MRKG 6	FOOT	7,482.000				
X7830074	GRV RCSD PVT MRKG 7	FOOT	3,159.000				
X7830076	GRV RCSD PVT MRKG 9	FOOT	5,975.000				
X7830090	GRV RCSD PVT MRKG 25	FOOT	881.000				
X8110454	CON AT ST 1 SS	FOOT	10.000				
X8110458	CON AT ST 2 SS	FOOT	80.000				
X8140105	HANDHOLE SPL	EACH	2.000				
X8140115	HANDHOLE TO BE ADJUST	EACH	2.000				
X8360120	LIGHT POLE FDN SPL	EACH	1.000				
X8360310	LIGHT POLE FDN 30D SP	FOOT	9.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X8410102	TEMP LIGHTING SYSTEM	L SUM	1.000				
X9700019	TUBULAR MARKER MAINT	EACH	15.000				
Z0007124	STEEL RAILING SPL	FOOT	6,729.000				
Z0007601	BLDG REMOV NO 1	L SUM	1.000				
Z0007602	BLDG REMOV NO 2	L SUM	1.000				
Z0012450	CONCRETE STEPS	CU YD	5.600				
Z0012455	CONC STEP REMOV	EACH	8.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0018000	DRAINAGE SCUPPERS SPL	EACH	22.000				
Z0018800	DRAINAGE SYSTEM	L SUM	1.000				
Z0025505	PROPERTY MARKERS	EACH	9.000				
Z0028415	GEOTECHNICAL REINF	SQ YD	52,282.000				
Z0030850	TEMP INFO SIGNING	SQ FT	208.000				
Z0034806	MODULAR EXP JT-SW 6	FOOT	34.000				
Z0046304	P UNDR FOR STRUCT 4	FOOT	203.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0049801	R&D FRIABL ASB BLD 1	L SUM	1.000				
Z0049802	R&D FRIABL ASB BLD 2	L SUM	1.000				
Z0049901	R&D NON-FR ASB BLD 1	L SUM	1.000				
Z0049902	R&D NON-FR ASB BLD 2	L SUM	1.000				
Z0054400	ROCK FILL	CU YD	1,960.000				
Z0054500	ROCK FILL	TON	69,040.000				
Z0056608	STORM SEW WM REQ 12	FOOT	100.000				
Z0056610	STORM SEW WM REQ 15	FOOT	51.000				
Z0056626	STORM SEW WM REQ 48	FOOT	94.000				
Z0062456	TEMP PAVEMENT	SQ YD	8,356.000				
Z0073510	TEMP TR SIGNAL TIMING	EACH	6.000				
Z0076600	TRAINEES	HOUR	5,000.000		0.800		4,000.000
Z0076604	TRAINEES TPG	HOUR	5,000.000		15.000		75,000.000
20100110	TREE REMOV 6-15	UNIT	883.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
20100210	TREE REMOV OVER 15	UNIT	1,430.000				
20100500	TREE REMOV ACRES	ACRE	2.500				
20200100	EARTH EXCAVATION	CU YD	57,025.000				
20201200	REM & DISP UNS MATL	CU YD	91,690.000				
20400100	BORROW EXCAVATION	CU YD	180,930.000				
20700220	POROUS GRAN EMBANK	CU YD	1,211.000				
20800150	TRENCH BACKFILL	CU YD	9,166.000				
21001000	GEOTECH FAB F/GR STAB	SQ YD	3,801.000				
21101615	TOPSOIL F & P 4	SQ YD	44,358.000				
25000210	SEEDING CL 2A	ACRE	2.750				
25000310	SEEDING CL 4	ACRE	7.250				
25000400	NITROGEN FERT NUTR	POUND	980.000				
25000500	PHOSPHORUS FERT NUTR	POUND	980.000				
25000600	POTASSIUM FERT NUTR	POUND	980.000				
25000750	MOWING	ACRE	2.750				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
25100125	MULCH METHOD 3	ACRE	26.000				
25100630	EROSION CONTR BLANKET	SQ YD	45,585.000				
25100900	TURF REINF MAT	SQ YD	764.000				
25200100	SODDING	SQ YD	6,754.000				
25200200	SUPPLE WATERING	UNIT	60.800				
28000250	TEMP EROS CONTR SEED	POUND	53,700.000				
28000305	TEMP DITCH CHECKS	FOOT	344.000				
28000400	PERIMETER EROS BAR	FOOT	5,219.000				
28000500	INLET & PIPE PROTECT	EACH	20.000				
28000510	INLET FILTERS	EACH	139.000				
28100109	STONE RIPRAP CL A5	SQ YD	120.000				
28200200	FILTER FABRIC	SQ YD	120.000				
28500200	PREC BLOCK REV MAT	SQ YD	1,764.000				
30300001	AGG SUBGRADE IMPROVE	CU YD	48.000				
30300011	AGG SUBGRADE IMPROVE	TON	2,000.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
30300112	AGG SUBGRADE IMPR 12	SQ YD	43,814.000				
30300124	AGG SUBGRADE IMPR 24	SQ YD	1,165.000				
31100800	SUB GRAN MAT A 9	SQ YD	189.000				
31200100	STAB SUBBASE 4	SQ YD	50,087.000				
35100300	AGG BASE CSE A 4	SQ YD	155.000				
35100500	AGG BASE CSE A 6	SQ YD	4,059.000				
40600290	BIT MATLS TACK CT	POUND	1,716.000				
40600295	P BIT MATLS TACK CT	POUND	2,232.000				
40600825	P LEV BIND MM N50	TON	153.000				
40600985	PCC SURF REM BUTT JT	SQ YD	376.000				
40603085	HMA BC IL-19.0 N70	TON	518.000				
40603310	HMA SC "C" N50	TON	67.000				
40603315	HMA SC "C" N70	TON	304.000				
40603585	P HMA SC "F" N50	TON	229.000				
42000060	WELDED WIRE REINF	SQ YD	1,315.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
42000080	PVT CON PCC BR APP SL	SQ YD	758.000				
42000406	PCC PVT 9 1/4 JOINTD	SQ YD	27,293.000				
42000511	PCC PVT 10 1/2 JOINTD	SQ YD	16,455.000				
42001300	PROTECTIVE COAT	SQ YD	47,133.000				
42300300	PCC DRIVEWAY PAVT 7	SQ YD	1,471.000				
42400200	PC CONC SIDEWALK 5	SQ FT	18,581.000				
42400800	DETECTABLE WARNINGS	SQ FT	451.000				
44000100	PAVEMENT REM	SQ YD	50,872.000				
44000159	HMA SURF REM 2 1/2	SQ YD	2,855.000				
44000200	DRIVE PAVEMENT REM	SQ YD	1,037.000				
44000500	COMB CURB GUTTER REM	FOOT	13,187.000				
44000600	SIDEWALK REM	SQ FT	23,760.000				
44003100	MEDIAN REMOVAL	SQ FT	51,677.000				
44200934	CL B PATCH T2 8	SQ YD	100.000				
44200942	CL B PATCH T3 8	SQ YD	145.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
44200976	CL B PATCH T4 10	SQ YD	1,170.000				
44201294	CL B PATCH EXPAN JT	FOOT	173.000				
44201296	DEFORMED BARS EXP JT	EACH	160.000				
44201299	DOWEL BARS 1 1/2	EACH	610.000				
44213200	SAW CUTS	FOOT	2,012.000				
44213204	TIE BARS 3/4	EACH	665.000				
48100500	AGGREGATE SHLDS A 6	SQ YD	119.000				
48203009	HMA SHOULDERS 3	SQ YD	181.000				
50100300	REM EXIST STRUCT N1	EACH	1.000				
50100400	REM EXIST STRUCT N2	EACH	1.000				
50100500	REM EXIST STRUCT N3	EACH	1.000				
50102400	CONC REM	CU YD	160.900				
50157300	PROTECTIVE SHIELD	SQ YD	32,077.000				
50200100	STRUCTURE EXCAVATION	CU YD	7,671.000				
50200400	ROCK EXC STRUCT	CU YD	1,087.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
50200450	REM/DISP UNS MATL-STR	CU YD	1,903.000				
50300225	CONC STRUCT	CU YD	4,861.000				
50300255	CONC SUP-STR	CU YD	12,119.500				
50300260	BR DECK GROOVING	SQ YD	33,406.000				
50300280	CONCRETE ENCASEMENT	CU YD	14.100				
50300300	PROTECTIVE COAT	SQ YD	42,937.000				
50500105	F & E STRUCT STEEL	L SUM	1.000				
50500505	STUD SHEAR CONNECTORS	EACH	101,705.000				
50800105	REINFORCEMENT BARS	POUND	80.000				
50800205	REINF BARS, EPOXY CTD	POUND	4,306,230.000				
50800515	BAR SPLICERS	EACH	427.000				
50901760	PIPE HANDRAIL	FOOT	68.000				
51100100	SLOPE WALL 4	SQ YD	967.000				
51201700	FUR STL PILE HP12X74	FOOT	266.000				
51201800	FUR STL PILE HP14X73	FOOT	9,252.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
51201900	FUR STL PILE HP14X89	FOOT	3,151.000				
51202305	DRIVING PILES	FOOT	12,669.000				
51203700	TEST PILE ST HP12X74	EACH	1.000				
51203800	TEST PILE ST HP14X73	EACH	23.000				
51203900	TEST PILE ST HP14X89	EACH	6.000				
51204650	PILE SHOES	EACH	681.000				
51500100	NAME PLATES	EACH	9.000				
52000110	PREF JT STRIP SEAL	FOOT	363.500				
52000208	FINGER PLT EXP JT 3	FOOT	74.000				
52000212	FINGER PLT EXP JT 4	FOOT	294.000				
52000216	FINGER PLT EXP JT 5	FOOT	66.500				
52100010	ELAST BEARING ASSY T1	EACH	60.000				
52100020	ELAST BEARING ASSY T2	EACH	66.000				
52100510	ANCHOR BOLTS 3/4	EACH	48.000				
52100515	ANCHOR BOLTS 7/8	EACH	36.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
52100520	ANCHOR BOLTS 1	EACH	900.000				
52200500	MECH ST EARTH RET WL	SQ FT	21,192.000				
52200800	SEG CONC BLOCK WALL	SQ FT	1,025.000				
54213663	PRC FLAR END SEC 18	EACH	1.000				
54213681	PRC FLAR END SEC 36	EACH	1.000				
54213717	PRC FLAR END SEC 72	EACH	1.000				
550A0340	STORM SEW CL A 2 12	FOOT	2,817.000				
550A0360	STORM SEW CL A 2 15	FOOT	1,824.000				
550A0380	STORM SEW CL A 2 18	FOOT	1,152.000				
550A0400	STORM SEW CL A 2 21	FOOT	320.000				
550A0410	STORM SEW CL A 2 24	FOOT	766.000				
550A0430	STORM SEW CL A 2 30	FOOT	352.000				
550A0450	STORM SEW CL A 2 36	FOOT	640.000				
550A0640	STORM SEW CL A 3 12	FOOT	231.000				
550A0660	STORM SEW CL A 3 15	FOOT	291.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
550A0680	STORM SEW CL A 3 18	FOOT	567.000				
550A0710	STORM SEW CL A 3 24	FOOT	31.000				
550A0750	STORM SEW CL A 3 36	FOOT	277.000				
550A0770	STORM SEW CL A 3 42	FOOT	748.000				
550A0780	STORM SEW CL A 3 48	FOOT	763.000				
550A0820	STORM SEW CL A 3 72	FOOT	1,186.000				
550A1070	STORM SEW CL A 4 42	FOOT	319.000				
550A5100	SS CL A 2 EQRS 30	FOOT	36.000				
55100300	STORM SEWER REM 8	FOOT	101.000				
55100400	STORM SEWER REM 10	FOOT	70.000				
55100500	STORM SEWER REM 12	FOOT	3,454.000				
55100700	STORM SEWER REM 15	FOOT	483.000				
55100900	STORM SEWER REM 18	FOOT	738.000				
55101100	STORM SEWER REM 21	FOOT	51.000				
55101200	STORM SEWER REM 24	FOOT	723.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
55101400	STORM SEWER REM 30	FOOT	625.000				
55101900	STORM SEWER REM 48	FOOT	226.000				
55102300	STORM SEWER REM 72	FOOT	134.000				
55200400	STORM SEWERS JKD 15	FOOT	34.000				
55200900	STORM SEWERS JKD 24	FOOT	249.000				
55201600	STORM SEWERS JKD 48	FOOT	216.000				
56400300	FIRE HYDNPTS TO BE ADJ	EACH	2.000				
58700300	CONCRETE SEALER	SQ FT	25,861.000				
59100100	GEOCOMPOSITE WALL DR	SQ YD	211.000				
60100060	CONC HDWL FOR P DRAIN	EACH	1.000				
60108200	PIPE UNDERDRAIN 6 SP	FOOT	7.000				
60108206	PIPE UNDERDR T 2 6	FOOT	12,818.000				
60218300	MAN TA 4 DIA T1F OL	EACH	5.000				
60218400	MAN TA 4 DIA T1F CL	EACH	11.000				
60218600	MAN TA 4 DIA T4F&G	EACH	2.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60219000	MAN TA 4 DIA T8G	EACH	2.000				
60219100	MAN TA 4 DIA T9F&G	EACH	5.000				
60219300	MAN TA 4 DIA T11F&G	EACH	3.000				
60219510	MAN TA 4 DIA T20F&G	EACH	26.000				
60221000	MAN TA 5 DIA T1F OL	EACH	1.000				
60221100	MAN TA 5 DIA T1F CL	EACH	2.000				
60221700	MAN TA 5 DIA T8G	EACH	6.000				
60221800	MAN TA 5 DIA T9F&G	EACH	6.000				
60222210	MAN TA 5 DIA T20F&G	EACH	3.000				
60223800	MAN TA 6 DIA T1F CL	EACH	8.000				
60224005	MAN TA 6 DIA T8G	EACH	5.000				
60224020	MAN TA 6 DIA T11F&G	EACH	1.000				
60224035	MAN TA 6 DIA T20F&G	EACH	2.000				
60224446	MAN TA 7 DIA T1F CL	EACH	11.000				
60224459	MAN TA 8 DIA T1F CL	EACH	2.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60224469	MAN TA 9 DIA T1F CL	EACH	1.000				
60240210	INLETS TB T1F OL	EACH	3.000				
60240301	INLETS TB T8G	EACH	6.000				
60240303	INLETS TB T9F&G	EACH	1.000				
60240310	INLETS TB T11F&G	EACH	6.000				
60240324	INLETS TB T20F&G	EACH	42.000				
60255500	MAN ADJUST	EACH	20.000				
60256910	MAN ADJ NEW T20F&G	EACH	8.000				
60257900	MAN RECONST	EACH	2.000				
60260100	INLETS ADJUST	EACH	13.000				
60265700	VV ADJUST	EACH	7.000				
60270050	DR STR T4 W/2 T20F&G	EACH	5.000				
60500040	REMOV MANHOLES	EACH	55.000				
60500060	REMOV INLETS	EACH	49.000				
60600095	CLASS SI CONC OUTLET	CU YD	1.300				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60600605	CONC CURB TB	FOOT	60.000				
60603800	COMB CC&G TB6.12	FOOT	1,211.000				
60605000	COMB CC&G TB6.24	FOOT	6,505.500				
60608300	COMB CC&G TM2.12	FOOT	66.000				
60609200	COMB CC&G TM6.12	FOOT	554.000				
60610400	COMB CC&G TM6.24	FOOT	1,459.000				
60618300	CONC MEDIAN SURF 4	SQ FT	18,179.000				
60622800	CONC MED TSM6.12	SQ FT	1,113.000				
60623105	CONC MED TSM6.18	SQ FT	2,173.000				
60624600	CORRUGATED MED	SQ FT	5,891.000				
63000001	SPBGR TY A 6FT POSTS	FOOT	125.000				
63100085	TRAF BAR TERM T6	EACH	4.000				
63100167	TR BAR TRM T1 SPL TAN	EACH	4.000				
63200310	GUARDRAIL REMOV	FOOT	672.000				
63500105	DELINEATORS	EACH	39.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
63700275	CONC BAR 2F 42HT	FOOT	80.000				
63700900	CONC BARRIER BASE	FOOT	179.000				
64200116	SHOULDER RUM STRIP 16	FOOT	1,233.000				
64300260	IMP ATTEN FRD NAR TL3	EACH	1.000				
64301090	ATTENUATOR BASE	SQ YD	14.000				
66400105	CH LK FENCE 4	FOOT	2,640.000				
66700305	PERM SURV MKRS T2	EACH	2.000				
66900105	UNDERGR STOR TANK REM	EACH	1.000				
66900200	NON SPL WASTE DISPOSAL	CU YD	88,000.000				
66900205	SPL WASTE DISPOSAL	CU YD	775.000				
66900400	SPL WAST GRD WAT DISP	GALLON	95,000.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	36.000				
66901000	BACKFILL PLUGS	CU YD	110.000				
67000400	ENGR FIELD OFFICE A	CAL MO	47.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
67100100	MOBILIZATION	L SUM	1.000				
70100420	TRAF CONT-PROT 701411	EACH	1.000				
70100800	TRAF CONT-PROT 701401	L SUM	1.000				
70100815	TRAF CONT-PROT 701446	L SUM	1.000				
70100820	TRAF CONT-PROT 701451	L SUM	1.000				
70100825	TRAF CONT-PROT 701456	L SUM	1.000				
70102625	TR CONT & PROT 701606	L SUM	1.000				
70102630	TR CONT & PROT 701601	L SUM	1.000				
70102635	TR CONT & PROT 701701	L SUM	1.000				
70102640	TR CONT & PROT 701801	L SUM	1.000				
70103815	TR CONT SURVEILLANCE	CAL DA	117.000				
70106800	CHANGEABLE MESSAGE SN	CAL MO	25.000				
70200100	NIGHT WORK ZONE LIGHT	L SUM	1.000				
70300100	SHORT TERM PAVT MKING	FOOT	3,875.000				
70300150	SHRT TRM PAVT MK REM	SQ FT	388.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
70300210	TEMP PVT MK LTR & SYM	SQ FT	1,374.000				
70300220	TEMP PVT MK LINE 4	FOOT	105,232.000				
70300240	TEMP PVT MK LINE 6	FOOT	2,606.000				
70300250	TEMP PVT MK LINE 8	FOOT	1,622.000				
70300280	TEMP PVT MK LINE 24	FOOT	879.000				
70400100	TEMP CONC BARRIER	FOOT	3,050.000				
70400200	REL TEMP CONC BARRIER	FOOT	1,087.500				
70600241	IMP ATTN TEMP NRN TL2	EACH	3.000				
70600260	IMP ATTN TEMP FRN TL3	EACH	2.000				
70600270	IMP ATTN TEMP FRW TL3	EACH	1.000				
70600332	IMP ATTN REL FRN TL3	EACH	1.000				
72000100	SIGN PANEL T1	SQ FT	652.000				
72000200	SIGN PANEL T2	SQ FT	260.000				
72000300	SIGN PANEL T3	SQ FT	1,877.000				
72400100	REMOV SIN PAN ASSY TA	EACH	58.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
72400200	REMOV SIN PAN ASSY TB	EACH	10.000				
72400310	REMOV SIGN PANEL T1	SQ FT	33.000				
72400320	REMOV SIGN PANEL T2	SQ FT	58.000				
72400330	REMOV SIGN PANEL T3	SQ FT	168.000				
72400500	RELOC SIN PAN ASSY TA	EACH	2.000				
72501000	TERMINAL MARKER - DA	EACH	4.000				
72600100	MILEPOST MKR ASSEMBLY	EACH	2.000				
72700100	STR STL SIN SUP BA	POUND	1,275.000				
72800100	TELES STL SIN SUPPORT	FOOT	606.000				
73000100	WOOD SIN SUPPORT	FOOT	176.000				
73100100	BASE TEL STL SIN SUPP	EACH	10.000				
73300100	OVHD SIN STR-SPAN T1A	FOOT	159.000				
73300200	OVHD SIN STR-SPAN T2A	FOOT	248.000				
73302170	OSS CANT 2CA 3-0X5-6	FOOT	30.000				
73304000	OVHD SIN STR BR MT	FOOT	30.500				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT
NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
73400100	CONC FOUNDATION	CU YD	2.800				
73400200	DRILL SHAFT CONC FDN	CU YD	125.000				
73600100	REMOV OH SIN STR-SPAN	EACH	4.000				
73700100	REM GR MT SIN SUPPORT	EACH	4.000				
73700200	REM CONC FDN-GR MT	EACH	4.000				
73700300	REM CONC FDN-OVHD	EACH	8.000				
78008300	POLYUREA PM T2 LTR-SY	SQ FT	1,300.000				
78008310	POLYUREA PM T2 LN 4	FOOT	9,532.000				
78008320	POLYUREA PM T2 LN 5	FOOT	17,600.000				
78008330	POLYUREA PM T2 LN 6	FOOT	5,247.000				
78008340	POLYUREA PM T2 LN 8	FOOT	7,074.000				
78008350	POLYUREA PM T2 LN 12	FOOT	1,089.000				
78008370	POLYUREA PM T2 LN 24	FOOT	881.000				
78100100	RAISED REFL PAVT MKR	EACH	179.000				
78200005	GRDRAIL REF TYPE A	EACH	16.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78200010	BARR WALL REF TYPE B	EACH	103.000				
78300200	RAISED REF PVT MK REM	EACH	22.000				
80400100	ELECT SERV INSTALL	EACH	1.000				
80500100	SERV INSTALL TY A	EACH	3.000				
80500300	SERV INSTALL TY C	EACH	1.000				
81028190	UNDRGRD C GALVS 1 1/2	FOOT	38.000				
81028320	UNDRGRD C PVC 1	FOOT	86.000				
81028350	UNDRGRD C PVC 2	FOOT	7,972.000				
81028360	UNDRGRD C PVC 2 1/2	FOOT	1,404.000				
81028370	UNDRGRD C PVC 3	FOOT	218.000				
81028390	UNDRGRD C PVC 4	FOOT	1,625.000				
81028750	UNDRGRD C CNC 2	FOOT	5,885.000				
81100300	CON AT ST 1 GALVS	FOOT	2,292.000				
81100600	CON AT ST 2 GALVS	FOOT	3,845.000				
81100605	CON AT ST 2 PVC GALVS	FOOT	40.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
81200210	CON EMB STR 1 PVC	FOOT	2,646.000				
81200230	CON EMB STR 2 PVC	FOOT	8,351.000				
81300220	JUN BX SS AS 6X6X4	EACH	90.000				
81300530	JUN BX SS AS 12X10X6	EACH	51.000				
81300550	JUN BX SS AS 12X12X6	EACH	6.000				
81301290	JUN BX SS ES 12X12X6	EACH	4.000				
81301500	JUN BX SS ES 28X12X6	EACH	1.000				
81400100	HANDHOLE	EACH	41.000				
81400300	DBL HANDHOLE	EACH	4.000				
81702100	EC C XLP USE 1C 12	FOOT	2,710.000				
81702110	EC C XLP USE 1C 10	FOOT	6,497.000				
81702120	EC C XLP USE 1C 8	FOOT	76,875.000				
81702130	EC C XLP USE 1C 6	FOOT	22,605.000				
81702140	EC C XLP USE 1C 4	FOOT	1,990.000				
81702150	EC C XLP USE 1C 2	FOOT	3,330.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
82500335	LT CONT PEDM 240V100	EACH	1.000				
82700100	TRANSFORMER (GP)	EACH	2.000				
83600200	LIGHT POLE FDN 24D	FOOT	10.000				
83600300	LIGHT POLE FDN 30D	FOOT	126.000				
83800505	BKWY DEV COU AL SKIRT	EACH	60.000				
84200600	REM LT U NO SALV	EACH	38.000				
84200804	REM POLE FDN	EACH	36.000				
84400105	RELOC EX LT UNIT	EACH	6.000				
84500110	REMOV LIGHTING CONTR	EACH	4.000				
84500120	REMOV ELECT SERV INST	EACH	4.000				
84500130	REMOV LTG CONTR FDN	EACH	3.000				
85000200	MAIN EX TR SIG INSTAL	EACH	5.000				
85700200	FAC T4 CAB	EACH	5.000				
86000100	MASTER CONTROLLER	EACH	2.000				
86200200	UNINTER POWER SUP STD	EACH	5.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
86400100	TRANSCEIVER - FIB OPT	EACH	5.000				
87100140	FO CAB C 62.5/125 12F	FOOT	3,334.000				
87300925	ELCBL C TRACER 14 1C	FOOT	3,334.000				
87301215	ELCBL C SIGNAL 14 2C	FOOT	5,598.000				
87301225	ELCBL C SIGNAL 14 3C	FOOT	6,959.000				
87301245	ELCBL C SIGNAL 14 5C	FOOT	18,368.000				
87301255	ELCBL C SIGNAL 14 7C	FOOT	2,573.000				
87301805	ELCBL C SERV 6 2C	FOOT	61.000				
87301900	ELCBL C EGRDC 6 1C	FOOT	3,806.000				
87502440	TS POST GALVS 10	EACH	1.000				
87502510	TS POST GALVS 17	EACH	21.000				
87600100	PED PUSH-BUT POST T1	EACH	11.000				
87700150	S MAA & P 22	EACH	1.000				
87700190	S MAA & P 30	EACH	1.000				
87700220	S MAA & P 36	EACH	1.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
87700230	S MAA & P 38	EACH	2.000				
87700280	S MAA & P 48	EACH	1.000				
87700300	S MAA & P 52	EACH	1.000				
87700410	S MAA & P 65	EACH	1.000				
87700430	S MAA & P 75	EACH	1.000				
87702198	S MAA & P DMA 16 & 42	EACH	1.000				
87702860	STL COMB MAA&P 26	EACH	1.000				
87702950	STL COMB MAA&P 44	EACH	1.000				
87702985	STL COMB MAA&P 52	EACH	2.000				
87703060	STL COMB MAA&P 65	EACH	1.000				
87703090	STL COMB MAA&P 70	EACH	1.000				
87703110	STL COMB MAA&P 74	EACH	1.000				
87704516	S C MAA&P DMA 48 & 30	EACH	1.000				
87800100	CONC FDN TY A	FOOT	69.000				
87800150	CONC FDN TY C	FOOT	15.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number

NHPP-0074/324/

Route

FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
87800400	CONC FDN TY E 30D	FOOT	66.000				
87800415	CONC FDN TY E 36D	FOOT	120.000				
87800420	CONC FDN TY E 42D	FOOT	116.000				
87900200	DRILL EX HANDHOLE	EACH	30.000				
88040070	SH P LED 1F 3S BM	EACH	33.000				
88040090	SH P LED 1F 3S MAM	EACH	51.000				
88040150	SH P LED 1F 5S BM	EACH	6.000				
88040160	SH P LED 1F 5S MAM	EACH	4.000				
88102825	PED SH P LED 1F BM CT	EACH	20.000				
88102845	PED SH P LED 2F BM CT	EACH	9.000				
88200110	TS BACKPLATE LOUVERED	EACH	92.000				
88800100	PED PUSH-BUTTON	EACH	37.000				
89000100	TEMP TR SIG INSTALL	EACH	1.000				
89501150	RELOC EX TS POST	EACH	1.000				
89502200	MOD EX CONTR	EACH	1.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER - 64C08

State Job # - C-92-063-15

County Name - ROCK ISLAND- -

Code - 161 - -

District - 2 - -

Section Number - (81-1)R & 81-1HVBR

Project Number
 NHPP-0074/324/

Route
 FAI 74

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
89502375	REMOV EX TS EQUIP	EACH	4.000				

CONTRACT NUMBER

64C08

THIS IS THE TOTAL BID

\$ _____

NOTES:

1. Each PAY ITEM should have a UNIT PRICE and a TOTAL PRICE.
2. The UNIT PRICE shall govern if no TOTAL PRICE is shown or if there is a discrepancy between the product of the UNIT PRICE multiplied by the QUANTITY.
3. If a UNIT PRICE is omitted, the TOTAL PRICE will be divided by the QUANTITY in order to establish a UNIT PRICE.
4. A bid may be declared UNACCEPTABLE if neither a unit price nor a total price is shown.

RETURN WITH BID

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

I. GENERAL

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

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

C. In addition to all other remedies provided by law, failure to comply with any assurance, failure to make any disclosure or the making of a false certification shall be grounds for the CPO to void the contract, and may result in the suspension or debarment of the bidder or subcontractor. If a false certification is made by a subcontractor the contractor's submitted bid and the executed contract may not be declared void unless the contractor refuses to terminate the subcontract upon the State's request after a finding that the subcontractor's certification was false.

I acknowledge, understand and accept these terms and conditions.

II. ASSURANCES

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

A. Conflicts of Interest

Section 50-13. Conflicts of Interest.

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

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

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

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

(e) Prior interests. This Section does not affect the validity of any contract made between the State and an officer or employee of the State or member of the General Assembly, his or her spouse, minor child or any combination of those persons if that contract was in existence before his or her election or employment as an officer, member, or employee. The contract is voidable, however, if it cannot be completed within 365 calendar days after the officer, member, or employee takes office or is employed. The current salary of the Governor is \$177,412.00. Sixty percent of the salary is \$106,447.20.

RETURN WITH BID

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

B. Negotiations

Section 50-15. Negotiations.

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

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

C. Inducements

Section 50-25. Inducement.

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

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

D. Revolving Door Prohibition

Section 50-30. Revolving door prohibition.

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

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

E. Reporting Anticompetitive Practices

Section 50-40. Reporting anticompetitive practices.

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

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

F. Confidentiality

Section 50-45. Confidentiality.

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

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

RETURN WITH BID

G. Insider Information

Section 50-50. Insider information.

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

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

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

III. CERTIFICATIONS

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

A. Bribery

Section 50-5. Bribery.

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

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

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

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

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

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.

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

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

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

B. Felons

Section 50-10. Felons.

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

(b) Certification. Every bid submitted to and contract executed by the State and every subcontract subject to Section 20-120 of the Code and every vendor's submission to a vendor portal shall contain a certification by the bidder or contractor or subcontractor, respectively, that the bidder, contractor, or subcontractor is not barred from being awarded a contract or subcontract under this Section and acknowledges that the CPO may declare the related contract void if any of the certifications required by this Section are false.

RETURN WITH BID

C. Debt Delinquency

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

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

D. Prohibited Bidders, Contractors and Subcontractors

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

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

E. Section 42 of the Environmental Protection Act

Section 50-14 Environmental Protection Act violations.

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

F. Educational Loan

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

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

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

G. Bid-Rigging/Bid Rotating

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

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

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

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

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

RETURN WITH BID

H. International Anti-Boycott

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

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

I. Drug Free Workplace

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

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

J. Disclosure of Business Operations in Iran

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

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

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

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

Check the appropriate statement:

Company has no business operations in Iran to disclose.

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

RETURN WITH BID

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

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

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

NA-FEDERAL

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

RETURN WITH BID

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

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

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

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

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

M. Lobbyist Disclosure

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

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

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

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

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

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

Or

Bidder has hired the following persons required to register pursuant to the Illinois Lobbyist Registration Act in connection with the contract:

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

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

RETURN WITH BID

IV. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

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

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

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

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

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

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

RETURN WITH BID

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

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

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

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

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

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form A Financial Information & Potential Conflicts of Interest Disclosure

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

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

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

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

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

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

RETURN WITH BID

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

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

Yes ___ No ___

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

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

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

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

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

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

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

RETURN WITH BID

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

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

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

3. Communication Disclosure.

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

Name and address of person(s): _____

RETURN WITH BID

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

Name of person(s): _____

Nature of disclosure: _____

APPLICABLE STATEMENT

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

Completed by: _____ Date _____
Signature of Individual or Authorized Representative

NOT APPLICABLE STATEMENT

Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the CONTRACTOR listed on the previous page.

_____ Date _____
Signature of Authorized Representative

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

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Other Contracts & Financial Related Information Disclosure

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

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

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

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

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

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

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature of Authorized Representative Date

OWNERSHIP CERTIFICATION

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

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

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

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

The following requirements of the Illinois Human Rights Act (775 ILCS 5/et seq), and applicable administrative rules apply:

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

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

RETURN WITH BID

**Contract No. 64C08
ROCK ISLAND County
Section (81-1)R & 81-1HVBR
Project NHPP-0074(324)
Route FAI 74
District 2 Construction Funds**

PART II. WORKFORCE PROJECTION - continued

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

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

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

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

PART III. AFFIRMATIVE ACTION PLAN

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

Company _____ Telephone Number _____

Address _____

NOTICE REGARDING SIGNATURE

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

Signature: _____ Title: _____ Date: _____

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

RETURN WITH BID

ADDITIONAL FEDERAL REQUIREMENTS

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

- A. By the execution of this proposal, the signing bidder certifies that the bidding entity has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. This statement made by the undersigned bidder is true and correct under penalty of perjury under the laws of the United States.
- B. CERTIFICATION, EQUAL EMPLOYMENT OPPORTUNITY:
1. Have you participated in any previous contracts or subcontracts subject to the equal opportunity clause. YES _____ NO _____
 2. If answer to #1 is yes, have you filed with the Joint Reporting Committee, the Director of OFCC, any Federal agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements of those organizations?
YES _____ NO _____

RETURN WITH BID

**Contract No. 64C08
ROCK ISLAND County
Section (81-1)R & 81-1HVBR
Project NHPP-0074(324)
Route FAI 74
District 2 Construction Funds**

PROPOSAL SIGNATURE SHEET

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

(IF AN INDIVIDUAL)

Firm Name _____
Signature of Owner _____
Business Address _____

(IF A CO-PARTNERSHIP)

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

(IF A CORPORATION)

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

(IF A JOINT VENTURE)

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

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



This Annual Proposal Bid Bond shall become effective at 12:01 AM (CDST) on _____ and shall be valid until _____ 11:59 PM (CDST).

KNOW ALL PERSONS BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

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

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer _____ day of _____ A.D., _____

In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer _____ day of _____ A.D., _____

(Company Name)

(Company Name)

By _____
(Signature and Title)

By _____
(Signature of Attorney-in-Fact)

Notary for PRINCIPAL

Notary for SURETY

STATE OF _____
COUNTY OF _____

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)

Signed and attested before me on _____ (date)

by _____
(Name of Notary Public)

by _____
(Name of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Date Commission Expires)

(Date Commission Expires)

In lieu of completing the above section of the Annual Proposal Bid Bond form, the Principal may file an Electronic Bid Bond. By signing the proposal(s) the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

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

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



Item No. _____

Letting Date _____

KNOW ALL PERSONS BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

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

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

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

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

In TESTIMONY WHEREOF, the said PRINCIPAL has caused this instrument to be signed by its officer _____ day of _____ A.D., _____.

In TESTIMONY WHEREOF, the said SURETY has caused this instrument to be signed by its officer _____ day of _____ A.D., _____.

(Company Name)

(Company Name)

By _____
(Signature and Title)

By _____
(Signature of Attorney-in-Fact)

Notary for PRINCIPAL

Notary for SURETY

STATE OF _____
COUNTY OF _____

STATE OF _____
COUNTY OF _____

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

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

(Name of Notary Public)

(Name of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Seal) _____
(Signature of Notary Public)

(Date Commission Expires)

(Date Commission Expires)

In lieu of completing the above section of the Proposal Bid Bond form, the Principal may file an Electronic Bid Bond. By signing the proposal the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the State of Illinois under the conditions of the bid bond as shown above.

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



DO NOT SUBMIT WITH BID

DBE Utilization Plan

(1) Policy

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

(2) Obligation

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

(3) Project and Bid Identification

Complete the following information concerning the project and bid:

Form with fields for Route, Section, Project, County, Letting Date, Contract No., Letting Item No., Total Bid, and Contract DBE Goal (Percent and Dollar Amount).

(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.

Signature fields for Company, By, Title, and Date.

Box containing instructions: 'The "as read" Low Bidder is required to comply with the Special Provision. Submit only one utilization plan for each project. The utilization plan shall be submitted in accordance with the special provision. Bureau of Small Business Enterprises 2300 South Dirksen Parkway Springfield, Illinois 62764 Local Let Projects Submit forms to the Local Agency'

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.

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. 64C08
ROCK ISLAND County
Section (81-1)R & 81-1HVBR
Project NHPP-0074(324)
Route FAI 74
District 2 Construction Funds**



Illinois Department of Transportation

SUBCONTRACTOR DOCUMENTATION

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

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

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

RETURN WITH SUBCONTRACT

STATE ETHICAL STANDARDS GOVERNING SUBCONTRACTORS

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

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

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

A. Bribery

Section 50-5. Bribery.

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

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

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

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

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

(2) the business demonstrates to the governmental entity with which it seeks to contract, or which is signatory to the contract to which the subcontract relates, and that entity finds that the commission of the offense was not authorized, requested, commanded, or performed by a director, officer, or high managerial agent on behalf of the business as provided in paragraph (2) of subsection (a) of Section 5-4 of the Criminal Code of 2012.

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

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

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

B. Felons

Section 50-10. Felons.

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

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

RETURN WITH SUBCONTRACT

C. Debt Delinquency

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

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

D. Prohibited Bidders, Contractors and Subcontractors

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

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

E. Section 42 of the Environmental Protection Act

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

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

Name of Subcontracting Company

Authorized Officer

Date

RETURN WITH SUBCONTRACT
SUBCONTRACTOR DISCLOSURES

I. DISCLOSURES

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

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

B. Financial Interests and Conflicts of Interest

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

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

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

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

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

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

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

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

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

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

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

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

RETURN WITH SUBCONTRACT

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

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

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

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

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

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

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

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

DISCLOSURE OF FINANCIAL INFORMATION

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

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

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

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

Yes ___ No ___

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

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

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

RETURN WITH SUBCONTRACT

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

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

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

Yes ___ No ___

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

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

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

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

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

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

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

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

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

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

RETURN WITH SUBCONTRACT

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

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

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

3 Communication Disclosure.

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

Name and address of person(s): _____

RETURN WITH SUBCONTRACT

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

Name of person(s): _____

Nature of disclosure: _____

APPLICABLE STATEMENT

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

Completed by: _____ Date _____
Signature of Individual or Authorized Officer

NOT APPLICABLE STATEMENT

Under penalty of perjury, I have determined that no individuals associated with this organization meet the criteria that would require the completion of this Form A.

This Disclosure Form A is submitted on behalf of the SUBCONTRACTOR listed on the previous page.

_____ Date _____
Signature of Authorized Officer

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B Subcontractor: Other Contracts & Financial Related Information Disclosure

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

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

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

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

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

THE FOLLOWING STATEMENT MUST BE CHECKED

Signature box with fields: Signature of Authorized Officer, Date

OWNERSHIP CERTIFICATION

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

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

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



- 1. TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 a.m. April 28, 2017. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after 10:00 a.m.
- 2. DESCRIPTION OF WORK.** The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

**Contract No. 64C08
ROCK ISLAND County
Section (81-1)R & 81-1HVBR
Project NHPP-0074(324)
Route FAI 74
District 2 Construction Funds**

Reconstruction of I-74 from the Mississippi River to 7th Avenue in Moline.

- 3. INSTRUCTIONS TO BIDDERS.** (a) This Notice, the invitation for bids, proposal and letter of award shall, together with all other documents in accordance with Article 101.09 of the Standard Specifications for Road and Bridge Construction, become part of the contract. Bidders are cautioned to read and examine carefully all documents, to make all required inspections, and to inquire or seek explanation of the same prior to submission of a bid.

(b) State law, and, if the work is to be paid wholly or in part with Federal-aid funds, Federal law requires the bidder to make various certifications as a part of the proposal and contract. By execution and submission of the proposal, the bidder makes the certification contained therein. A false or fraudulent certification shall, in addition to all other remedies provided by law, be a breach of contract and may result in termination of the contract.
- 4. AWARD CRITERIA AND REJECTION OF BIDS.** This contract will be awarded to the lowest responsive and responsible bidder considering conformity with the terms and conditions established by the Department in the rules, Invitation for Bids and contract documents. The issuance of plans and proposal forms for bidding based upon a prequalification rating shall not be the sole determinant of responsibility. The Department reserves the right to determine responsibility at the time of award, to reject any or all proposals, to readvertise the proposed improvement, and to waive technicalities.

By Order of the
Illinois Department of Transportation

Randall S. Blankenhorn,
Secretary

INDEX
 FOR
 SUPPLEMENTAL SPECIFICATIONS
 AND RECURRING SPECIAL PROVISIONS

Adopted January 1, 2017

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 4-1-16) (Revised 1-1-17)

SUPPLEMENTAL SPECIFICATIONS

<u>Std. Spec. Sec.</u>	<u>Page No.</u>
106 Control of Materials	1
403 Bituminous Surface Treatment (Class A-1, A-2, A-3)	2
420 Portland Cement Concrete Pavement	3
502 Excavation for Structures	5
503 Concrete Structures	7
504 Precast Concrete Structures	10
542 Pipe Culverts	11
586 Sand Backfill for Vaulted Abutments	12
670 Engineer's Field Office and Laboratory	14
704 Temporary Concrete Barrier	15
888 Pedestrian Push-Button	17
1003 Fine Aggregates	18
1004 Coarse Aggregates	19
1006 Metals	21
1020 Portland Cement Concrete	22
1103 Portland Cement Concrete Equipment	24

RECURRING SPECIAL PROVISIONS

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

<u>CHECK SHEET #</u>	<u>PAGE NO.</u>
1 X Additional State Requirements for Federal-Aid Construction Contracts	26
2 X Subletting of Contracts (Federal-Aid Contracts)	29
3 X EEO	30
4 Specific EEO Responsibilities Non Federal-Aid Contracts	40
5 Required Provisions - State Contracts	45
6 Asbestos Bearing Pad Removal	51
7 Asbestos Waterproofing Membrane and Asbestos HMA Surface Removal	52
8 Temporary Stream Crossings and In-Stream Work Pads	53
9 Construction Layout Stakes Except for Bridges	54
10 X Construction Layout Stakes	57
11 Use of Geotextile Fabric for Railroad Crossing	60
12 Subsealing of Concrete Pavements	62
13 Hot-Mix Asphalt Surface Correction	66
14 Pavement and Shoulder Resurfacing	68
15 Patching with Hot-Mix Asphalt Overlay Removal	69
16 X Polymer Concrete	70
17 PVC Pipeliner	72
18 Bicycle Racks	73
19 Temporary Portable Bridge Traffic Signals	75
20 X Work Zone Public Information Signs	77
21 X Nighttime Inspection of Roadway Lighting	78
22 English Substitution of Metric Bolts	79
23 Calcium Chloride Accelerator for Portland Cement Concrete	80
24 Quality Control of Concrete Mixtures at the Plant	81
25 X Quality Control/Quality Assurance of Concrete Mixtures	89
26 X Digital Terrain Modeling for Earthwork Calculations	105
27 Reserved	107
28 Preventive Maintenance – Bituminous Surface Treatment (A-1)	108
29 Preventive Maintenance – Cape Seal	114
30 Preventive Maintenance – Micro-Surfacing	129
31 Preventive Maintenance – Slurry Seal	140
32 Temporary Raised Pavement Markers	149
33 Restoring Bridge Approach Pavements Using High-Density Foam	150
34 Portland Cement Concrete Inlay or Overlay	153

TABLE OF CONTENTS

LOCATION OF PROJECT	1
DESCRIPTION OF PROJECT	1
TRAFFIC CONTROL PLAN	2
PRECAST BLOCK REVETMENT MAT	12
PROPERTY MARKERS	13
COMPLETION DATE PLUS WORKING DAYS	13
GUARDRAIL REMOVAL	14
MOWING	14
MOWING (SPECIAL).....	15
TEMPORARY PAVEMENT	15
GEOTECHNICAL REINFORCEMENT	17
HOT-MIX ASPHALT SURFACE COURSE, LEVEL BINDER, AND BINDER.....	19
PCC AUTOMATIC BATCHING EQUIPMENT	19
PCC QC/QA ELECTRONIC REPORTS SUBMITTAL	19
CONSTRUCTION PROGRESS SCHEDULE	20
INCENTIVE/DISINCENTIVE.....	45
SHARED BONUS	48
STORM SEWER WATER MAIN REQUIREMENT	52
SEEDING MOBILIZATION	53
HOT-MIX ASPHALT SURFACE COURSE, CUT OFF DATE.....	53
ISLAND REMOVAL	53
ENGINEER'S FIELD OFFICE TYPE A.....	54
WORK ZONE PAVEMENT MARKING AND REMOVAL	54
STATUS OF UTILITIES TO BE ADJUSTED	55
TRAFFIC CONTROL SURVEILLANCE	56
ABANDON AND FILL EXISTING STORM SEWER	57
CHAIN LINK FENCE, 4'	58
CONCRETE BARRIER, SINGLE FACE, 42 INCH HEIGHT (SPECIAL) AND CONCRETE BARRIER BASE (SPECIAL).....	58
CONCRETE BARRIER TRANSITION AND CONCRETE BARRIER BASE (SPECIAL)	59
CONCRETE FOUNDATION, TYPE E	59
CONCRETE GUTTER, TYPE A (SPECIAL).....	60

CONCRETE MEDIAN (SPECIAL)	60
CONCRETE MEDIAN, TYPE SM (SPECIAL)	60
CONCRETE STEPS	61
CONCRETE STEP REMOVAL	61
CONSTRUCTION LAYOUT (SPECIAL)	62
DEWATERING STRUCTURE	63
DOUBLE HANDHOLE	65
ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	66
ENVIRONMENTAL PROTECTION	67
MUSSEL CONSERVATION	72
FIRE HYDRANTS TO BE ADJUSTED	76
FULL-ACTUATED CONTROLLER AND TYPE IV CABINET	76
HANDHOLE	77
HANDHOLE TO BE ADJUSTED	78
INLET BOXES TO BE ADJUSTED (SPECIAL)	78
MILE POST MARKER ASSEMBLY (SPECIAL)	79
PARAPET MOUNTED SIGN SUPPORT ASSEMBLY	80
JUNCTION BOX	81
RAILROAD COORDINATION	82
RELOCATE EXISTING SIGN (SPECIAL)	83
RELOCATE INTERCONNECT CABLE	83
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	83
REMOVE EXISTING FLAGPOLE	85
REMOVE EXISTING FLARED END SECTION	85
REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	86
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	86
MODIFY EXISTING CONTROLLER	86
PEDESTRIAN PUSH BUTTON	87
ROCK FILL (Z0054400)	87
ROCK FILL (Z0054500)	88
STORM SEWER REMOVAL, 31" X 20"	88
TEMPORARY CHAIN LINK FENCE	89
TEMPORARY CHAIN LINK FENCE (PORTABLE)	89
TEMPORARY INFORMATION SIGNING	90

TEMPORARY TRAFFIC SIGNAL INSTALLATION	91
TEMPORARY TRAFFIC SIGNAL TIMING	91
UNINTERRUPTABLE POWER SUPPLY, STANDARD.....	92
WIDE AREA VIDEO DETECTION SYSTEM COMPLETE	100
HANDHOLE (SPECIAL)	104
REMOVE EXISTING ITS EQUIPMENT.....	106
EQUIPMENT CABINET	107
45 FT STEEL ITS POLE, BLACK PAINTED.....	113
POWER INSTALLED FOUNDATION	114
MVDS CABLE, INSTALL ONLY	115
ROADWAY LUMINAIRE, SPECIAL (INSTALL ONLY).....	116
ROADWAY LIGHTING MODIFICATIONS.....	117
ROADWAY LIGHT POLE, INSTALL ONLY	119
UNDERPASS LUMINAIRE, (INSTALL ONLY)	120
AESTHETIC LUMINAIRE, (INSTALL ONLY)	122
LIGHT POLE FOUNDATION, 30" DIAMETER SPECIAL	124
LIGHT POLE FOUNDATION, SPECIAL.....	124
TEMPORARY LIGHTING SYSTEM	126
REMOVE AND REPLACE EXISTING CIRCUIT BREAKER WITH 40AMP, 2-POLE.....	127
GRANULAR BACKFILL FOR STRUCTURES.....	128
SLIPFORM PARAPET	128
STEEL RAILING (SPECIAL).....	133
FENCE, PERFORATED ALUMINUM.....	133
STRUCTURAL STEEL RAILING, TRAFFIC AND BICYCLE.....	134
CLEANING AND PAINTING STRUCTURAL STEEL.....	134
PILING	135
MECHANICALLY STABILIZED EARTH RETAINING WALLS.....	139
BUILDING REMOVAL - CASE I (NON-FRIABLE AND FRIABLE ASBESTOS ABATEMENT) (BDE)	148
RAILROAD PROTECTIVE LIABILITY INSURANCE (5 AND 10) (BDE)	186
RAILROAD PROTECTIVE LIABILITY INSURANCE (BDE)	187
REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES.....	188
DRAINAGE SYSTEM	200
HIGH LOAD MULTI-ROTATIONAL BEARINGS.....	201

MODULAR EXPANSION JOINT.....	207
PIPE UNDERDRAINS FOR STRUCTURES	211
ERECTION OF CURVED STEEL STRUCTURES	212
AGGREGATE COLUMN GROUND IMPROVEMENT	213
ADJUSTING FRAMES AND GRATES (BDE)	217
AGGREGATE SUBGRADE IMPROVEMENT (BDE).....	219
BUTT JOINTS (BDE)	221
CONCRETE MIX DESIGN – DEPARTMENT PROVIDED (BDE)	222
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE).....	222
DOWEL BAR INSERTER (BDE)	234
GROOVING FOR RECESSED PAVEMENT MARKINGS (BDE)	241
HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE).....	243
HOT-MIX ASPHALT – TACK COAT (BDE)	244
LIGHT POLES (BDE).....	244
MAST ARM ASSEMBLY AND POLE (BDE).....	245
PAVEMENT MARKING REMOVAL (BDE)	245
PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)	246
PORTLAND CEMENT CONCRETE BRIDGE DECK CURING (BDE)	247
PROGRESS PAYMENTS (BDE)	249
RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)	250
SPEED DISPLAY TRAILER (BDE).....	260
STEEL PLATE BEAM GUARDRAIL (BDE)	261
TRAINING SPECIAL PROVISIONS (BDE)	263
IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION	266
TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (BDE)	268
TUBULAR MARKERS (BDE).....	269
WARM MIX ASPHALT (BDE)	270
WEEKLY DBE TRUCKING REPORTS (BDE).....	272
BITUMINOUS MATERIALS COST ADJUSTMENTS (BDE) (RETURN FORM WITH BID).....	273
FUEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID).....	276
STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID).....	280
STORM WATER POLLUTION PREVENTION PLAN	284

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction, Adopted April 1, 2016”, the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways”, and the “Manual of Test Procedures for Materials” in effect on the date of invitation for bids, and the “Supplemental Specifications and Recurring Special Provisions” indicated on the Check Sheet included herein, which apply to and govern the construction of FAI Route 74 (IL 74), Project NHPP-0074(324), Section (81-1)R&81-1HVBR, Rock Island County, Contract No. 64C08 and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

LOCATION OF PROJECT

Project is located along Interstate 74 south of the Mississippi River and just south of 7th Avenue in Moline, Illinois and includes Interstate, ramp, and local road improvements.

DESCRIPTION OF PROJECT

Work on this project consists of, but is not limited to, the following:

Construction of Interstate 74 from Iowa Station 6747+16.75 to Illinois Station 49+03.54 including,

- Construction of the south bridge approach slab for the Structure carrying I-74 westbound over the Mississippi River,
- Construction of the south bridge approach slab for the Structure carrying I-74 eastbound over the Mississippi River,
- Construction of eastbound and westbound roadway between Iowa Station 6747+16.75 and Illinois Station 29+06.89,
- Construction of westbound Viaduct Structure Number 081-0177 and eastbound Viaduct Structure Number 081-0178 between Illinois Station 29+06.89 and Station 49+03.54,
- Construction of exit ramp RD-G to River Drive, entrance ramp RD-H from River Drive, exit ramp 6th-C to 6th Avenue including Structure Number 081-0186, and ramp 6th-D from 6th Avenue including Structure Number 081-0187,
- Reconstruction of 21st Street between 5th Avenue and the alley just south of 6th Avenue,
- Removal of the entrance ramp from River Drive to existing Interstate 74 eastbound (Ramp 3-N) and construction of temporary Ramp 3-N (with temporary retaining walls) to accommodate maintenance of traffic operations,
- Construction of retaining walls along I-74 mainline, Ramps RD-G, Ramp RD-H, Ramp 6th-C, and Ramp 6th-D,
- Proposed lighting improvements,
- Proposed Intelligent Transportation System (ITS) improvements,
- Proposed Drainage improvements,
- Construction of Aesthetic Identity Elements.

TRAFFIC CONTROL PLAN

Effective: January 14, 1999

Revised: January 13, 2017

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

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications for Road and Bridge Construction and the following Highway Standards relating to traffic control.

Standards:

701001	701006	701011	701101	701106	701301
701311	701400	701401	701411	701426	701427
701428	701446	701451	701456	701601	701606
701701	701801	701901	704001		

Details:

- Staging Plans
- District Standard WORK ZONE SIGN DETAILS (DIST STD 34.1)
- District Standard URBAN LANE INSIDE CLOSURE, MULTILANE, 2W, WITH MOUNTABLE MEDIAN (DIST STD 35.1)
- District Standard TRAFFIC CONTROL FOR TRANSITION AREAS (DIST STD 38.1)
- District Standard TRAFFIC CONTROL FOR ROAD CLOSURE (DIST STD 40.1)
- District Standard TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) (DIST STD 94.2)

General:

Where construction activities involve sidewalks on both sides of the street, the work shall be staged so that both sidewalks are not out of service at the same time.

Signs:

No bracing shall be allowed on post-mounted signs.

Post-mounted signs shall be installed using standard 720011, 728001, 729001, on 4"x4" wood posts, or on any other "break away" connection if accepted by the FHWA and corresponding letter is provided to the resident.

All signs are required on both sides of the road when the median is greater than 10 feet and on one way roadways.

The "WORKERS" (W21-1a(O)-48) signs shall be replaced with symbol "Right or Left Lane Closed Ahead" (W4-2R or L(O)-48) signs on multilane roadways.

"BUMP" (W8-1(O)48) signs shall be installed as directed by the Engineer.

"NO PASSING ZONES NOT STRIPED NEXT ___ MILES" (G20-I 100(O)) signs shall be 60" x 36".

When covering existing Department signs, no tape shall be used on the reflective portion of the sign. Contact the District sign shop for covering techniques.

All regulatory signs shall be maintained at a 5 foot minimum bottom (rural), 7 foot minimum (urban).

Any plates or direct applied sheeting used to alter signs shall have the same sheeting as the base sign.

No more than one kind of alteration shall be used to alter a sign.

Any post stubs without a sign in place and visible shall have a reflector placed on each post.

Devices:

Cones or reflectorized cones shall not be used during hours of darkness.

A minimum of 3 drums spaced at 4 feet shall be placed at each return when the sideroad is open.

On all standards, and the devices listed in Section 701 of the Standard Specifications, the device spacing shall be revised to the following dimensions:

Where the spacing shown on the standard is 25 feet, the devices shall be placed at 20 feet.

Where the spacing shown on the standard is 50 feet, the devices shall be placed at 40 feet.

Where the spacing shown on the standard is 100 feet, the devices shall be placed at 80 feet.

Direction Indicator Barricades shall exclusively be used in lane closure tapers. The back of a direction indicator barricade shall be a Type III barricade when within 12' of opposing traffic. The taper shall be continuous. It shall not be broken for access to turn lanes, side roads, ramps, or large commercial driveways. The taper shall be moved further away and shall be completed prior to the access point.

Vertical barricades shall not be used in weaves, and in the gore areas on Highway Standard 701411.

Vertical barricades shall not be used as a device on I-74.

Lights:

Steady burn mono-directional lights are required on devices delineating a widening trench.

Flaggers:

Flagger at Sideroads and Commercial Entrances:

Effective: August 1, 2011 Revised: December 29, 2015

Flaggers shall comply with all requirements and signaling methods contained in the Department's "Traffic Control Field Manual" current at the time of letting. The flagger equipment listed for flaggers employed by the Illinois Department of Transportation shall apply to all flaggers

All workers and flaggers shall wear ANSI Class E pants and an ANSI Class 2 vest that in combination meet the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 3 garments during hours of darkness.

In addition to the flaggers shown on applicable standards, on major sideroads, flaggers shall be required on all legs of the intersection. Major sideroads for this project shall be None.

In addition to the flaggers shown on applicable standards, a flagger shall be required on high volume commercial entrances listed below. High volume commercial entrances for this project shall be None.

When the mainline flagger is within 200 feet of an intersection, the sideroad flagger shall be required.

When the road is closed to through traffic and it is necessary to provide access for local traffic, all flaggers as shown on the applicable standards will be required. No reduction in the number of flaggers shall be allowed.

Revise Article 701.20(i) of the Standard/Supplemental Specifications to read:

"Signs, barricades, other traffic control devices, or flaggers required by the Engineer, over and above those shown in the contract documents, will be paid for according to Article 109.04."

Pavement Marking:

All temporary pavement markings shall be urethane paint.

Temporary pavement markings shall not be included in the cost of the standard rather it shall be paid for separately at the contract unit prices of specified temporary pavement marking items.

Changeable Message Signs:

Changeable Message Signs shall be required for 2 weeks before the start of work for each of the following roadways.

- 19th Street (one each direction)
- River Drive (one each direction)
- 4th Avenue (WB IL 92)
- 6th Ave (EB IL 92)
- 7th Avenue (one each direction)

Changeable Message Signs on I-74 (one in each direction) shall be required for 2 weeks prior to the start of work.

A changeable message sign shall be in place for a maximum of 2 weeks (10 business days) prior to the start of work, for a stage switch, for a major change in traffic patterns, new signals (10 days starting the day the signals are turned on), prior to beginning construction, and as shown on the plans.

Additional changeable message signs may be required by the Resident Engineer.

Payment for changeable message signs that are not shown in an applicable Traffic Control and Protection Standard shall be paid for at the contract unit price per calendar month as CHANGEABLE MESSAGE SIGN.

Highway Standards Application:

Traffic Control and Protection Standard 701428: This work shall be done according to Section 701 of the Standard Specifications and the Typical Application of Traffic Control Devices for Highway Construction, Standard 701428, and as specified herein.

This standard shall be used, regardless of the ADT on the roadway.

This work will not be measured for payment.

Traffic Control and Protection Standard 701601:

Beam removal, beam setting, overhead sign placement on roads open to traffic: Close all but one lane, using applicable lane closure standards, in each direction of travel. Closing the remaining lane(s) using flaggers under I-74 is allowed for up to twenty (20) minutes to remove/set bridge beams and place overhead signs. At the end of the twenty minute period, the lane(s) shall be opened to traffic and all queued traffic shall be cleared prior to closing the lane(s) again.

This work shall be completed during nighttime hours, 9:00 PM Monday to 6:00 AM Friday. Traffic control set up shall not begin prior to 9:00 PM on any day and shall be completely removed by 6:00 AM the following morning. No lane closures shall be allowed on Friday, Saturday, and Sunday evenings. During legal holidays, Section 107 of the Standard Specifications shall apply.

Additional lane closure restrictions may be imposed due to local events, inclement weather, etc.

All workers and flaggers shall wear ANSI Class E pants and an ANSI Class 2 vest that in combination meet the requirements of ANSI/ISEA 107-2004 for Conspicuity Class 3 garments during hours of darkness.

Traffic control devices shall be removed from the traffic lanes and all lanes shall be opened to traffic thirty (30) minutes after bridge beam removal/setting and overhead sign placement operations cease, or defined by work restriction hours, whichever comes first.

Changeable Message Signs shall be placed on each direction of travel for the road to be closed 48 hours prior to the beam removal/setting and overhead sign placement providing notification of the closures. These changeable message signs required for setting of beams/placing overhead signs shall not be paid for separately but shall be included in the cost of applicable TRAFFIC CONTROL AND PROTECTION STANDARDS.

The Contractor shall be liable if they fail to completely open and keep open all traffic lanes on the road in accordance with the limitations specified. The Contractor shall be liable to the Department in the amount of \$500 for each lane blocked as liquidated and ascertained damages for each and every fifteen (15) minute interval, or portion thereof, that a lane is blocked outside the allowable time limitations. Such damages may be deducted by the Department from any monies due to the Contractor. These damages shall apply during the contract time and during any extensions of the contract time.

Standard 701611 shall not be paid for separately during bridge beam removal/setting and overhead sign placement operations, but shall be included in TRAFFIC CONTROL AND PROTECTION. STANDARD 701601.

This work shall be included in the contract unit price per Lump Sum for TRAFFIC CONTROL AND PROTECTION. STANDARD 701601.

Traffic Control and Protection Standard 701701: This work shall be done according to Section 701 of the Standard Specifications and the Typical Application of Traffic Control Devices for Highway Construction, Standard 701701, and as specified herein.

The "left" leg of the intersection shown on this standard also applies when the right turn lane is closed. When the right turn lane is closed, "RIGHT TURN LANE CLOSED AHEAD" shall be substituted for the "LEFT TURN LANE CLOSED AHEAD" and the set up would be a mirror image to what is shown.

This work shall be included in the contract unit price per Lump Sum for TRAFFIC CONTROL AND PROTECTION STANDARD 701701.

Interstates and multi-lane divided highways: The Contractor shall equip all machinery and vehicles with flashing amber lights, installed so the illumination is visible from all directions.

The median crossover will generally not be available for Contractor use. It may be used only when both lanes adjacent to the median are closed. Under no condition shall left turn lanes be made to cross the median from lanes open to traffic. Where interchanges are not available, the Contractor shall only be allowed to turn around where left turn lanes are present.

Parking of personal vehicles within the interstate right-of-way will be strictly prohibited. Parking of construction equipment within the right-of-way will be permitted only at locations approved by the Engineer.

District Standards Application:

Traffic Control and Protection (Special): All work defined for the closure of 5th Avenue, 6th Avenue, 7th Avenue, 19th Street, and 21st Street shall be paid for at the contract unit price per LSUM for TRAFFIC CONTROL AND PROTECTION, (SPECIAL). This work shall be done according to the District Standard 40.1 TRAFFIC CONTROL FOR ROAD CLOSURE, the Staging Plans, and Section 701 of the Standard Specifications.

“ROAD CLOSED AHEAD” (W20-3(O)-48) with flasher and the appropriate arrow plate (W1-6(O)-36x18 or W1-7(O)-36x18) shall be required on all side roads within the limits of the mainline “ROAD CLOSED AHEAD” signs.

“NO LEFT TURN”, “NO RIGHT TURN”, and “LANE ASSIGNMENT” signing shall be required as shown in the plan details.

For State Routes Only (6th Ave IL-92 EB):

The Contractor shall notify the Department via email at DOT.D2.TrafficNotice@illinois.gov. **This request shall be submitted a minimum of three weeks (21 days) and no earlier than four weeks (28 days) prior to the anticipated closure date to allow the State adequate time to set the detour route.** The Contractor shall notify Metrolink at 309/786-2705.

The contractor shall provide information warning signs for oversized loads regarding the road closure. These signs shall be 8' x 4' as shown on the sign design and shall read “ROAD CLOSED TO OVERSIZED LOADS XX MILES AHEAD” and the distance from the cross roads as noted. The contractor shall erect these signs near the intersection of IL 92 at US 67 (4 MILES AHEAD).

Signing and devices required to close the road, according to the Traffic Control for Road Closure detail and contained herein, shall be the responsibility of the Contractor. Detour signing required to detour traffic to IL 92 EB only shall be the responsibility of the Department. The other route's detour signing shall be the responsibility of the Contractor. The day the detour signing begins, the detour will be in effect at 2:00 p.m., or when the Traffic Operations Section has notified the Resident Engineer or personnel on the project. No detour shall be erected on Friday, Saturday or Sunday. The road shall not be closed until the detour signing is completely installed, verified, and ready to accept traffic.

The "ROAD CLOSED" sign on the Type III barricades shall be unobstructed and visible to traffic at all times. No equipment, debris, or other materials shall be stored within 20 feet of the first set of Type III barricades, unless approved by the Engineer.

The Contractor shall not drive around the outside of the Type III barricades, but shall relocate the barricades temporarily for access. When it is necessary for the barricades to be moved for access, the Contractor shall move the devices into the left lane and/or left shoulder area behind barricades that are to remain in place. At no time shall the barricades be turned parallel to traffic flow for access purposes.

If a path becomes evident around the outside of the barricades, the Contractor shall be required to place additional Type III barricades to prevent driving around the existing barricades. Additional barricades shall be included in the cost of applicable Traffic Control Standards. Any damage caused by vehicles driving around the outside of barricades shall be repaired by the Contractor at no additional cost to the Department.

A 1:3 compacted gravel wedge is required at the end of the closure limits when there is a 12" or greater difference in elevation (drop-off) between the pavement and the work area.

Road Closures (5th Avenue, 6th Avenue, 7th Avenue, 19th Street, and 21st Street):

The road closure shall be completed using Type III barricades in compliance with Standards 701901, and signing according to Traffic Control for Road Closure detail. Two flashers shall be installed above each Type III barricade. The "ROAD CLOSED" (R11-2) or "ROAD CLOSED TO THRU TRAFFIC" (R11-4) signs shall be placed as shown in Standard 701901. Flashers shall be installed above all warning signs involving a night time road closure.

Closure of the 7th Avenue/19th Intersection shall occur in Pre-Stage (Fall 2017) and prior to winter shutdown to the limits shown in the Staging Plans in accordance with District Standard 40.1, the Staging Plans, and Section 701 of the Standard Specifications. The 7th Avenue/19th Street intersection shall be reopened within 60 consecutive calendar days of closure and no later than Tuesday, **November 21st, 2017**.

Reconstruction of 6th Avenue is to occur in two segments under full closure in accordance with District Standard 40.1, the Staging Plans, and Section 701 of the Standard Specifications.

Segment 1: STA 6005+10 to 6009+20
Segment 2: STA 6000+29 to 6005+10

Closure of 6th Avenue for the construction of Segment 1 shall occur no earlier than **October 1, 2019**. The closure shall remain in place through the winter shutdown between Stage 2 and Stage 3. Segment 2 shall be constructed, closure removed and all lanes open to traffic within the first **60 calendar days** of the start of the 3rd construction season (Stage 3).

Ramp 6th-C construction during the Winter-Stage can continue once Ramp RD-H opens during the Winter-Stage and the Existing Ramp N-3 is closed and removed using cold weather precautions during construction.

The Contractor shall be required to notify the Bureau of Project Implementation and affected residents prior to a complete closure.

All cost involved in conforming with this provision shall be considered a part of TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

Coordination with the adjacent Contract 64E26 is required to provide the necessary traffic control along 19th Street and the I-74 mainline for each contract.

Method of Measurement. This work shall be paid for at the contract per LSUM price for TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

TEMPORARY SIGNALS: The Contractor will be required to have someone available at all times to receive phone calls during non-work hours and who is able to reach the job site within one hour of being called. This person will be able to repair the temporary signals or will be able to have flaggers on site within another hour to flag traffic until the signals are again in operation. Failure to have a person on site within an hour after the initial call out will result in the Contractor being charged liquidated damages by the Department of One Thousand Dollars (\$1,000). Failure to have traffic restored either with repaired signals or with flaggers within two hours after the initial call out will result in the Contractor being charged liquidated damages by the Department of One Thousand Dollars (\$1,000) per hour until traffic is restored. The Contractor may use a traffic control subcontractor for the first call, however this does not relieve the prime Contractor from having a person on call.

Traffic Signal Work: No traffic signal work shall begin until all of the traffic signal hardware is on the job site. The existing traffic signal system shall remain in operation during the modernization work. The work shall be scheduled so that a minimum of two signal indications for each phase remains in operation. No signal indication shall be absent for more than seven calendar days.

The Contractor will be allowed to shut down the existing signal system not to exceed 8 hours to replace the existing controller and cabinet. During this shutdown, the intersection will operate as a 4-way "Stop". Flaggers or Stop Signs required for the 4-way "Stop" condition shall be included in the cost of the TEMPORARY SIGNALS.

Tubular Marker Maintenance: This item shall consist of all materials and labor necessary to maintain the flexible delineator required as part of Traffic Control and Protection, Standards 701601 and District Standard 39.1.

The re-attachment of the tubular marker to the base shall be considered included in the cost of the Traffic Control and Protection used.

Any unit which needs repair because the attachment of the base to the pavement fails at any time after installation shall be re-attached by the Contractor no additional cost to the Department. Any tubular marker which needs to be replaced within seven (7) calendar days after installation shall be replaced by the Contractor no additional cost to the Department..

The quantity listed in the contract is only an estimate of the anticipated number of units requiring repair.

Any tubular marker which needs to be replaced after seven (7) calendar days shall be paid for at the contract unit price per Each for TUBULAR MARKER MAINTENANCE to maintain the tubular marker required as part of Traffic Control and Protection, Standards 701601 and District Standard 39.1.

Traffic Control for Narrow Travel Lanes on I-74: The Contractor shall provide informational warning signs regarding narrow travel lanes in construction areas. MAX WIDTH XX'-XX" X MILES AHEAD (W12-I103-48) sign with a width restriction of 8'-6" shall be installed at the following location; eastbound River Drive (STA 3010+00) as shown in the Staging Plans. The distance text shall be covered with a 48"x24" arrow.

The material of these signs shall be 0.125 inch thick aluminum, Type AP White and fluorescent orange reflective sheeting, and 6 inch D Series font Black vinyl lettering meeting the requirements of Sections 1090 and 1091 of the Standard Specifications.

Two signs at each location shall be required where the median is greater than 10 feet.

The Contractor shall notify the Department via email at DOT.D2.TrafficNotice@illinois.gov. **This request shall be submitted a minimum of three weeks (21 days) and no earlier than four weeks (28 days) prior to the anticipated closure date to allow the State adequate time to re-route oversized loads.**

The contractor shall be responsible for providing, erecting, maintaining, and removing these signs. All cost involved in conforming with this provision shall be considered a part of TRAFFIC CONTROL AND PROTECTION STANDARD 701401.

TEMPORARY LINEAR DELINEATION PANELS

Two (2) Panels shall be placed on each section of temporary concrete barrier 6 inches from the top. The panels shall be alternating white and fluorescent orange and have a spacing of 18 inches apart and centered horizontally on each section of temporary concrete barrier. Each panel shall not be less than 34 inches in length and 6 inches in width. The panels shall be constructed of cube-corner retroreflective material in standard highway colors permanently bonded to an aluminum substrate. The lateral edges of each panel shall be hemmed. The panel assembly shall have a repeating raised lateral ridge every 2.25 inches. Each ridge shall be 0.34 inches high with a 45 degree profile and a 0.28 inch radius top. Each panel shall be attached/adhered to as per the manufacturer specifications and/or recommendations.

Daytime color requirements shall be determined from measurement of the retroreflective sheeting applied to aluminum test panels. Daytime color shall be measured instrumentally using a spectrophotometer employing annular 45/0 (or equivalent 0/45) illuminating and viewing geometry. Measurements shall be made in accordance with ASTM E1164 for ordinary colors or ASTM E2153 for fluorescent colors. Chromaticity coordinates shall be calculated for CIE Illuminant D65 and the CIE 1931 (2o) Standard Colorimetric Observer in accordance with ASTM E308 for ordinary colors or ASTM E2152 for fluorescent colors.

Chromaticity Limits for White

	x	y	x	y	x	y	x	y	Limit Y (%)	
									Min	Max
White	0.303	0.287	0.368	0.353	0.340	0.380	0.274	0.316	40	-

Chromaticity Limits for Orange

	x	y	x	y	x	y	x	y	Total Luminance Factor Y (%)
									Min
Fluor Orange	0.595	0.351	0.645	0.355	0.583	0.416	0.542	0.403	30

The TEMPORARY LINEAR DELINEATION PANELS will not be paid for separately, but shall be considered included in the cost of TEMPORARY CONCRETE BARRIER.

Work Restrictions:

There shall be no I-74 Lane Closures allowed at the following times when not staged as shown in the plans:

Sunday: 10:00 am to 8:00 pm

Monday through Friday: 6:00 am to 7:00 pm

Saturday: 9:00 am to 6:00 pm

Any additional lane closures on local roads other than what is shown on the plans shall be approved by Traffic Operations. Work hour restrictions may be impacted.

The Contractor shall coordinate with IDOT Traffic Operations (DOT.D2.TrafficNotice@illinois.gov), City of Moline, and the Quad Cities Marathon Director (<http://qcmarathon.org/>) to determine the potential for accommodating the marathon route each year during construction. Typically, the marathon is held in late September of each year. The 2017 race date is scheduled for September 24, 2017. Race dates are not yet scheduled at the time of letting for years 2018 through 2020. Accommodating the marathon route will be dependent on the timing of the marathon, construction progress, and work zone configuration.

Maintenance of Traffic:

The Contractor shall be required to notify the City of Moline, emergency response agencies (i.e.: fire, ambulance, police), school bus companies, MetroLINK and the Department of Transportation (Bureau of Project Implementation) regarding any changes in traffic control.

The Contractor shall submit maintenance of local traffic plan to the Engineer at the preconstruction meeting telling how local access will be maintained at each access location. It will show which locations will be completely closed, and which locations will be constructed utilizing Traffic Control Standards, and/or barricades. This traffic plan shall be approved by the Engineer before any roadway is closed to traffic.

Placing and removing pavement marking shall be completed using Traffic Control and Protection Standard 701311, 701401, 701426, 701427 or 701701.

The partial ramp closures shall be completed using Traffic Control and Protection Standard 701456 and as shown on the Staging Plans.

The milling, saw cuts, pavement patches, and resurfacing along 4th Avenue shall be completed using Traffic Control and Protection Standard 701601. 4th Avenue shall be kept open to one way traffic at all times during working and non-working hours.

PRECAST BLOCK REVETMENT MAT

Effective: January 1, 2015

Revised: December 29, 2015

This work shall consist of furnishing and placing Precast Block Revetment Mat, as a permanent scour countermeasure in accordance with the grades, details and design dimensions as shown on the plans.

This work shall be completed according to Section 285 of the Standard Specifications and as specified herein:

The manufacturer shall use the alignment and cross-section of the channel, the design depth of flow, channel slope and design velocity provided in the plans to design the block size, block weight, block configuration, and mat configuration utilizing HEC 23 criteria.

The manufacturer shall be required to submit the design for the block mat, based on the existing field conditions and the hydraulic information for the various plan locations provided in the contract plans to the Resident Engineer, four weeks prior to delivery of the block to the jobsite.

Block used above normal pool elevation shall be open-cell to allow for vegetation growth. The block used below normal pool elevation shall be closed-cell block, unless otherwise noted in the plans.

The anchors (if required), cable and fittings shall be as specified by the manufacturer, and at the spacing specified by the manufacturer and shall not be paid for separately.

A 4 in. layer of clean aggregate, as specified by the manufacturer, is required for bedding, and is not paid for separately, but included in the price of the revetment mat.

Basis of Measurement: This work will be measured for payment in place and the area computed in square yards. The area for measurement will include the upper, sloped surface of the mat. The portion of the mat in trenches will not be measured for payment. No allowances will be made for overlaps.

Filter fabric will measured for payment according to Article 282.08.

Basis of Payment: This work will be paid for at the contract unit price per square yard for PRECAST BLOCK REVETMENT MAT.

Filter Fabric will be paid for according to Article 282.09.

PROPERTY MARKERS

Effective: July 1, 1994

Revised: January 30, 2008

This work shall consist of locating, protecting, preserving and relocating property markers, monuments or pins which are discovered and which will be disturbed in the normal course of construction. An Illinois Registered Land Surveyor will relocate the markers, monuments or pins to the new or relocated right-of-way line in such a location as to legally define the location of the new or reestablished property corner(s). The Contractor shall be required to furnish one copy of the final plat or plats to the State upon completion of the work.

The Surveyor shall place as a minimum a 36" x 3/4" round iron pin for the property marker. This work will be paid for at the contract unit price Each for PROPERTY MARKERS.

COMPLETION DATE PLUS WORKING DAYS

Effective: December 29, 2006

Revised: January 10, 2017

Revise Article 108.05(b) of the Standard Specifications to read:

Interim Completion Dates.

The Contractor shall complete all Pre-Stage work as shown in the plans no later than 3:00 P.M. on Tuesday, November 21, 2017. The Pre-Stage work includes, but is not limited to, removal and displacement of unsuitable soil and placement of embankment in the plug fill area to allow sufficient settlement time before Stage 1 pavement work in that area, construction of the temporary access driveway on the north side of 5th Avenue and west of I-74 (refer to the Commitments plan sheet), and reconstruction of the 7th Avenue and 19th Street intersection to the extent shown in the plans, including drainage and pavement (refer to Road Closures (5th Avenue, 6th Avenue, 7th Avenue, 19th Street and 21st Street, in the Special Provision, Traffic Control Plan).

The Contractor shall complete all Stage 1 work as shown in the plans no later than 3:00 P.M. on Tuesday, November 20, 2018. The Stage 1 work includes, but is not limited to, construction of Eastbound and Westbound I-74 Viaduct and Ramps RD-H, RD-G, Ramps 6TH-C and 6TH-D, retaining walls, earthwork, drainage and pavement to the limits shown in the plans; 7th Avenue drainage and pavement as shown in the plans.

The Contractor shall complete all Stage 2 work as shown in the plans no later than 3:00 P.M. on Tuesday, November 26, 2019. The Stage 2 work includes, but is not limited to, completion of Westbound I-74 Viaduct and Ramps RD-H, and 6TH-D, retaining walls, earthwork, drainage and pavement to the limits shown in the plans; 7th Avenue drainage and pavement as shown in the plans; and starting reconstruction of 6th Avenue Segment 1 (refer to Road Closures (5th Avenue, 6th Avenue, 7th Avenue, 19th Street and 21st Street, in the Special Provision, Traffic Control Plan). In order for work to be considered complete, the Westbound I-74 mainline and ramp roadways must be open to traffic with no lane closures or obstructions.

The Contractor shall complete all Winter Stage work as shown in the plans no later than 3:00 P.M. on Tuesday, March 31, 2020. The Winter Stage work includes, but is not limited to completion of crossover in the plug fill area; Ramp 6TH-C bridge and pavement; and 6th Avenue reconstruction.

The Contractor shall complete all work Stage 3 work as shown in the plans no later than 3:00 P.M. on Tuesday, November 24, 2020. The Stage 3 work includes, but is not limited to completion of all Eastbound I-74 Viaduct and Ramp RD-G. Refer to Road Closures (5th Avenue, 6th Avenue, 7th Avenue, 19th Street and 21st Street, in the Special Provision, Traffic Control Plan), for sub-stage time to complete 6th Avenue construction and open all lanes to traffic. In order for work to be considered complete, the Eastbound I-74 mainline and ramp roadways must be open to traffic with no lane closures or obstructions.

Completion Date plus Working Days.

The Contractor shall complete the project no later than 3:00 P.M. on Tuesday, November 24, 2020, except for erosion control items, punch list items and minor clean-up, for the contract work to be considered complete.

The Contractor will be allowed 30 working days after the Completion Date to complete erosion control items, punch list items, and minor clean-up.

GUARDRAIL REMOVAL

Effective: August 20, 1990

Revised: April 10, 2014

This work shall be done according to Section 632 of the Standard Specifications except that all removed guardrail will become the property of the Contractor.

This work will be paid for at the contract unit price per Foot for GUARDRAIL REMOVAL, measured from center-to-center of end posts.

MOWING

Effective: January 1, 2002

Revised: April 12, 2016

This work consists of mowing all Seeding Class 1A and Class 2A at the completion of the project or before winter shut down. The vegetation must be at least 6" long before mowing. The vegetation shall be mowed to obtain a height of not more than 3 inches. All debris must be cleared from the right-of-way immediately after the mowing.

This work will be paid for at the contract unit price per Acre for MOWING.

MOWING (SPECIAL)

Description: This work shall consist of mowing areas that are currently maintained by the Moline Park District throughout the entire construction period, at the discretion of the engineer. The vegetation must be at least 6" long before mowing and shall not be longer than 10" at any time. The vegetation shall be mowed to obtain a height of not more than 3 inches.

Basis of Payment: This work will be paid for at the contract unit price per acre for MOWING (SPECIAL).

TEMPORARY PAVEMENT

Effective: October 17, 2007

Revised: July 20, 2016

This work shall consist of placing a Hot-Mix Asphalt Surface Course, Portland Cement Concrete Pavement or Continuously Reinforced Portland Cement Concrete Pavement and aggregate base to serve as temporary pavement at the locations shown on the plans. The choice of material to be used for this item is left to the Contractor to choose from the following options:

HOT-MIX ASPHALT OPTION

This work shall consist of placing and compacting 10 inches of Aggregate Subgrade Improvement and constructing 8 ¼ inches of HOT-MIX ASPHALT SURFACE COURSE and HOT-MIX ASPHALT BINDER COURSE to serve as temporary pavement at the location shown on the plans. The 6 ¼" binder thickness should be placed in 2 lifts. The surface thickness is 2".

Description: This work shall consist of designing, producing and constructing a HMA Surface Course on a prepared base, according to Sections 311, 406, 1030 and 1102 of the Standard Specifications, except as follows.

Materials: Surface Mixture SBS PG 70-28, IL 9.5, Mix E, N90 shall be used for the surface and IL 19.0 for the binder.

Required Field Tests: Density Acceptance at 95% - 102% of growth curve at the frequency indicated in Article 1030.05(d)(3).

All work and materials required to complete the work listed above shall be included in the contract unit cost per Square Yard for TEMPORARY PAVEMENT.

The pavement and sub-base shall be removed after the stage(s) it is needed is completed. Removal shall be paid for separately at the contract unit price per Square Yard for TEMPORARY PAVEMENT REMOVAL.

PORTLAND CEMENT CONCRETE PAVEMENT (JOINTED) OPTION

This work shall consist of placing and compacting 10 inches of Aggregate Subgrade Improvement and constructing a 9 ¼ inch thick Portland Cement Concrete Pavement (Jointed) to serve as temporary pavement at the location shown on the plans. The minimum width shall be 3 feet. This work shall be completed according to Sections 311 and 420 of the Standard Specifications.

The Contractor shall saw transverse joints in the pavement according to the detail for Jointed PCC Pavement in Standard 420101, except that dowel bars are not required. These joints shall not be sealed.

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

The pavement and sub-base shall be removed after the stage(s) it is needed is completed. Removal shall be paid for separately at the contract unit price per Square Yard for TEMPORARY PAVEMENT REMOVAL.

CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT OPTION

This work shall consist of placing and compacting 10 inches of Aggregate Subgrade Improvement and constructing a 8 ½ inch thick Continuously Reinforced Portland Cement Concrete Pavement to serve as temporary pavement at the location shown on the plans. The minimum width shall be 3 feet. This work shall be completed according to Sections 311 and 421 of the Standard Specifications.

The Contractor shall saw transverse joints in the pavement, except that dowel bars are not required. These joints shall not be sealed.

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

The pavement and sub-base shall be removed after the stage(s) it is needed is completed. Removal shall be paid for separately at the contract unit price per Square Yard for TEMPORARY PAVEMENT REMOVAL.

GEOTECHNICAL REINFORCEMENT

Effective: November 30, 2010

Revised: April 10, 2014

This work consists of furnishing and installing an integrally-formed polypropylene geotechnical grid reinforcement material. The geogrid shall have an aperture, rib and junction cross section sufficient to permit significant mechanical interlock with the material being reinforced. There shall be a high continuity of tensile strength through all ribs and junctions of the grid material to reinforce the subbase or subgrade as shown on the plans and specifications.

MATERIAL CHARACTERISTICS	TEST METHOD	DATA
polymer type		polypropylene
carbon black content	ASTM D 4218	0.50% (min.)

DIMENSIONAL CHARACTERISTICS	TEST METHOD	UNIT	DATA
open area	CW 02215	%	75 (max.)
unit weight	ASTM D 5261	oz/yd ²	5.0 (min.)

TECHNICAL CHARACTERISTICS	TEST METHOD	UNIT	DATA
junction efficiency	GRI-GG2	%	90 (min.)

The supplier should provide a certification that their product meets the above requirements.

The geotechnical reinforcement shall be placed as described herein or as shown on the cross sections.

Geogrid shall be delivered to the jobsite in such a manner as to facilitate handling and incorporation into the work without damage. Material shall be stored in such a manner as to prevent exposure to direct sunlight and damage by other construction activities.

Prior to the installation of the geogrid, the application surface shall be cleared of debris, sharp objects and trees. Tree stumps shall be cut to the level of the ground surface. If the stumps cannot be cut to the ground level, they shall be completely removed. In the case of subgrades, all wheel tracks or ruts in excess of 3 inches in depth shall be graded smooth or otherwise filled with soil to provide a reasonably smooth surface.

The geotechnical reinforcement shall be placed with the "roll length" parallel to the pavement. Fabric of insufficient width or length to fully cover the specified area shall be lapped a minimum of 24 inches. The geogrid should be secured in place.

Installation:

The granular blanket shall be constructed to the width and depth required on the plans. Unless otherwise specified, the material shall be back-dumped on the Geogrid in a sequence of operations beginning at the outer edges of the treatment area with subsequent placement towards the middle.

Placement of material on the Geogrid shall be accomplished by spreading dumped material off of previously placed material with a bulldozer blade or endloader, in such a manner as to prevent tearing or shoving of the Geogrid. Dumping of material directly on the Geogrid will only be permitted to establish an initial working platform. No construction equipment shall be allowed on the Geogrid prior to placement of the granular blanket. If the geogrid develops wrinkles or moves significantly, an alternative method of securing it shall be used.

Unless otherwise specified in the plans or Special Provisions, the granular material, shall be placed to the full required thickness and compacted.

Geogrid which is damaged during installation or subsequent placement of granular material, due to failure of the Contractor to comply with these provisions, shall be repaired or replaced at no additional cost to the Department, including costs of removal and replacement of the granular material.

Torn Geogrid may be patched in-place by cutting and placing a piece of the same Geogrid over the tear. The dimensions of the patch shall be at least 2 feet larger than the largest dimension of the tear and it shall be weighted or otherwise secured to prevent the granular material from causing lap separation.

Method of Measurement: Geotechnical Reinforcement will be measured in square yards for the surface area placed. The excavation, replacement and compaction of the granular layer shall be paid for separately.

Basis of Payment: This work will be measured in place and the area computed in square yards. The work will be paid for at the contract unit price per Square Yard for GEOTECHNICAL REINFORCEMENT.

HOT-MIX ASPHALT SURFACE COURSE, LEVEL BINDER, AND BINDER

Effective: June 15, 2010

Revised: June 23, 2014

The maximum allowed average bulk specific gravity for the approved mix design (Gmb) will be:

2.460 for Mixture C

2.470 for Mixture D

2.610 for Mixture E

2.710 for Mixture F

The maximum allowed average bulk specific gravity for the approved mix design (Gmb) for all other uses will be 2.470.

PCC AUTOMATIC BATCHING EQUIPMENT

Effective: January 1, 2015

Revised: April 12, 2016

Portland cement concrete provided shall be produced from batch plants that conform to the requirements of Article 1103.03 (a) and (b) of the Standard Specifications for Road and Bridge Construction. Semi-automatic batching will not be allowed.

Plants shall have computerized batching interfaced with a printer. Batch weights, aggregate mixtures, water added, amount of each admixture or additive, and percent variance from design shall be printed for each batch. Tickets shall state the actual water-cement ratio as batched, and the amount of water that can be added to the batch without exceeding the maximum water-cement ratio. Truck delivery tickets are still required as per Article 1020.11(a)(7) of the Standard Specifications.

PCC QC/QA ELECTRONIC REPORTS SUBMITTAL

Effective: January 1, 2015

Revised: April 12, 2016

The Contractor's QC personnel shall be responsible for electronically submitting BMRP MI654 "Concrete Air, Slump, and Quantity," BMRP MI655 "P.C. Concrete Strength," and BMRP MI504 "Aggregate Gradation" reports to the Department. The format for the electronic submittals shall be the QC/QA package reporting program, which will be provided by the Department. Microsoft Excel 2007 or newer and Microsoft Outlook is required for this program which shall be provided by the Contractor.

CONSTRUCTION PROGRESS SCHEDULE

Effective June 16, 2017

General.

- A.** Time is of the essence in this Contract. It may be necessary for the Contractor to work longer hours, use additional crews, and work during weekends in order to complete the work within the required time limit. The Contractor shall submit a Critical Path Method (CPM) Progress Schedule as described below for the Engineer's approval before the work can be started.
- B.** The Contractor will not be allowed any compensation for working longer hours or using extra shifts; and working on weekends or during Holidays; working during winter months, etc. to meet the specified Completion Date, except in cases of extra work approved by the Engineer that effects the controlling operation. In such cases where extra work is associated with a controlling operation, the contractor shall separate out the added costs of the extra work that keep the project on the Target Schedule when submitting extra work prices. If the contractor does not meet the specified Completion Date after this extra work is approved, the Contractor will reimburse the Contract Authority for the added costs paid on the extra work associated with keeping the project on schedule.
- C.** This work shall consist of preparing, revising and updating a detailed progress schedule based upon the Critical Path Method (CPM). This work shall also consist of performing time impact analysis of the progress schedule based upon the various revisions and updates as they occur.
- D.** The CPM progress schedule shall be used for coordination and monitoring of all work under the contract including all activities of subcontractors, vendors and suppliers. The CPM progress schedule shall include provisions for traffic control, staging, and other events to complete the contract work. This schedule shall be the Contractor's intended working schedule and shall be used to plan, organize and execute the work; record and report actual performance and progress; and forecast remaining work.

Submittal of a CPM Progress Schedule.

A. Submitting the Preliminary and Baseline CPM Progress Schedules.

The successful bidder for the project shall submit a Preliminary CPM progress schedule to the Contracts Engineer within 14 calendar days of the award of the contract. Due to the need for starting Pre-Stage work in a timely manner, the Preliminary baseline schedule is shall meet all requirements detailed below for the Pre-Stage part of the schedule only, while the remainder of the contact work may be presented in lesser detail. A Baseline CPM Schedule for the entire contract time shall be submitted to the Engineer within 30 calendar days after the Engineer's approval of the preliminary schedule.

B. Submittal Format

Any CPM progress schedule submittal – baseline, updated, revision or recovery – shall be in electronic form acceptable to the Engineer, as a pdf file including the complete CPM progress schedule and the current narrative report. In addition to the PDF submittal file specified, an electronic copy of the CPM progress schedule in the original software format shall be submitted for the Engineer’s use in reviewing electronically.

C. Compliance with Intended Work.

Upon receipt of the CPM progress schedule, the schedule will be reviewed for compliance with the intended work and other requirements specified in the contract documents.

D. Review and Approval Process.

1. For the Preliminary Schedule only, the Engineer will notify the Contractor in writing, within three calendar days after receiving the preliminary CPM progress schedule submittal if the schedule is approved or if any corrections or revisions are required. For any other CPM progress schedule submittal (baseline, revision, update or recovery), the Engineer will notify the Contractor in writing, within 14 calendar days after receiving any CPM progress schedule submittal (baseline, revision, update or recovery), if the schedule is approved or if any corrections or revisions are required. If corrections or revisions are required to the submitted CPM progress schedule, the Contractor shall submit the revised CPM progress schedule to the Engineer within 7 calendar days (typically, but 3 calendar days for the Preliminary Schedule) after receiving the Engineer’s request for corrections or revisions.
2. Submittals that are required to be revised and resubmitted shall have the revisions clouded or annotated to designate revisions. Resubmittals made in accordance with this provision will have a review time as stated above. Resubmittals that are not in accordance with this provision will be allowed a review time of 30 calendar days.
3. If the Contractor fails to submit a revised baseline CPM progress schedule as stated above, the Contractor will not be allowed to begin work on site until an acceptable Preliminary CPM progress schedule has been submitted and approved. The Completion date(s) will not be changed, and the Department will not pay for any accelerated work required to make up time lost for this reason. When the baseline CPM progress schedule is approved it will be designated as the “Target Schedule” and shall only be changed as specified below.

Requirements for the CPM Progress Schedule.

The CPM progress schedule shall be developed using the latest edition of Primavera project management software, published by Primavera Systems, Inc. or similar software that is 100% compatible with the latest edition of Primavera project management software and approved by the Engineer. The CPM progress schedule submitted shall be a Gantt chart with a tabular data report for each activity and accompanied by a narrative report.

A. Format.

The electronic schedule format shall contain the following on each page printed:

1. Project Name
2. Template: Construction.
3. Type and edition of software
4. Planning Unit: Days (calendar or working).
5. Number/Version: Original or update number.
6. Start Date of contract work
7. Completion Date as specified in contract documents.
8. Project Title: Contract number.
9. Company Name: Contractor's name.
10. Submittal date.
11. Data date.
12. Page number.

B. Calendars for Completion Date Contracts.

The base calendar shall show the proposed working days of the week and the proposed number of work hours per day.

C. Schedule Development.

1. The detailed schedule shall incorporate the entire contract time. The construction time, as determined by the CPM progress schedule, for the entire contract or any milestone, shall not exceed the specified contract period. The minimum number of activities shown on the schedule shall represent the work incorporating the bid items whose aggregate contract value constitutes 80% of the total contract value. These bid items shall be determined by starting with the bid item with the largest individual contract value and adding subsequent bid item contract values in descending order until 80% of the contract value has been attained. Any additional activities required to complete the contract beyond 95% and any additional activities required to maintain the continuity of the schedule logic shall also be shown.
2. The schedule shall be limited exclusively to Finish-to-Start (FS) relationships. Start-to-Start (SS), Start-to-Finish (SF) or Finish-to-Finish (FF) relationships will not be allowed. Activity constraints shall not be used without the approval of the Engineer. Lead or lag duration between schedule activities should generally be avoided and any employed shall be brought to the attention of the Engineer in the narrative.
3. The Contractor shall take account in the schedule for any critical closure periods and limitations of operations specified in Article 107.09 of the Standard Specifications or the contract documents.

4. Any work item that depends on work in another contract that is included in the I-74 over the Mississippi River Corridor Project (I-74 Project) shall be scheduled in cooperation with the other Contractor. Likewise, any work item upon which work in another I-74 Project contract depends shall be scheduled in cooperation with the other Contractor. All such interdependent work items shall be identified on the CPM progress schedule. Approval of any submittal of the CPM progress schedule will be contingent upon interdependent work items being appropriately coordinated.
5. In cases where interdependent contracts are awarded at different times, parts of the CPM progress schedule of the first contract that include work that is interdependent with an adjacent project or contract that will be awarded later, will be given conditional approval based on the Engineer's judgment. The CPM progress schedule of the first contract shall be reviewed in conjunction with the CPM progress schedule of the second contract, at the time when the CPM Schedule of the second contract is being developed, and revised as necessary, based on cooperative effort between the Contractors. The revised CPM progress schedule shall be submitted to the Engineer for approval. CPM progress schedule updates and revisions throughout the duration of the contract shall be coordinated with the CPM progress schedules of all adjacent contracts with interdependent work.
6. The tables in Appendix A of these Special Provisions show interdependent work that must be coordinated between I-74 Projects and Contracts. Items may be added to these tables, subject to agreement of the other affected Contractor and subject to the approval of the Engineer, if such additions contribute to the efficient progress of the I-74 Project. If any interdependent work has been omitted from the tables in Appendix A, such omission does not release the Contractors from the responsibility of coordinating such work.

D. Schedule Presentation - Gantt chart.

1. The following shall be included for each activity in the graphic part of the schedule in Gantt chart format:
 - a. Activity Identification (ID) Numbers. The Contract shall utilize numerical designations to identify each activity. Numbering of activities shall be in increments of not less than ten digits.
 - b. A description of the work represented by the activity (maximum forty-five characters). The use of descriptions referring to a percentage of a multi-element item (i.e., construct deck 50%) shall not be used. Separate activities shall be included to represent different elements of multi-element items (i.e., forms, reinforcing, concrete, etc.). Multiple activities with the same work description shall include a location as part of the description.
 - c. Proposed activity duration shall be shown in whole days. The Contractor shall provide production rates to justify the activity duration. Schedule duration shall be contiguous and not interruptible.

- d. The sequence and interdependence of activities required for the prosecution of the work. The schedule logic shall not be violated.
 - e. The critical path to milestone and contract completion. Only one controlling item shall be designated at any point in time on the schedule
2. Activities shall be broken down such that each activity encompasses a single operation or tightly-integrated operations in a single, contiguous and continuous area of the project, with no activity exceeding \$200,000 without the consent of the Engineer.
 3. Dates shall be included for the following:
 - a. Starting and completing the various stages of the work, including milestones identified in the contract document.
 - b. Placing material orders, delivery of materials and equipment.
 - c. Preparation, submittal and approval of all required submittals to the Contracting Authority
 - d. Procuring material and equipment furnished by I-74 Project supply contracts.
 - e. Interdependent activities performed by other contractors.
 - f. All work activities and field construction operations.
 - g. Equipment installation, testing and balancing.
 4. Total Float shall be calculated as finish float. The schedule shall be calculated using retained logic. The Contractor shall not sequester float by calendar manipulations or extended duration. Float is not for the exclusive use or benefit of either the Department or the Contractor.
 5. There shall be a legend with the CPM progress schedule defining all abbreviations, terms, or symbols used.
- E. Schedule Presentation - Tabular Data Reports.**
1. A tabular data report is required with each progress schedule submittal and may be printed on the same pages as the Gantt chart.
 2. The heading of each tabular data report, if not printed on the same pages as the Gantt chart, shall include, but not be limited to, the project name, contract number, Contractor name, report (submittal) date, data date, report title and page number.

3. Each of the tabular reports shall contain the following minimum information for each activity:
 - a. Activity ID
 - b. Activity Description
 - c. Original Duration (calendar day/working day)
 - d. Remaining Duration (calendar day/working day)
 - e. Intended production rate
 - f. Early Start Date
 - g. Late Start Date
 - h. Early Finish Date
 - i. Late Finish Date
 - j. Percent Complete
 - k. Total Float
 - l. Calendar ID
 - m. Subcontractor identity if activity is performed by a subcontractor

F. Narrative Report.

The Contractor shall prepare a written narrative report to be included in each CPM progress schedule submittal.

1. Baseline Narrative.

The narrative report submitted with the baseline CPM progress schedule shall include the following information:

- a. Description of the critical path.
- b. Identification of potential problem areas.
- c. Proposed solutions to potential problems.
- d. Detailed description of the Contractors approach to weather days, including an estimated number of weather days for each month of the contract, and an explanation of how they are incorporated in the CPM Progress Schedule.

A weather day is defined as a day when adverse weather including rain, snow, wind, flood, extreme heat, and the results thereof, such as inaccessibility or non-workability of materials, do not allow productive work on the critical path, if that work would otherwise be performed by the Contractor on that day. Adverse weather days will not be considered justification for an extension of the contract time and thus must be planned for.

2. Update Narrative.

The narrative report submitted with each updated CPM progress schedule shall highlight the progress during the past update period. This written report must include the following information:

- a. Summary of work accomplished during the past update period.
- b. Contract milestone comparison chart, if applicable.
- c. Analysis of critical path.
- d. Analysis of time lost/gained during the update period.
- e. Identification of problem areas.
- f. Recommended solutions to current problems.
- g. Actual number of weather days during the update period compared to the baseline estimate. Documentation of weather days is for information only, and shall not be considered as justification for an extension of the contract time.

3. Recovery or Revision Narrative.

The narrative report submitted with any Recovery or Revised CPM progress schedule shall explain the reason(s) for the changes and how the submitted changes address the reason(s). This written report must include the following information:

- a. Summary reason(s) for the Recovery or Revised CPM progress schedule.
- b. Contract milestone comparison chart, if applicable.
- c. Analysis of critical path.
- d. Summary of how the Recovery or Revised CPM progress schedule resolves the issues/reasons requiring the submittal.

Use of CPM Progress Schedule in Construction Operations.

A. No contract work shall be done without a CPM progress schedule approved by the Engineer. If the CPM progress schedule is approved, with parts of the CPM Progress Schedule conditionally approved, in accordance with Article .04, C of these Special Provisions, contract work may proceed.

B. If the Contractor deviates from the current approved CPM progress schedule by not following the logical sequence of the critical path, payment will be withheld for the bid items for the affected activities until the Contractor submits a revised CPM progress schedule and this schedule is approved by the Engineer.

C. Updates.

During the life of the project, the Contractor shall submit an updated CPM progress schedule monthly.

1. All updates shall be plotted against the Target Schedule. The Contractor shall not make any changes to the original duration, activity relationships, constraints or costs, and shall not add or delete activities, or alter the Target Schedule's logic when updating the schedule.

2. The updated information will include the original schedule detail and the following additional information:
 - a. Actual start dates
 - b. Actual finish dates
 - c. Activity percent completion
 - d. Remaining duration of activities in progress
 - e. Identified or highlighted critical activities
3. The Engineer shall withhold progress payments if the Contractor does not submit scheduled updates as required.
4. Upon receipt of the updated CPM progress schedule, the Engineer will review the schedule for conformance with the Contract Documents and degree of detail. The Engineer, within 14 calendar days after receipt of the updated CPM progress schedule and supporting documents, will approve or reject it with written comments. If the updated CPM progress schedule is rejected, the Contractor must submit a revised updated CPM progress schedule within seven calendar days after the date of rejection.
5. The updated progress schedule must accurately represent the Project's current status.

D. Revisions.

Revisions to the Target Schedule may be initiated by a proposal by the Contractor or by direction from the Engineer.

1. Contractor Changes to the Target Schedule.

The Contractor shall comply with the following requirements regarding proposed changes to the Target Schedule:

- a. If the Contractor proposes to make any changes in the Target Schedule, the Contractor shall notify the Engineer in writing, stating the reasons for the change, identifying each changed activity (including duration and interrelationships between activities) and providing a submittal including compact discs and printed copies of the proposed revised schedule. Every effort must be made by the Contractor to retain the original Activity ID numbers.
- b. The Engineer has the authority to approve or reject the proposed change(s) in the Target Schedule and shall do so in writing within 14 calendar days after receipt of the Contractor's submittal. If the Engineer approves the change in the Target Schedule, all future monthly updates will be plotted against the new Target Schedule.
- c. If the Engineer approves a portion of the change to the Target Schedule, the Contractor shall submit a revised schedule incorporating such change(s) within seven calendar days after the partial approval along with a written description of the change(s) to the schedule.

2. Engineer Changes to the Target Schedule

- a. The Engineer may direct the Contractor to revise the approved baseline CPM progress schedule. Reasons for such direction may include, are limited to the following: (1) changes in the work, (2) re-phasing of the Project or any phase, (3) a change in the duration of the Project or phase, and (4) acceleration of the Project or phase.
- b. The Engineer will direct the Contractor to provide a revised CPM schedule in writing.
- c. The Contractor shall submit the revised CPM progress schedule within ten calendar days of receipt of the Engineer's written direction.
- d. The Engineer has the authority, in its sole discretion, to approve or reject the revised CPM progress schedule and will do so in writing within fourteen calendar days after receipt of the Contractor's submittal. If the Engineer approves the revised CPM progress schedule, such schedule will be designated the new "Target Schedule".
- e. If the Engineer approves a portion of the change to the Target Schedule, the Contractor shall submit a revised schedule incorporating such change(s) within seven calendar days after the partial approval along with a written description of the change(s) to the schedule.

E. Recovery.

1. The Contractor shall maintain an adequate work force and the necessary materials, supplies and equipment to meet the Target Schedule. In the event that the Contractor, in the judgment of the Engineer, is failing to meet the Target Schedule including any Contract milestones, the Engineer will direct the Contractor, in writing, to submit a recovery schedule.
2. The Contractor shall submit the recovery schedule within ten calendar days of receipt of the Engineer's written direction.
3. The recovery schedule shall set forth a plan to eliminate the schedule slippage (negative float). The plan must be specific to show the methods to achieve the recovery of time, i.e. increasing staffing, working overtime, weekend work, employing multiple shifts. All costs associated with implementing the recovery schedule shall be borne by the Contractor.
4. Upon receipt of the CPM recovery schedule, the Engineer will review the schedule for conformance with the Contract Documents and degree of detail. The Engineer will approve the schedule or reject it with written comments within fourteen (14) calendar days of receipt of the recovery schedule. If the Engineer approves the CPM recovery schedule, such schedule will be designated the new Target Schedule.
5. If the CPM recovery schedule is rejected, the Contractor must submit a revised CPM recovery schedule within seven calendar days of the date of rejection.

- F. Acceptance or approval of any progress schedule by the Engineer shall not be construed to imply approval of any particular method of construction, sequence of construction, any implied or stated rate of production. Acceptance will not act as a waiver of the obligation of the Contractor to complete the work in accordance with the contract proposal, plans and specifications, modify any rights or obligations of the Department as set forth in the contract, nor imply any obligation of a third party. Acceptance shall not be construed to modify or amend the contract or the time limit(s) therein. Acceptance shall not relieve the Contractor of the responsibility for the accuracy of any of the information included on the schedule. Failure of the Contractor to include in the schedule any element of work required for the performance of the contract, any sequence of work required by the contract, or any known or anticipated condition affecting the work shall not excuse the Contractor from completing all work required within the time limit(s) specified in the contract notwithstanding acceptance of the schedule by the Engineer.

Basis of Payment.

This work will not be paid for separately, but shall be considered as included in the costs of the various items of work in the contract.

APPENDIX A – CONTRACT INTERDEPENDENCIES

Projects and Contracts in the I-74 over the Mississippi River Corridor Project Active in Pre-Stage

- Iowa Project (197): IM-NHS-074-1(197)5--03-82, River Bridge Approach Spans
- Iowa Project (198): IM-NHS-074-1(198)5--03-82, River Bridge Arch Spans
- Iowa Project (199): IM-NHS-074-1(199)5--03-82, Westbound Iowa Viaduct and Ramps
- Iowa Project (260): IM-NHS-074-1(260)1--03-82, Grading and Sanitary Sewer
- Illinois Contract 64C08: Work in Moline from the Mississippi River to 7th Avenue
- Illinois Contract 64E26: Work in Moline from 7th Avenue to south of Avenue of the Cities

Projects and Contracts in the I-74 over the Mississippi River Corridor Project Active in Stage 1

- Iowa Project (197): IM-NHS-074-1(197)5--03-82, River Bridge Approach Spans
- Iowa Project (198): IM-NHS-074-1(198)5--03-82, River Bridge Arch Spans
- Iowa Project (199): IM-NHS-074-1(199)5--03-82, Westbound Iowa Viaduct and Ramps
- Iowa Project (260): IM-NHS-074-1(260)1--03-82, Grading and Sanitary Sewer
- Iowa Project (208): IMN-074-1(208)5--0E-82, Light Pole Supply
- Iowa Project (209): IMN-074-1(209)5--0E-82, Luminaire Supply
- Illinois Contract 64C08: Work in Moline from the Mississippi River to 7th Avenue
- Illinois Contract 64E26: Work in Moline from 7th Avenue to south of Avenue of the Cities

Projects and Contracts in the I-74 over the Mississippi River Corridor Project Active in Stage 2

- Iowa Project (197): IM-NHS-074-1(197)5--03-82, River Bridge Approach Spans
- Iowa Project (198): IM-NHS-074-1(198)5--03-82, River Bridge Arch Spans
- Iowa Project (199): IM-NHS-074-1(199)5--03-82, Westbound Iowa Viaduct and Ramps
- Iowa Project (260): IM-NHS-074-1(260)1--03-82, Grading and Sanitary Sewer
- Iowa Project (205): IM-NHS-074-1(205)5--03-82, US 67 Ramp D Grading and Paving
- Iowa Project (206): IM-NHS-074-1(206)5--03-82, Mainline and Ramps Grading and Paving Iowa
- Iowa Project (219): IM-NHS-074-1(220)5--03-82, Mainline and Ramps Traffic Signs
- Iowa Project (208): IMN-074-1(208)5--0E-82, Light Pole Supply
- Iowa Project (209): IMN-074-1(209)5--0E-82, Luminaire Supply
- Iowa Project (235): IMN-074-1(235)5--0E-82, Aesthetic Lighting Supply
- Iowa Project (221): ITS-074-1(221)5--25-82, ITS Integration and Deployment
- Iowa Project (222): ITS-074-1(222)5--25-82, ITS Fiber Optics
- Illinois Contract 64C08: Work in Moline from the Mississippi River to 7th Avenue
- Illinois Contract 64E26: Work in Moline from 7th Avenue to south of Avenue of the Cities

Projects and Contracts in the I-74 over the Mississippi River Corridor Project Active in Stage 3

- Iowa Project (197): IM-NHS-074-1(197)5--03-82, River Bridge Approach Spans
- Iowa Project (198): IM-NHS-074-1(198)5--03-82, River Bridge Arch Spans
- Iowa Project (200): IM-NHS-074-1(200)5--03-82, Eastbound Iowa Viaduct and Ramps
- Iowa Project (255): IM-074-1(255)1--13-82, Letdown Structure for Bike Trail
- Iowa Project (206): IM-NHS-074-1(206)5--03-82, Mainline and Ramps Grading and Paving
- Iowa Project (219): IM-NHS-074-1(220)5--03-82, Mainline and Ramps Traffic Signs
- Iowa Project (207): IM-NHS-074-1(206)5--03-82, Local Roads Grading and Paving
- Iowa Project (220): IM-NHS-074-1(220)5--03-82, Local Roads Traffic Signs
- Iowa Project (208): IMN-074-1(208)5--0E-82, Light Pole Supply
- Iowa Project (209): IMN-074-1(209)5--0E-82, Luminaire Supply
- Iowa Project (235): IMN-074-1(235)5--0E-82, Aesthetic Lighting Supply
- Iowa Project (221): ITS-074-1(221)5--25-82, ITS Integration and Deployment
- Iowa Project (222): ITS-074-1(222)5--25-82, ITS Fiber Optics
- Illinois Contract 64C08: Work in Moline from the Mississippi River to 7th Avenue
- Illinois Contract 64E26: Work in Moline from 7th Avenue to south of Avenue of the Cities

Summary of Milestone Completion Dates

Pre-Stage Milestone Completion Date	Tuesday, November 21, 2017
Stage 1 Milestone Completion Date	Tuesday, November 20, 2018
Stage 2 Milestone Completion Date	Tuesday, November 26, 2019
Winter Stage Completion Date	Tuesday, March 31, 2020
Stage 3 Milestone Completion Date	Tuesday, November 24, 2020

Contract Start Through Pre-Stage

Contract 64C08 Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Contract 64C08 Work
Complete plug fill removal and placement of embankment, including special rock fill for piles in abutment area; complete RWs 1, 2 and 16	(197)	(After 9 months settlement) Drive piles for WB and EB River Approach Abutments 1A and 1B (I-74 and Ramps RD-H and RD-G)

Pre-Stage Milestone Completion Date: November 21, 2017

Contract Start Through Stage 2

Contract 64C08 Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Contract 64C08 Work
Remove existing WB IL Viaduct from Pier 23NB to S Abutment	64E26	Excavate and install ACGI at WB IL Viaduct S Abutment
Complete pile driving for WB IL Viaduct S Abutment	64E26	Construct MSE RW 05 (SN 081-6014), temporary wire face MSE wall at CL I-74 and backfill to elevation of bottom of WB IL Viaduct S Abutment
Complete WB IL Viaduct S Abutment	64E26	Complete MSE RW 05 (SN 081-6014), temp wire face MSE wall at CL I-74 and backfill for WB IL Viaduct S Abutment and approach slab
Complete WB River Bridge Approach Slabs	(197)	Construct barriers/parapets on WB Abutment wingwalls
Complete WB ITS infrastructure installation IL, River to 7th Ave	(222), (221)	Install Fiber Optics for WB, Deploy and Integrate ITS for WB
Complete WB IL Viaduct S approach slab footing	64E26	Construct WB Mainline pavement to N limit (joint with AB approach slab)

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Contract 64C08 Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Contract 64C08 Work
Remove existing EB IL Viaduct from Pier 24SB to S Abutment	64E26	Excavate and install ACGI at EB IL Viaduct S Abutment
Complete pile driving for EB IL Viaduct S Abutment	64E26	Construct MSE RW 05 (SN 081-6014) and backfill to elevation of bottom of EB IL Viaduct S Abutment
Complete EB IL Viaduct S Abutment	64E26	Complete MSE RW 05 (SN 081-6014) and backfill for EB IL Viaduct S Abutment and approach slab
Complete EB River Bridge Approach Slabs	(197)	Construct barriers/parapets on EB Abutment wingwalls
Complete Identity Element Foundations in IL (5 locations)	(206)	Install Identity Elements in Moline
Complete EB ITS infrastructure installation IL, River to 7th Ave	(222), (221)	Install Fiber Optics for EB, Deploy and Integrate ITS for EB
Complete EB IL Viaduct S approach slab footing	64E26	Construct EB Mainline pavement to N limit (joint with 64C08 approach slab)

Stage 3 Milestone Completion Date: November 24, 2020

Contract Start Through Stage 1

Contract 64E26 Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Contract 64E26 Work
Complete WB ITS infrastructure installation IL, Ave of the Cities to south project limit	(222), (221)	Install Fiber Optics; Deploy and Integrate ITS Ave of the Cities to south project limit

Stage 1 Milestone Completion Date: November 20, 2018

Contract Start Through Stage 2

Contract 64E26 Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Contract 64E26 Work
Complete ACGI at WB IL Viaduct S Abutment	64C08	(After 2 weeks settlement) Drive piles for WB IL Viaduct S Abutment
Complete WB RW 05 (SN 081-6014), temp wire face MSE wall at CL I-74 and backfill for WB IL Viaduct S Abutment and approach slab	64C08	Construct WB IL Viaduct S Abutment
Complete WB ITS infrastructure installation IL, 7th Ave to S end	(222), (221)	Install Fiber Optics for WB, Deploy & Integrate ITS for WB
Complete WB Mainline pavement to N limit (joint with 64C08 approach slab)	64C08	Install preformed joint seal at S end of WB IL Viaduct S approach slab (at 64E26 mainline pavement)

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Contract 64E26 Work to be Completed	Adjacent Contract / Project	Successor Work Dependent on Completed Contract 64E26 Work
Complete ACGI at EB IL Viaduct S Abutment	64C08	(After 2 weeks settlement) Drive piles for EB IL Viaduct S Abutment
Construct MSE RW 05 (SN 081-6014) and backfill to elevation of bottom of EB IL Viaduct S Abutment	64C08	Construct EB IL Viaduct S Abutment
Complete Identity Element Foundations at Avenue of the Cities	206	Install Identity Elements in Moline
Complete EB ITS infrastructure installation IL, 7th Ave to S end	(222), (221)	Install Fiber Optics for EB, Deploy & Integrate ITS for EB
Complete EB Mainline pavement to N limit (joint with 64C08 approach slab)	64C08	Install preformed joint seal at S end of EB IL Viaduct S approach slab (at 64E26 mainline pavement)

Stage 3 Milestone Completion Date: November 24, 2020

Contract Start Through Stage 2

Project (197) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (197) Work
Install floating silt curtain around Moline water supply intake and south of proposed river bridge spans 1-9	IL 64C08	Install storm sewer outlets into Mississippi River
Complete WB Pier 16	(199)	Set girders WB IA Viaduct span 16
Place upper portion of backwalls, WB Abutment, Units 1A and 1B	IL 64C08	Construct WB River Bridge mainline and Ramp RD-H remaining embankment and approach slabs in Moline
Complete WB deck concrete placement at Pier 12 (with blackout for modular expansion joint)	(198)	Install modular expansion joint at WB Pier 12, including concrete in blackout areas both sides.
Complete WB deck concrete placement at Pier 16 (with blackout for finger plate expansion joint)	(199)	Install finger plate expansion joint at WB Pier 16, including concrete in blackout areas both sides.
Complete ITS infrastructure installation on WB Approach Spans	(222), (221)	Install Fiber Optics for WB, Deploy and Integrate ITS for WB

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Project (197) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (197) Work
Complete EB Pier 16	(200)	Set girders EB IA Viaduct span 16
Place upper portion of backwalls, EB Abutment 1, Units 1A and 1B	IL 64C08	Construct EB River Bridge mainline and Ramp RD-G) remaining embankment and approach slabs in Moline
Complete EB deck concrete placement at Pier 12 (with blackout for modular expansion joint)	(198)	Install modular expansion joint at EB Pier 12, including concrete in blackout areas both sides.
Complete EB deck concrete placement at Pier 16 (with blackout for finger plate expansion joint)	(200)	Install finger plate expansion joint at EB Pier 16, including concrete in blackout areas both sides.
Complete ITS infrastructure installation on EB Approach Spans	(222), (221)	Install Fiber Optics for EB, Deploy and Integrate ITS for EB

Stage 3 Milestone Completion Date: November 24, 2020

Contract Start Through Stage 2

Project (198) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (198) Work
Complete WB arch erection, remove temp works from WB Piers 10, 11, 14 and 15	(197)	Construct columns and caps, WB Piers 10, 11, 14 and 15
Complete WB deck concrete placement at Pier 13 (with blockout for finger plate expansion joint)	(197)	Install finger plate expansion joint at WB Pier 13, including concrete in blockout areas both sides
Complete ITS infrastructure installation on WB Arch Span	(222), (221)	Install Fiber Optics for WB, Deploy and Integrate ITS for WB

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Project (198) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (198) Work
Complete EB arch erection, remove temp works from EB Piers 10, 11, 14 and 15	(197)	Construct columns and caps, EB Piers 10, 11, 14 and 15
Complete EB deck concrete placement at Pier 13 (with blockout for finger plate expansion joint)	(197)	Install finger plate expansion joint at EB Pier 13, including concrete in blockout areas both sides
Complete ITS infrastructure installation on EB Arch Span	(222), (221)	Install Fiber Optics for EB, Deploy and Integrate ITS for EB

Stage 3 Milestone Completion Date: November 24, 2020

Contract Start Through Stage 1

Projects (199) and (260) Work to be Completed	Adjacent Contract / Project	Adjacent Work Dependent on Completed Project (199) or (260) Work
Relocate part of existing sanitary sewer	(197)	Construct drilled shaft foundation for WB Pier 16

Stage 1 Milestone Completion Date: November 20, 2018

Contract Start Through Stage 2

Projects (199) and (260) Work to be Completed	Adjacent Contract / Project	Adjacent Work Dependent on Completed Project (199) or (260) Work
Remove existing WB IA Viaduct north of Mississippi Blvd	(206)	Place embankment north of Mississippi Blvd for new WB Mainline pavement
Remove existing WB IA Viaduct from south of Gilbert St (Pier WB11) to S of Brown St	(200)	Construct EB IA Viaduct from Pier 17 to Pier 26 and US 67 Ramp C from Pier 21C to Abutment 23C
Complete ITS infrastructure installation on WB IA Viaduct	(222), (221)	Install Fiber Optics for WB, Deploy and Integrate ITS for WB

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Projects (200) and (255) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (200) or (255) Work
Drive US 67 Ramp A North Abutment piles in MSE zone	(206)	Construct MSE Retaining Wall 165
Remove remaining existing WB IA Viaduct existing WB exit ramp to State Street, from north of the river to Gilbert St	(206)	Place embankment for Ramp US 67 Ramp C
Remove existing EB IA Viaduct north of Mississippi Blvd.	(206)	Place embankment north of Mississippi Blvd for EB IA Viaduct Abutment 32 and approach pavement
Complete ITS infrastructure installation on EB IA Viaduct	(222), (221)	Install Fiber Optics for EB, Deploy and Integrate ITS for EB

Stage 3 Milestone Completion Date: November 24, 2020

Contract Start Through Stage 1

Project (205) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (205) Work
Complete pavement US 67 Ramp D between US 67 (Grant St) and Ramp D bridge	(199)	Construct bridge approach pavement, south of US 67 Ramp D bridge

Stage 1 Milestone Completion Date: November 20, 2018

Contract Start Through Stage 2

Project (206) or (219) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Contract (206) or (219) Work
Complete pavement US 67 Ramp B north of bridge to previous construction	(199)	Construct bridge approach pavement, north of US 67 Ramp B Bridge
Complete pavement US 67 Ramp D north of bridge to mainline	(199)	Construct bridge approach pavement, north of US 67 Ramp D Bridge
Complete embankment north of Mississippi Blvd for WB IA Viaduct Abutment 32 and approach pavement	(199)	(After 14 days settlement) Drive piles for and construct WB IA Viaduct Abutment 32
Complete pavement I-74 WB north of IA Viaduct Abutment 32	(199)	Construct bridge approach pavement, north of WB IA Viaduct Abutment 32
Complete ITS WB infrastructure installation in Iowa to north project limit	(222), (221)	Install Fiber Optics for WB, Deploy and Integrate ITS for WB

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Project (206) or (219) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Contract (206) or (219) Work
Complete MSE Retaining Wall 165 and embankment north of Mississippi Blvd for US 67 Ramp A North Abutment	(200)	Construct US 67 Ramp A North Abutment
Remove existing loop ramp and complete embankment south of Mississippi Blvd for US 67 Ramp A South Abutment	(200)	Construct US 67 Ramp A South Abutment
Complete US 67 Ramp A pavement, Mississippi Blvd to ramp bridge	(200)	Construct bridge approach pavement, north of US 67 Ramp A Bridge
Complete US 67 Ramp A pavement, south of ramp bridge to Grant St (US 67)	(200)	Construct bridge approach pavement, south of US 67 Ramp A Bridge
Complete embankment for US 67 Ramp C	(200)	(After 30 days settlement) Drive piles for and construct US 67 Ramp C Abutment 23C
Complete pavement US 67 Ramp C north of bridge to Grant St (US 67)	(200)	Construct bridge approach pavement, north of US 67 Ramp C Bridge
Complete embankment north of Mississippi Blvd for EB IA Viaduct Abutment 32-and approach pavement	(200)	(After 7 days settlement) Drive piles for and construct EB IA Viaduct Abutment 32
Complete pavement I-74 EB north of IA Viaduct Abut 32	(200)	Construct bridge approach pavement, north of EB IA Viaduct Abut 32
Complete ITS EB infrastructure installation in Iowa to north project limit	(222), (221)	Install Fiber Optics for EB, Deploy and Integrate ITS for EB

Stage 3 Milestone Completion Date: November 24, 2020

Contract Start Through Stage 1

Project (208) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (208) Work
Provide light poles for 7th Ave south of I-74	64C08	Install light poles 7th Ave south of I-74
Provide light poles for IL I-74 median barrier from Sta 129 to south end, Ramp AC-A and part south of Ramps AC-B and AC-C	64E26	Install light poles IL I-74 median barrier from Sta 129 to south end, Ramp AC-A and part south of Ramps AC-B and AC-C

Stage 1 Milestone Completion Date: November 20, 2018

Contract Start Through Stage 2

Project (208) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (208) Work
Provide light poles for WB IL viaduct (all spans), EB IL Viaduct Unit 1, Ramps RD-H, 6TH-D and 6TH-C, local roads east of I-74	64C08	Install light poles IL I-74 WB IL viaduct (all spans), EB IL Viaduct Unit 1, Ramps RD-H, 6TH-D and 6TH-C, local roads east of I-74
Provide light poles for IL I-74 WB from 7th Ave to Ave of the Cities (median barriers and bridges over 19th St, 12th Ave and 19th St SB), Ramps 7TH-A and AC-D	64E26	Install light poles IL I-74 WB from 7th Ave to Ave of the Cities (median barriers and bridges over 19th St, 12th Ave and 19th St SB), Ramps 7TH-A and AC-D
Provide light poles for Middle Road Ramp B	(206)	Install light poles Middle Road Ramp B
Provide light poles for WB River Bridge Approach Spans	(197)	Install light poles WB River Bridge Approach Spans
Provide light poles for WB River Bridge Arch Span	(198)	Install light poles WB River Bridge Arch Span
Provide light poles for WB IA Viaduct (all spans), US 67 Ramps B and D bridges	(199)	Install light poles WB IA Viaduct (all spans), US 67 Ramps B and D bridges
Provide light poles for US 67 Ramps B and D	(206)	Install light poles US 67 Ramps B and D

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Project (208) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (208) Work
Provide light poles for IL I-74 EB plug fill RT barrier, Ramp RD-G, and River Dr west of I-74	64C08	Install light poles IL I-74 EB plug fill RT barrier, Ramp RD-G, and River Dr west of I-74
Provide light poles for IL I-74 median at plug fill after crossover is removed	64C08	Install light poles for IL I-74 median at plug fill after crossover is removed
Provide light poles for Ramps 7TH-B and remaining Ramps AC-C and AC-B	64E26	Install light poles Ramps 7TH-B and remaining Ramps AC-C and AC-B
Provide light poles for remaining IL I-74 median south of Ave of the Cities after crossover is removed	64E26	Install light poles for remaining IL I-74 median south of Ave of the Cities after crossover is removed
Provide light pole for US 67 Ramp A bridge	(200)	Install light pole US 67 Ramp A bridge
Provide light poles for US 67 Ramp A and Middle Rd Ramp C	(206)	Install light poles US 67 Ramp A and Middle Rd Ramp C
Provide light poles for US 67 Ramp C	(206)	Install light poles US 67 Ramp C
Provide light poles for IA I-74 median, Mississippi Blvd to Middle Rd south of Ave of the Cities after crossover is removed	(206)	Install light poles IA I-74 median, Mississippi Blvd to Middle Rd south of Ave of the Cities after crossover is removed
Provide light poles for EB River Bridge Approach Spans	(197)	Install light poles EB River Bridge Approach Spans
Provide light poles for EB River Bridge Arch Span	(198)	Install light poles EB River Bridge Arch Span
Provide light poles for EB IA Viaduct (all spans), US 67 Ramp C bridges	(199)	Install light poles EB IA Viaduct (all spans), US 67 Ramp C bridges

Stage 3 Milestone Completion Date: November 24, 2020

Contract Start Through Stage 1

Project (209) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (209) Work
Provide luminaires for 7th Ave south of I-74; underdeck luminaires: WB over River Dr and Ramp 6TH-C, EB over River Dr	64C08	Install luminaires 7th Ave south of I-74; underdeck: WB over River Dr and Ramp 6TH-C, EB over River Dr
Provide luminaires for IL I-74 median barrier from Sta 129 to south end, Ramp AC-A and part south of Ramps AC-B and AC-C	64E26	Install luminaires IL I-74 median barrier from Sta 129 to south end, Ramp AC-A and part south of Ramps AC-B and AC-C
Provide luminaires for underdeck luminaires: US 67 Ramp B over Gilbert St	(199)	Install luminaires underdeck: US 67 Ramp B over Gilbert St

Stage 1 Milestone Completion Date: November 20, 2018

Contract Start Through Stage 2

Project (209) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (209) Work
Provide luminaires for WB IL viaduct (all spans), EB IL Viaduct Unit 1, Ramps RD-H, 6TH-D and 6TH-C, local roads east of I-74; underdeck luminaires: WB over River Dr and Ramp 6TH-C; underdeck luminaires: WB over 6th Ave and 7th Ave	64C08	Install luminaires IL I-74 WB IL viaduct (all spans), EB IL Viaduct Unit 1, Ramps RD-H, 6TH-D and 6TH-C, local roads east of I-74; underdeck: WB over River Dr and Ramp 6TH-C; underdeck luminaires: WB over 6th Ave and 7th Ave
Provide luminaires for IL I-74 WB from 7th Ave to Ave of the Cities (median barriers and bridges over 19th St, 12th Ave and 19th St SB), Ramps 7TH-A and AC-D; WB underdeck luminaires Ave of the Cities	64E26	Install luminaires IL I-74 WB from 7th Ave to Ave of the Cities (median barriers and bridges over 19th St, 12th Ave and 19th St SB), Ramps 7TH-A and AC-D; WB underdeck Ave of the Cities
Provide luminaires for Middle Road Ramp B	(206)	Install luminaires Middle Road Ramp B
Provide luminaires for WB River Bridge Approach Spans	(197)	Install luminaires WB River Bridge Approach Spans
Provide luminaires for WB River Bridge Arch Span	(198)	Install luminaires WB River Bridge Arch Span
Provide luminaires for WB IA Viaduct (all spans), US 67 Ramps B and D bridges; underdeck luminaires: WB IA Viaduct over Gilbert St and over US 67 (Grant St)	(199)	Install luminaires WB IA Viaduct (all spans), US 67 Ramps B and D bridges; underdeck: WB IA Viaduct over Gilbert St and over US 67 (Grant St)
Provide luminaires for US 67 Ramps B and D	(206)	Install luminaires US 67 Ramps B and D

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Project (209) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (209) Work
Provide luminaires for IL I-74 EB plug fill RT barrier, Ramp RD-G, and River Dr west of I-74; underdeck luminaires: EB over Ramp 6TH-C, 6th Ave and 7th Ave	64C08	Install luminaires IL I-74 EB plug fill RT barrier, Ramp RD-G, and River Dr west of I-74; underdeck: EB over Ramp 6TH-C, 6th Ave and 7th Ave
Provide luminaires for IL I-74 median at plug fill after crossover is removed	64C08	Install luminaires for IL I-74 median at plug fill after crossover is removed
Provide luminaires for Ramps 7TH-B and remaining Ramps AC-C and AC-B; EB underdeck luminaires Ave of the Cities	64E26	Install luminaires Ramps 7TH-B and remaining Ramps AC-C and AC-B; EB underdeck Ave of the Cities
Provide luminaires for remaining IL I-74 median south of Ave of the Cities after crossover is removed	64E26	Install luminaires for remaining IL I-74 median south of Ave of the Cities after crossover is removed
Provide luminaire for US 67 Ramp A bridge	(200)	Install luminaire US 67 Ramp A bridge
Provide luminaires for US 67 Ramp A and Middle Rd Ramp C	(206)	Install luminaires US 67 Ramp A and Middle Rd Ramp C
Provide luminaires for US 67 Ramp C	(206)	Install luminaires US 67 Ramp C
Provide luminaires for IA I-74 median, Mississippi Blvd to Middle Rd south of Ave of the Cities after crossover is removed	(206)	Install luminaires IA I-74 median, Mississippi Blvd to Middle Rd south of Ave of the Cities after crossover is removed
Provide luminaires for EB River Bridge Approach Spans	(197)	Install luminaires EB River Bridge Approach Spans
Provide luminaires for EB River Bridge Arch Span	(198)	Install luminaires EB River Bridge Arch Span
Provide luminaires for EB IA Viaduct (all spans), US 67 Ramp C bridges; underdeck luminaires: EB IA Viaduct over Gilbert St and over US 67 (Grant St), US 67 over Gilbert St	(199)	Install luminaires EB IA Viaduct (all spans), US 67 Ramp C bridges; underdeck luminaires: EB IA Viaduct over Gilbert St and over US 67 (Grant St), US 67 over Gilbert St

Stage 3 Milestone Completion Date: November 24, 2020

Contract Start Through Stage 2

Project (235) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (235) Work
Provide aesthetic lighting material - WB IL Viaduct	64C08	Install aesthetic lighting on WB IL Viaduct piers
Provide aesthetic lighting material - WB Approach piers	(197)	Install aesthetic lighting on WB Approach piers
Provide aesthetic lighting material - WB Arch	(198)	Install aesthetic lighting on WB Arch
Provide aesthetic lighting material - WB IA Viaduct	(199)	Install aesthetic lighting on WB IA Viaduct piers

Stage 2 Milestone Completion Date: November 26, 2019

Contract Start Through Stage 3

Project (235) Work to be Completed	Adjacent Contract / Project	Adjacent Successor Work Dependent on Completed Project (235) Work
Provide aesthetic lighting material - EB IL Viaduct	64C08	Install aesthetic lighting on EB IL Viaduct piers
Provide aesthetic lighting material - EB Approach piers	(197)	Install aesthetic lighting on EB Approach piers
Provide aesthetic lighting material - EB Arch, Overlook and EB piers	(198)	Install aesthetic lighting on EB Arch, Overlook and EB piers
Provide aesthetic lighting material - EB IA Viaduct	(200)	Install aesthetic lighting on EB IA Viaduct piers

Stage 3 Milestone Completion Date: November 24, 2020

INCENTIVE/DISINCENTIVE

Effective: January 10, 2017

General. Because the closure of I-74 Westbound during Stage 2 and re-routing of I-74 Eastbound during Stage 3 incur daily costs to road users and to the Department, Incentive/Disincentive provisions have been established to encourage early completion of the Contractor's work at milestones for these stages, and to recoup costs to the Department should the Contractor fail to complete their work by the specified milestone completion dates.

Stage 2 Milestone.

- a) Stage 2 Milestone Completion Date. The Contractor shall schedule his/her operations so as to complete Stage 2 critical work on or before Tuesday, November 26, 2019. The Contractor shall note that this completion date is based on an expedited work schedule.

Completion of Stage 2 critical work items, for the purposes of determining the calendar days calculated for incentive payment or disincentive assessment, shall be defined as follows:

- 1) All Stage 2 work identified in the contract documents for this particular contract has been completed. In order for work to be considered complete, the Westbound I-74 mainline and ramp roadways (associated with Illinois Contract 64C08) must be open to traffic with no lane closures or obstructions.
 - 2) The remaining work to be completed is confined to the areas outside the outside edge of shoulder of Westbound I-74 mainline and ramps. Such items may consist of minor work such as clean up or erosion control, and any erosion control work must be completed during the first available seeding period.
- b) Disincentive for Failure to Complete the Work on Time: Should the Contractor fail to complete the Stage 2 critical work on or before the specified Stage 2 Milestone Completion Date, or within such extended time allowed by the Department, the Contractor shall be liable to the Department in the amount of ELEVEN THOUSAND EIGHT HUNDRED DOLLARS (\$11,800), not as a penalty but as liquidated and ascertained damages for each calendar day beyond the Stage 2 Milestone Completion Date or extended time as may be allowed. Such damages may be deducted by the Department from any monies due the Contractor.

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work because the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the loss of use of the roadway if the project is delayed in completion. The Department shall not be required to provide any actual loss to recover these liquidated damages provided herein, as these damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later.

- c) Incentive Payment Plan. The nature of this project is such that the use of Westbound I-74 cannot be safely and efficiently used until all westbound bridge and roadway work is essentially complete. On this basis, the Contractor shall be entitled to an Incentive Payment for completing the Stage 2 critical work prior to the Stage 2 Milestone Completion Date.

The Incentive Payment shall be paid at the rate of ELEVEN THOUSAND EIGHT HUNDRED DOLLARS (\$11,800) per calendar day for each day the Stage 2 critical work is completed prior to the Stage 2 Milestone Completion Date. The maximum payment under this incentive plan will be limited to 30 calendar days.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. No payment will be paid for any day less than twenty-four hours.

Should the Contractor be delayed in the commencement, prosecution, or completion of the Stage 2 critical work for any reason, there will be no extension of the specified Stage 2 Milestone Completion Date for Stage 2 Incentive Payment calculation even though there may be granted an extension of time for completion of the work. No Stage 2 Incentive Payment will be made if the Contractor fails to complete the Stage 2 critical work before the specified Stage 2 Milestone Completion Date. Failure of the Contractor to complete all Stage 2 critical work and open the westbound roadway to traffic as required by the contract on or before the Stage 2 Milestone Completion Date shall release and discharge the State, the Department and all of its officers, agents, and employees from any and all claims and demands for the payment of any Stage 2 incentive amount or damages arising from the refusal to pay any Stage 2 incentive amount.

Stage 3 Milestone.

- a) Stage 3 Milestone Completion Date. The Contractor shall schedule his/her operations so as to complete Stage 3 critical work on or before Tuesday, November 24, 2020. The Contractor shall note that this completion date is based on an expedited work schedule.

Completion of Stage 3 critical work items, for the purposes of determining the calendar days calculated for incentive payment or disincentive assessment, shall be defined as follows:

- 1) All Stage 3 work identified in the contract documents for this particular contract has been completed. In order for work to be considered complete, the Eastbound I-74 mainline and ramp roadways (associated with Illinois Contract 64C08) must be open to traffic with no lane closures or obstructions.

- 2) The remaining work to be completed is confined to the areas outside the outside edge of shoulder of Eastbound I-74 mainline and ramps. Such items may consist of minor work such as clean up or erosion control, and any erosion control work must be completed during the first available seeding period.
- b) Disincentive for Failure to Complete the Work on Time: Should the Contractor fail to complete the Stage 3 critical work on or before the specified Stage 3 Milestone Completion Date, or within such extended time allowed by the Department, the Contractor shall be liable to the Department in the amount of TWELVE THOUSAND TWO HUNDRED DOLLARS (\$12,200), not as a penalty but as liquidated and ascertained damages for each calendar day beyond the Stage 3 Milestone Completion Date or extended time as may be allowed. Such damages may be deducted by the Department from any monies due the Contractor.

In fixing the damages as set out herein, the desire is to establish a certain mode of calculation for the work because the Department's actual loss, in the event of delay, cannot be predetermined, would be difficult of ascertainment, and a matter of argument and unprofitable litigation. This mode is an equitable rule for measurement of the Department's actual loss and fairly takes into account the loss of use of the roadway if the project is delayed in completion. The Department shall not be required to provide any actual loss to recover these liquidated damages provided herein, as these damages are very difficult to ascertain. Furthermore, no provision of this clause shall be construed as a penalty, as such is not the intention of the parties.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later.

- c) Incentive Payment Plan. The nature of this project is such that the use of Eastbound I-74 cannot be safely and efficiently used until all eastbound bridge and roadway work is essentially complete. On this basis, the Contractor shall be entitled to an Incentive Payment for completing the Stage 3 critical work prior to the Stage 3 Milestone Completion Date.

The Incentive Payment shall be paid at the rate of TWELVE THOUSAND TWO HUNDRED DOLLARS (\$12,200) per calendar day for each day the Stage 3 critical work is completed prior to the Stage 3 Milestone Completion Date. The maximum payment under this incentive plan will be limited to 30 calendar days.

A calendar day is every day on the calendar and starts at 12:00 midnight and ends at the following 12:00 midnight, twenty-four hours later. No payment will be paid for any day less than twenty-four hours.

Should the Contractor be delayed in the commencement, prosecution, or completion of the Stage 3 critical work for any reason, there will be no extension of the specified Stage 3 Milestone Completion Date for Stage 3 Incentive Payment calculation even though there may be granted an extension of time for completion of the work. No Stage 3 Incentive Payment will be made if the Contractor fails to complete the Stage 3 critical work before the specified Stage 3 Milestone Completion Date. Failure of the Contractor to complete all Stage 3 critical work and open the eastbound roadway to traffic as required by the contract on or before the Stage 3 Milestone Completion Date shall release and discharge the State, the Department and all of its officers, agents, and employees from any and all claims and demands for the payment of any Stage 3 incentive amount or damages arising from the refusal to pay any Stage 3 incentive amount.

SHARED BONUS

Effective: January 10, 2017

General. The intent of the Shared Bonus Program is to compensate Contractors with interdependent work for the added cooperation required to schedule and complete such work. This cooperation is required for the roadway and bridges to open to traffic in a timely manner.

Stage 2 Milestone. Westbound I-74 cannot be opened to traffic until completion of the critical work in all the contracts listed below. In addition, there is an unusually high degree of interdependence among these contracts to complete their work. Therefore this Special Provision has been established such that a lump sum payment will be made, if and only if, all the Contractors for the contracts listed below complete their critical work on or before the Stage 2 Milestone Completion Date, as specified below.

Stage 2 Milestone Contracts. The following contracts must all complete their Stage 2 critical work on time in order for any Stage 2 Milestone Shared Bonus payments to be made:

- Iowa Project (197): IM-NHS-074-1(197)5--03-82, River Bridge Approach Spans;
- Iowa Project (198): IM-NHS-074-1(198)5--03-82, River Bridge Arch Spans;
- Iowa Project (199): IM-NHS-074-1(199)5--03-82, Westbound Iowa Viaduct and Ramps, and Iowa Project (260): IM-NHS-074-1(260)1--03-82, Grading and Sanitary Sewer;).
- Iowa Project (206): IM-NHS-074-1(206)5--03-82, Mainline and Ramps Grading and Paving.
- Illinois Contract 64C08: Work in Moline from the Mississippi River to 7th Avenue.
- Illinois Contract 64E26: Work in Moline from 7th Avenue to south of Avenue of the Cities.

Note that the contract and project descriptors above are intended to identify the contract or project overall and are not complete descriptions of Stage 2 critical work. In general, work required to open Westbound I-74, mainline and ramps, to traffic must be completed on or before the Stage 2 Milestone Completion Date. Contract documents for each contract or project specify what work items are critical to complete for the Stage 2 Milestone.

Stage 2 Milestone Completion Date. The Contractor shall schedule his/her operations so as to complete Stage 2 critical work on or before Tuesday, November 26, 2019. The Contractor shall note that this completion date is based on an expedited work schedule.

Completion of Stage 2 critical work items, for the purposes of determining payment of Stage 2 Shared Bonus, shall be defined as follows:

- a) Traffic must have complete use of the Westbound I-74 mainline and ramp roadways, including shoulders, with no delays or lane closures and no obstructions except for signs warning of construction work ahead.
- b) The remaining work to be completed is confined to the areas outside the outside edge of shoulder of Westbound I-74 mainline and ramps.
- c) Only minor work is left for completion such as clean up or erosion control, and the erosion control work is completed during the first available seeding period.

Stage 3 Milestone. Eastbound I-74 cannot be opened to traffic until completion of the critical work in all the contracts listed below. In addition, there is an unusually high degree of interdependence among these contracts to complete their work. Therefore this Special Provision has been established such that a lump sum payment will be made, if and only if, all the Contractors for the contracts listed below complete their critical work on or before the Stage 3 Milestone Completion Date, as specified below.

Stage 3 Milestone Contracts. The following contracts must all complete their Stage 3 critical work on time in order for any Stage 3 Milestone Shared Bonus payments to be made:

- Iowa Project (197): IM-NHS-074-1(197)5--03-82, River Bridge Approach Spans;
- Iowa Project (198): IM-NHS-074-1(198)5--03-82, River Bridge Arch Spans;
- Iowa Project (200): IM-NHS-074-1(200)5--03-82, Eastbound Iowa Viaduct and Ramps, and Iowa Project (255): IM-074-1(255)1--13-82, Letdown Structure for bike trail;
- Iowa Project (206): IM-NHS-074-1(206)5--03-82, Mainline and Ramps Grading and Paving.
- Illinois Contract 64C08: Work in Moline from the Mississippi River to 7th Avenue.
- Illinois Contract 64E26: Work in Moline from 7th Avenue to south of Avenue of the Cities.

Note that the contract and project descriptors above are intended to identify the contract or project overall and are not complete descriptions of Stage 3 critical work. In general, work required to open Eastbound I-74, mainline and ramps, to traffic must be completed on or before the Stage 3 Milestone Completion Date. Contract documents for each contract or project specify what work items are critical to complete for the Stage 3 Milestone.

Stage 3 Milestone Completion Date. The Contractor shall schedule his/her operations so as to complete Stage 3 critical work on or before Tuesday, November 24, 2020. The Contractor shall note that this completion date is based on an expedited work schedule.

Completion of Stage 3 critical work, for the purposes of determining the calendar days calculated for incentive payment or disincentive assessment, shall be defined as follows:

- a) Traffic must have complete use of the Eastbound I-74 mainline and ramp roadways, including shoulders, with no delays or lane closures and no obstructions except for signs warning of construction work ahead.
- b) The remaining work to be completed is confined to the areas outside the outside edge of shoulder of Eastbound I-74 mainline and ramps.
- c) Only minor work is left for completion such as clean up or erosion control, and the erosion control work is completed during the first available seeing period.

Basis of Payment Stage 2 Shared Bonus. The nature of this project is such that the use of Westbound I-74 cannot be safely and efficiently used until all westbound bridge and roadway work in the I-74 over the Mississippi River Corridor Project is essentially complete. On this basis, the Contractor shall be entitled to a Stage 2 Shared Bonus payment if and only if the Stage 2 critical work of all the Stage 2 Milestone Contracts is complete prior to the Stage 2 Milestone Completion Date.

Should any Stage 2 Milestone Contractor be delayed in the commencement, prosecution, or completion of the work for any reason, there will be no extension of the specified Stage 2 Milestone Completion Date for Shared Bonus payment, even if there may be granted an extension of time for completion of the work. No Stage 2 Shared Bonus payment will be made if any of the Stage 2 Milestone Contractors fails to complete their Stage 2 critical work before the specified Stage 2 Milestone Completion Date. Failure of any of said Contractors to complete their Stage 2 critical work and open the roadway as required by the contract on or before the Stage 2 Milestone Completion Date, shall release and discharge the State, the Department and all of its officers, agents, and employees from any and all claims and demands for the payment of any Stage 2 Shared Bonus amount or damages arising from the refusal to pay any Stage 2 Shared Bonus amount.

The Stage 2 Milestone Shared Bonus payment, if applicable, shall be a lump sum payment of FIVE HUNDRED THIRTY THOUSAND DOLLARS (\$530,000).

Basis of Payment Stage 3 Shared Bonus. The nature of this project is such that the use of Eastbound I-74 cannot be safely and efficiently used until all eastbound bridge and roadway work in the I-74 over the Mississippi River Corridor Project is essentially complete. On this basis, the Contractor shall be entitled to a Stage 3 Shared Bonus payment if and only if the Stage 3 critical work of all the Stage 3 Milestone Contracts is complete prior to the Stage 3 Milestone Completion Date.

Should any Stage 3 Milestone Contractor be delayed in the commencement, prosecution, or completion of the work for any reason, there will be no extension of the specified Stage 3 Milestone Completion Date for Shared Bonus payment, even if there may be granted an extension of time for completion of the work. No Stage 3 Shared Bonus payment will be made if any of the Stage 3 Milestone Contractors fails to complete their Stage 3 critical work before the specified Stage 3 Milestone Completion Date. Failure of any of said Contractors to complete their Stage 3 critical work and open the roadway as required by the contract on or before the Stage 3 Milestone Completion Date, shall release and discharge the State, the Department and all of its officers, agents, and employees from any and all claims and demands for the payment of any Stage 3 Shared Bonus amount or damages arising from the refusal to pay any Stage 3 Shared Bonus amount.

The Stage 3 Milestone Shared Bonus payment, if applicable, shall be a lump sum payment of TWO HUNDRED FORTY-SIX THOUSAND DOLLARS (\$246,000).

STORM SEWER WATER MAIN REQUIREMENT

Effective: June 12, 1997

Description: This work shall consist of furnishing and installing water main quality pipe at the locations shown on the plans.

Materials:

- a) Ductile iron water main Class 52

Joints for Ductile Iron pipe shall be:

1. Mechanical Joints - AWWA C111 and C600
2. Push-On-Joints - AWWA C111 and C600

- b) Polyvinyl Chloride (PVC) Class 12454B (PVC 1120) or Class 12454C (PVC 1220).
Schedule 40 is required for 8" diameter and schedule 80 for larger sizes.

CONSTRUCTION REQUIREMENTS

The storm sewer water main shall be installed according to the applicable portions of Section 550 and 561 of the Standard Specifications and the Standard Specifications for Water and Sewer Main Construction. In case of conflict between the Standard Specifications, the Standard Specifications for Water and Sewer Main Construction in Illinois shall take precedence and shall govern.

No testing or disinfections of the newly laid storm sewer water main will be required. A water-tight connection is required between the storm sewer water main and the storm sewer.
Method of Measurement: Storm sewer water main of the various diameters will be measured for payment in feet, measured in place.

Basis of Payment: This work will be paid for at the contract unit price per Foot for STORM SEWER WATER MAIN REQUIREMENT, of the diameter specified.

SEEDING MOBILIZATION

Effective: May 9, 2000

Revised: August 23, 2013

The Contractor shall coordinate his work so no more than 10 acres are disturbed at a time. All work in this area shall be completed and the area seeded before additional areas are disturbed. Under no conditions shall the Contractor prolong final grading and shaping so the entire project can be permanently seeded at one time.

Wherever possible, permanent seeding and the permanent erosion control shall be installed. The ditch bottoms and backslopes shall not be disturbed again unless the seeding hasn't become established. If the foreslopes need to be regraded to the new shoulder, all work shall be confined to the foreslope and any damage to the ditch bottom, backslope, or permanent erosion control shall be repaired at no additional cost to the Department.

All permanent seeding, mulch, and the required fertilizer nutrients shall be completed and paid for in accordance with Sections 250 and 251 of the Standard Specifications, except that SEEDING MOBILIZATION will be paid for at the contract unit price per each. This will be paid each time the Engineer requires the Contractor to bring the equipment to the jobsite. If the equipment is already on the site, this will not be paid for again.

HOT-MIX ASPHALT SURFACE COURSE, CUT OFF DATE

Effective: December 8, 1998

Revised: October 17, 2007

Placement of Hot-Mix Asphalt Surface Course will not be permitted after October 15 unless approved, in writing, by the Resident Engineer.

ISLAND REMOVAL

Effective: October 10, 2006

This work shall consist of the removal and disposal of the islands as shown on the plans. This work shall be done in accordance with applicable portions of Section 440 of the Standard Specifications and shall include the removal of the concrete island surface, concrete curb & gutter, and excavation below the concrete to a depth of the bottom of the adjacent concrete pavement.

This work will be paid for at the contract unit price per Square Foot for ISLAND REMOVAL.

ENGINEER'S FIELD OFFICE TYPE A

Effective: January 1, 2012

Engineer's Field Office Type A shall be in accordance with Article 670.02 of the Standard Specifications:

Add (s) to the end of 670.02

(s) Cellular phone with a minimum of 500 anytime minutes per month for use by the site resident engineer/technician.

WORK ZONE PAVEMENT MARKING AND REMOVAL

Effective: December 29, 2008

Revised: April 12, 2016

This work shall consist of installing and removing temporary pavement marking according to Section 703 of the Standard Specifications and the following:

Paint pavement marking shall be used on the final wearing surface when the temporary pavement marking will conflict with the permanent pavement marking such as on tapers, crossovers and lane shifts.

All temporary paint on the final wearing surface shall be removed according to Article 1101.12 Water Blaster with Vacuum Recovery and the applicable portions of Sections 703 and 783 of the Standard Specifications and as described herein.

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

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

STATUS OF UTILITIES TO BE ADJUSTED

Effective: September 25, 2015

<u>Name & Address of Utility</u>	<u>Type</u>	<u>Location</u>	<u>Estimated Date Relocation Complete</u>
AT&T 2800 7 th Street Moline, IL 61265	Telephone		
CENTURYLINK – Qwest Communications 3908 Utica Ridge Road Bettendorf, IA 52722	Telephone		
CITY OF MOLINE 3635 4 th Avenue Moline, IL 61265	Water and Sewer		
MIDAMERICAN ENERGY COMPANY 2811 5 th Avenue Rock Island, IL 61201	Electric		
MIDAMERICAN ENERGY 106 East Second Street Davenport, IA 52801	Electric - Transmission		
MIDAMERICAN ENERGY COMPANY 2811 5 th Avenue Rock Island, IL 61201	Gas		
KONE INC 2266 US Highway 6 Coal Valley, IL 61240	Gas and Electric		
MEDIACOM 3900 26 th Avenue Moline, IL 61265	CATV		
MCI World Com 2400 N. Glenville Dept. 41103/107 Richardson, TX 75082	Telephone		
WINDSTREAM 1815 S. Meyers Road, Suite 900 Oak Brook Terrace, IL 60181	Telephone		

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

The applicable portions of Article 105.07 of the Standard Specification shall apply except for the following: The Contractor shall be responsible to locate the vertical depths of the underground utilities which may interfere with construction operations. This work will not be measured or paid for separately, but shall be considered as included in the unit bid price for the item of construction involved.

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

** Above utility relocation information reflected as of [REDACTED], relocation complete dates are unknown at this time due to right of way acquisitions. Per SB 699 (90 day utility relocation law), once the proposed right of way is clear to award the project, a notice will be sent to the utility companies instructing them to have their facilities relocated within 90 days.

EXISTING UTILITIES:

The Contractor shall familiarize himself with the locations of all utilities and structures that may be found in the vicinity of the construction. The Contractor shall conduct his operations to avoid damage to the above-mentioned utilities and structures. Should any damage occur due to the Contractor's negligence, repairs shall be made by the contractor at no additional cost to the Department.

The Contractor shall notify all utility owners of his construction schedule and shall coordinate construction operations with utility owners so that relocation of utility lines and structures may proceed in an orderly manner. Notification shall be in writing, with copies transmitted to the Engineer.

TRAFFIC CONTROL SURVEILLANCE

Effective: January 1, 2011

Revise the first sentence of the first paragraph of Article 701.10 of the Standard Specifications to read:

“When open holes, broken pavement, trenches over 3 in. deep and 4 in. wide or other hazards are present within 8 ft. of the edge of an open lane, the Contractor shall furnish traffic control surveillance at all times, whether or not the Contractor is engaged in construction operations.”

ABANDON AND FILL EXISTING STORM SEWER

DESCRIPTION. This work consists of filling storm sewers to be abandoned, as designated on the plans or as directed by the Engineer, with Controlled Low Strength Material (CLSM) meeting the requirements of Articles 593.02, 593.03, and 593.04 and Section 1019 of the Standard Specifications. Existing storm sewer end sections and associated grates at the end of the storm sewer to be filled should be removed unless otherwise indicated, and pipe ends shall be securely sealed as described in section 605.03.

MATERIALS. The CLSM shall meet the requirements of Section 1019 of the Standard Specifications

CONSTRUCTION REQUIREMENTS. The storm sewer pipe shall be plugged on both ends with Class SI concrete or brick and mortar. The plug shall be adequate to withstand the hydrostatic load created during the filling operation. If the plugs fail during construction, the Contractor shall be responsible for the cost of repairing the pipe plugs and filling the remainder of the pipe culvert.

Storm sewer end sections that are removed must be disposed of in accordance with article 605.05 of the Standard Specifications.

METHOD OF MEASUREMENT. ABANDON AND FILL EXISTING STORM SEWERS will be measured in place and the length computed in feet. Storm sewer end sections that are removed at the end of the sewer sections will not be measured for payment.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per foot for ABANDON AND FILL EXISTING STORM SEWER. This item includes the removal of storm sewer end sections and associated pipe runners and grates.

CHAIN LINK FENCE, 4'

DESCRIPTION. This work consists of constructing chain link fence and accessories according to the requirements of Section 664 of the Standard Specifications, Highway Standard 664001-02, the Chain Link Fence Details as shown in the plans, and as specified herein.

MATERIALS. Materials shall meet the requirements of Articles 1006.26, 1006.27 and 1006.28 of the Standard Specifications and as specified herein.

Chain link fence fabric shall be galvanized according to AASHTO M 181, Type I, Class D or ASTM F 1345 with Class 2 mischmetal coating.

CONSTRUCTION REQUIREMENTS. Construct according to the requirements of Section 664 of the Standard Specifications and the Chain Link Fence Details as shown in the plans.

METHOD OF MEASUREMENT. CHAIN LINK FENCE, 4' will be measured for payment in feet, along the top of the fence from center to center of end posts. The fall protection D-bolts at the maskwalls and the anchor bolts for the fence posts installed on top of MSE wall coping as shown in the plans shall not be measured separately for payment but shall be included in the cost of CHAIN LINK FENCE, 4'.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per foot for CHAIN LINK FENCE, 4'.

CONCRETE BARRIER, SINGLE FACE, 42 INCH HEIGHT (SPECIAL) AND CONCRETE BARRIER BASE (SPECIAL)

This work shall be done in accordance with Section 637 of the Standard Specifications except as herein modified.

DESCRIPTION. This work shall consist of constructing a 42" single face concrete barrier as shown on the roadway plans and roadway details.

CONSTRUCTION. Concrete barrier shall be constructed per the requirements of Section 637 and as shown in the details in the plans. Concrete barrier base is to be installed with the CONCRETE BARRIER SINGLE FACE, 42 INCH HEIGHT (SPECIAL). Locations of each installation is shown on the plans.

METHOD OF MEASUREMENT. CONCRETE BARRIER SINGLE FACE, 42 INCH HEIGHT (SPECIAL) will be measured for payment in feet in place, along the centerline of the barrier.

BASIS OF PAYMENT. This work will be paid for at the contract unit price, per FOOT, for CONCRETE BARRIER SINGLE FACE, 42 INCH HEIGHT (SPECIAL). Concrete barrier base to be paid for at the contract unit price, per FOOT, for CONCRETE BARRIER BASE (SPECIAL).

CONCRETE BARRIER TRANSITION AND CONCRETE BARRIER BASE (SPECIAL)

This work shall be done in accordance with Section 637 of the Standard Specifications except as herein modified.

DESCRIPTION. This work shall consist of constructing a concrete barrier transition as shown on the roadway plans and roadway details.

CONSTRUCTION. Concrete barrier shall be constructed per the requirements of Section 637 and as shown in the details in the plans. Concrete barrier base is to be installed with the CONCRETE BARRIER TRANSITION (SPECIAL). Locations for each installation is shown on the plans.

METHOD OF MEASUREMENT. CONCRETE BARRIER TRANSITION (SPECIAL) will be measured for payment in feet in place, along the centerline of the installation.

BASIS OF PAYMENT. This work will be paid for at the contract unit price, per FOOT, for CONCRETE BARRIER TRANSITION (SPECIAL). Concrete barrier base to be paid for at the contract unit price, per FOOT, for CONCRETE BARRIER BASE (SPECIAL) or CONCRETE BARRIER BASE depending on the location. See plans for locations.

CONCRETE FOUNDATION, TYPE E

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

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

Any rock excavation required to achieve appropriate depth for the traffic signal foundation shall be conducted according to Section 502 Excavation for Structure of the Standard Specifications for Road and Bridge Construction

BASIS OF PAYMENT. This work shall be paid for at the contract unit price per foot for Concrete Foundation, Type E, 30" Diameter or Concrete Foundation, Type E, 36" Diameter, or Concrete Foundation, Type E, 42" Diameter.

CONCRETE GUTTER, TYPE A (SPECIAL)

This work shall be constructed in accordance with Section 606 of the Standard Specifications, State Standard 606001, District Detail 36.4, and with the limits shown on the plans and as directed by the Engineer, with the exception that the thickness of the gutter on the front face shall match the thickness of the adjacent ramp shoulder of 10 ½” instead of being 9” as stated in District Detail 36.4.

BASIS OF PAYMENT. This item will be paid for at the contract unit price per foot for CONCRETE GUTTER, TYPE A (SPECIAL).

CONCRETE MEDIAN (SPECIAL)

DESCRIPTION. This work shall consist of constructing islands in accordance with Section 606 of the Standard Specifications, District 2 Standard 4.1, as shown in the plans, and as directed by the Engineer.

This work shall include the construction of the combination curb and gutter, sidewalk, aggregate fill, concrete median surface, and solid concrete median.

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

CONCRETE MEDIAN, TYPE SM (SPECIAL)

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

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

CONCRETE STEPS

DESCRIPTION. This work shall be constructed in accordance with Section 1020 of the Standard Specifications, District Standards 71.4 and 63.2, and the details shown in the plans.

This work shall include providing concrete stair adjustments for the residents with existing stairs on 6th Avenue (IL-92 EB) and 7th Avenue to accommodate the proposed change in vertical profile of the roadway.

METHOD OF MEASUREMENT. This work will be measured for payment in place and the volume in cubic yards.

BASIS OF PAYMENT. This work shall be paid for at the contract unit price per Cubic Yard for CONCRETE STEPS. The reinforcement bars within the concrete stairs shall be paid for at the contract unit price per pound for REINFORCEMENT BARS. Pipe handrails for steps shall be paid for at the contract price per foot for PIPE HANDRAIL.

CONCRETE STEP REMOVAL

This work shall consist of removing the concrete stair structures and any railings connected to the stairs at the locations shown on the plans. All materials removed under this item shall become the property of the Contractor and shall be removed and disposed of according to the requirements of Article 202.03 of the Standard Specifications.

The Contractor shall maintain slope stability by backfilling all voids to the natural ground line with material meeting the approval of the Engineer. For existing residents, if a significant time extends between the removal of the existing stairs and the construction of the proposed stairs, then temporary backfilling will be required. The necessary backfill material shall be compacted. The backfill material used for backfilling voids to natural ground line caused by the removal of the stairs will not be paid for as a separate item but shall be included in the cost of CONCRETE STEP REMOVAL and no additional cost will be allowed.

General. The Contractor shall remove the existing concrete steps on the location shown on the details in the plans and the satisfactory disposal of the concrete outside of state right-of-way. The Contractor shall take extra precautions while working near existing buildings as to not cause damage to adjacent property. Any damage caused to the adjacent structure shall be repaired at no additional cost to the Department.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per each for CONCRETE STEP REMOVAL.

CONSTRUCTION LAYOUT (SPECIAL)

Effective: April 1, 2017

If the Contractor opts to utilize GPS equipment for Construction Layout, the Contractor shall be required to complete the following in addition to the requirements of the Recurring Special Provision Check Sheet #9 or #10 of the Standard Specifications and as directed by the Engineer.

1. Submit 3D drawings or show the Engineer the digital terrain model (or proof of some type) that the Contractor has generated all proposed information correctly for all parts of the job (mainline, ramps, side roads, entrances, etc.) before starting any grading, structures or paving work. This does not relieve the Contractor of responsibility of any possible errors made in the modeling.
2. The Contractor shall also submit a written QC/QA plan that they must follow to provide quality control on the actual layout and quality assurance checks of the layout during and after construction. This shall be submitted prior to the start of construction and shall meet the approval of the Engineer.
3. The Engineer may perform spot checks of the machine control grading results, surveying calculations, records, field procedures, and actual staking. If the Engineer determines the work is not being performed in a manner that will provide accurate results, the Engineer may order such work to be redone, to the requirements of the contract documents, at no additional cost to the Department.
4. The Contractor shall check and recalibrate their GPS rover system as needed.
5. The Contractor shall establish secondary control points at appropriate intervals and at locations along the length of the project and outside the project limits and/or where work is performed beyond the project limits as required at intervals not to exceed 1000 feet (300 m). Determine the horizontal position of these points using static GPS sessions or by traverse connection from the original baseline control points. Establish the elevation of these control points using differential leveling from the project benchmarks, forming closed loops. Provide a copy of all new control point information to the Engineer prior to construction activities. The Contractor is responsible for all errors resulting from their efforts. Correct all deficiencies to the satisfaction of the Engineer at no additional cost to the Department.
6. The Contractor shall preserve all reference points and monuments that are established by the Engineer within the project limits. Any reference points that have not been preserved shall be reestablished at no additional cost to the Department.

Construction Layout Equipment

General. The Contractor shall furnish articles of survey equipment to be used by the Department for independent monitoring and verification of construction layout stakes, reference points, and any other horizontal and vertical control set by the Contractor. All equipment will be for the exclusive use of the Department throughout the duration of the contract and will be returned to the Contractor at the end of the contract.

Equipment. The equipment to be furnished by the Contractor shall consist of one precision GNSS rover and a secondary GPS handheld controller. The precision GNSS rover must meet or exceed the capabilities of, and be compatible with the Contractor's equipment and meet the approval of the Engineer. The secondary GPS handheld controller shall also meet or exceed the capabilities of, and be compatible with the Contractor's equipment and meet the approval of the Engineer. The equipment provided shall include all software, data and any additional equipment (base station, repeaters, etc.) necessary to find any point on the project in station, offset and elevation with precision. The Contractor will be required to supply the Department Windows-based software capable of downloading project data from the GPS handheld controller. The project data included in the equipment will be consistent with the data used by the Contractor for layout and grading. Any data revisions or software updates to the Contractor's equipment will also be applied to the Department's equipment by the Contractor.

The Contractor will be responsible for providing training for three members of the Department's staff on use of the equipment and software. The Contractor shall provide one person to the Engineer who will be able to answer any questions and offer any necessary technical support at any point of the project.

Basis of Payment. This work will be paid for at the contract lump sum price for CONSTRUCTION LAYOUT (SPECIAL). If the Contractor elects not to utilize GPS equipment for the use of construction layout, this will not be paid for.

DEWATERING STRUCTURE

DESCRIPTION. This work shall consist of all labor, materials, and equipment necessary to construct a dewatering structure at the locations shown on the contract plans, and as directed by the Engineer. All work shall be performed in accordance with Section 502 of the Standard Specifications, except as modified herein, shown on the plans, or as directed by the Engineer. No component of the dewatering structure shall extend beyond the authorized construction area shown on the contract plans.

CONSTRUCTION REQUIREMENTS. The Contractor shall submit plans, showing a sequence of work, design and construction methods, and description of materials and equipment used to complete the construction of the dewatering structure. The plans shall be accompanied by supporting calculations, and both shall be signed and sealed by a Structural Engineer licensed in the State of Illinois. All materials and equipment used in construction shall comply with the provisions of the Army Corp of Engineers, Illinois Department of Natural Resources, Illinois EPA and US Coast Guard permits as well as the relevant portions of the contract and IDOT specifications.

The dewatering structure shall consist of any temporary earthen embankment, dike, or engineered structure, as approved by the Engineer, which shall provide a partially dry working area suitable for all activities required to complete the construction of the outfalls. After construction of the dewatering structure, the Contractor shall remove the amount of surface water necessary from within the limits of the structures by draining, pumping, or other acceptable means, and maintain suitable working conditions. After construction activities within the river have been completed, the Contractor shall remove the structures.

Damage to work previously completed due to improper protection, shall be repaired at no additional compensation. All water shall be discharged outside the limits of the structures within the river banks. Pumping water from excavated areas may require the use of filtering via filter bags, portable filtering tanks, sediment basins, or other acceptable means in accordance to the project SWPPP. The dewatering system shall not be the cause of flooding of adjacent property. Any fill or other stabilizing materials placed within the limits of the structures shall comply with the provisions of the permit. Agitation of canal sediment shall be limited during installation and removal of the dewatering system.

The exact location of the dewatering structure shall be determined by the Contractor according to clearance needs during construction, and as directed by the Engineer. All work shall be completed within the authorized construction area shown on the plans.

The Contractor will be responsible for the stability and structural adequacy of the structure in resisting all hydrostatic forces imposed due to water surfaces at any elevation within the riverbanks, as well as any other imposed forces. Excavation required to install or remove the dewatering system shall be included in the cost of DEWATERING STRUCTURE of the number specified.

Upon completion of construction, all disturbed areas shall be returned to pre-construction conditions. Protection or stabilization of the river shall be provided to prevent damage due to the return of flowing water. No additional compensation will be given for this protection.

METHOD OF MEASUREMENT. This work shall be measured for payment in units of Each as shown on the contract plans.

BASIS OF PAYMENT. All labor, equipment and materials required to complete this work shall be paid for at the contract unit price EACH for DEWATERING STRUCTURE NO. 1 and DEWATERING STRUCTURE NO. 2.

DOUBLE HANDHOLE

This work shall consist of furnishing the materials and constructing a handhole in accordance with the applicable Articles of Section 814 and 1059 of the Standard Specifications with the following modifications:

The lift ring for the cover shall consist of a solid closed ring of stainless steel at least 3/8 inch in diameter. The lift ring shall be attached to the cover by a loop of stainless steel at least 3/8 inch in diameter. The lift ring and loop shall be recessed in the cover.

The Contractor shall install heavy-duty, fully-galvanized hooks, with a minimum diameter of 1/2" in the proposed handhole. The Contractor shall submit this material to the Engineer prior to construction of the handholes.

The lid shall be marked with the legend "Traffic Signals".

Pre-cast handholes are not allowed.

All unsuitable materials shall be disposed of by the Contractor outside the job limits.

BASIS OF PAYMENT. This work shall be paid for at the contract unit price each for **DOUBLE HANDHOLE**.

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

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

This work shall consist of furnishing and installing wire for traffic signal controller service.

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

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

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

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

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

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

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

BASIS OF PAYMENT. This work shall be paid for at the contract unit price per foot for ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C.

ENVIRONMENTAL PROTECTION

DESCRIPTION. The work under this contract is located in an environmentally sensitive area within or near the Mississippi River (the River). The Contractor's work area shall be restricted to the minimum to construct the project and to accomplish related work. Contractor shall make every reasonable effort to execute the construction in a manner so as to minimize any adverse impact of the construction or work on fish, mussels, wildlife, or natural areas. The Contractor shall abide by all permit restrictions and conditions imposed by regulatory agencies.

Areas disturbed by excavation for construction of haul roads, docks and other permanent or temporary structures, shall be restored to original contours as noted in contract documents. Areas required for equipment movement, offices, stockpiling, service repairs, and storage shall be kept to a minimum and shall be restricted to the boundaries noted in the plans and contract documents.

WORK ZONE REQUIREMENTS.

- A. The I-74 corridor project area crosses the Mississippi River which is an environmentally sensitive resource. All construction activity in the Mississippi River, along its riverbank, and within the area that drains into the Mississippi River should be considered work in an environmentally sensitive area. Work on the Illinois side of the river should be considered work in a particularly sensitive area.
- B. Any construction related conditions deemed to be potentially damaging to environmentally sensitive resources by the Engineer shall be rectified immediately or construction will cease until such time as the condition is rectified. At the discretion of the Engineer, construction activities may resume once provisions to rectify the situation are made. The Contractor shall confine equipment and operations to the project right-of-way shown in the contract documents. These designated construction zones shall be protected with temporary sediment control measures in accordance with the details in the contract documents. No work shall commence on this contract until temporary erosion control and sediment control measures identified in the plans have been installed.
- C. Any erosion control and sediment control measures implemented, on land or water, shall remain in place and maintained until construction in the area is completed.
- D. No tributaries, oxbows or other backwater areas will be "cut off" or blocked from normal flow conditions. Recreational boat traffic closures may be necessary in the area of Sylvan Slough due to construction activities. The contractor is required to secure necessary permits and clearances for closure of any portion of the River.

- E. Any sediment control measures implemented, on land or water, shall remain in place and maintained until construction in the area is completed. For areas on the river bank, sediment control measures shall remain in place and be maintained until the area has been stabilized with temporary or permanent seeding. All earthwork operations on shore will be carried out in such a manner to ensure no sediment runoff and soil erosion will enter the river.
- F. Temporary sediment control measures removed or damaged due to construction activities or high water levels shall be replaced or repaired, where possible, within the emergency mobilization time of 8 hours or within standard mobilization time of 72 hours. If it is not possible to meet the designated time frames, sediment controls shall be replaced prior to recommencing work that would cause turbidity issues in the water.
- G. The clearing of vegetation will be limited to that which is absolutely necessary for construction and operation of the project. All areas disturbed by construction activities and not covered with riprap shall be re-seeded with Class 4 native grass mix according to Section 250 of the Standard Specifications, unless otherwise specified in the contract documents. All re-vegetated areas shall be monitored to make certain they succeed.
- H. Removal and replacement of any revetment stone placed as part of the project should yield a structure with no significant change in gradation. Any damaged stone shall be replaced with new stone to ensure proper gradation.
- I. Any and all barges and other water craft used for construction activities, shall be inspected for the presence of zebra mussels prior to placing the barges into the Mississippi River. Barges shall be completely out of the water for 10 days with all compartments opened that could potentially contain water and therefore harbor adult, larval or juvenile zebra mussel. This will ensure proper drying of the barge(s) and reduction of potential infestation. If the barge is obtained from a local source, United States Fish and Wildlife Service, Illinois Department of Natural Resources and Iowa Department of Natural Resources staff must still be contacted to discuss previous locations at which the barge has been used.
- J. The U.S. Army Corps of Engineers (USACE) shall be notified if temporary work is constructed and when it is removed from the river. All temporary construction required shall be removed from the River in its entirety once it is no longer needed for construction of the project.
- K. Temporary construction in the River may include an appropriate combination of barges, temporary slips, temporary supports (falsework), and temporary cofferdams. **An elevated earthen/sand/rock work platform (causeway or equipment pad) shall not be used for any construction; fills in the River for temporary crossings, causeway, or equipment pad structures are not permitted.**

- L. A plan for all temporary construction needed shall be submitted to and approved by the USACE and the Engineer prior to installation. The plan must include but is not limited to the location identified on an aerial photo, the dimensions, construction methods, duration of use and measures that will be used to control turbidity and/or sedimentation. The Contractor shall submit the plan for all temporary construction to the Engineer prior to commencing work. Once approved by the USACE and/or the Engineer, the Engineer will notify the Contractor of approval.
- M. If dredging is needed to convey barges the discharge will not be placed back into the River. The USACE shall be notified of the location of dredging, amount to be dredged, and any Section 401 water quality testing required by the Iowa Department of Natural Resources prior to any discharge of dredged material. Should dredged or excavated material be deposited on the shore before being hauled away, silt fences, perimeter and slope sediment control devices, or low silt berms shall be required to limit the reentry of sediments into the river. In addition, the materials shall be placed in a confined area, not classified as a wetland.
- N. Prior to commencement of hydraulic dredging, the applicant shall perform a modified elutriate test procedure to predict the effluent quality or the total concentration of contaminants in the effluent. This test simulates the processes occurring during confined disposal and provides information on the dissolved and particulate contaminant concentrations. Results of the elutriate test shall be forwarded to the Iowa Department of Natural Resources and the Illinois Environmental Protection Agency when available. Should test results prove unsatisfactory, the Iowa Department of Natural Resources or the Illinois Environmental Protection Agency may amend this Certification to assure that effluent water quality requirements are met. Please note that if mechanical dredging is performed, the testing will not be required.
- O. Native materials removed from cofferdams may be replaced in the cofferdam. Other than replacing native materials, any fill materials introduced into the River must be clean (meaning less than 10% fines that would pass through a #200 sieve). Areas disturbed by dredging shall be backfilled with special revetment. Dredging and backfill is included in project IM-NHS-074-1(197)5--03-82 and project IM-NHS-074-1(198)5--03-82.
- P. The Contractor shall remove any debris from the water or the river bed as soon as practicable during the same work day in order to prevent the accumulation of unsightly, deleterious, and /or potentially polluted materials, as directed by the Engineer. The Contractor shall also implement measures to prevent debris from falling into the river. Should debris enter the river, it shall be retrieved immediately. Debris will not be allowed to collect on the bottom of the river.
- Q. No materials, including cleared and grubbed vegetation or construction debris, shall be disposed of in such a way that it could enter a wetland or waterway.

- R. The contractor shall perform his work in such a way to ensure that no wet or dried concrete shall enter the River, any waterway or wetlands. If concrete does enter these areas the Contractor shall be solely responsible for any remediation necessary. Wash concrete trucks out in such a manner that wash water cannot enter the River, waterway, or wetlands. If a designated area is constructed or identified, that location shall be included in the temporary construction plans.
- S. Care shall be taken to prevent materials spilled or stored on site from washing into any wetland or waterway as a result of cleanup activities, natural runoff, or flooding, and that, during construction, any materials, which are accidentally spilled into these areas, will be retrieved.
- T. No fuels, lubricants, form oil, or similar products shall be stored in an area that has not been protected by a berm or other spill materials within the project area. All handling and storage of these materials must be done in such a manner as to comply with federal Spill Prevention Control and Countermeasure regulations and protect all water bodies from accidental spills and leaks.
- U. The contractor shall perform his work in such a way as to prevent materials spilled or stored on site from washing into the River or any wetland or waterway as a result of cleanup activities, natural runoff, or flooding. If, during construction, any materials are accidentally spilled into these areas, the materials will be retrieved and/or remediated immediately.
- V. Spill protection material (i.e., spill kit) shall be readily available at the project site, and on work barges, to contain and absorb accidental spills of fluids from construction equipment. Personnel trained in the implementation of the spill kit shall be readily available onsite to respond to accidental spills.
- W. Open burning within the project limits is prohibited.

PROTECTED SPECIES

- A. Sylvan Slough, downstream of the project area, has been identified by the US Fish and Wildlife service as an Essential Habitat Area for the federally endangered Higgins eye pearly mussels. In addition, Sylvan Slough is inhabited by two other federally endangered mussels, spectacle case mussel and sheepnose mussel. Please refer to Special Provision for Mussel Conservation for more information on protecting threatened and endangered species.

- B. Attention is directed to the Migratory Bird Treaty Act (15 USC 703-711) 50 CFR Part 21 and 50 CFR Part 10 that protect migratory birds, their occupied nests, and their eggs from disturbance or destruction. Activities that are likely to result in disturbance or destruction of migratory birds include but are not limited to clearing and grubbing, as well as structure cleaning, painting, demolition or reconstruction where bird nests are present. To protect migratory birds, do not conduct construction activities where active nests are present between the dates April 1 and July 15 inclusive or until the birds have fledged and left the structure. If evidence of migratory bird nesting is discovered after beginning work or in the event that migratory bird nests become established, immediately stop work and notify the Engineer.
- C. If during the course of construction, any discoveries of protected plant or animals are made in the project area, the Contractor should notify the Engineer immediately.

CLEAN WATER ACT COMPLIANCE.

- A. A Clean Water Act Section 404 Permit has been obtained by the Contracting Authority that authorizes all construction-related activities affecting waters of the U.S. The 404 Permit contains numerous special conditions, all of which may not have been included in this Special Provision. Failure to follow the provisions of the 404 Permit or this Special Provision may result in enforcement actions being initiated by the USACE. Enforcement actions may include an order to immediately cease all construction activity and/or fines.
- B. It will be the Contractor's responsibility to ensure that the day-to-day operations of the project comply with this Special Provision. The Engineer will be available throughout the project to offer guidance to the Contractor regarding compliance with this Special Provision and the Clean Water Act.
- C. Included with the Clean Water Act Section 404 Permit are Section 401 Water Quality Certifications from Iowa Department of Natural Resources and the Illinois Environmental Protection Agency, which contain numerous special conditions that are included by reference in this Special Provision.
- D. It is the goal of Iowa's and Illinois' Water Quality Standards that all uses of the Mississippi River be maintained and protected. The dredging will cease if the water quality standards of either the State of Iowa or the State of Illinois are violated.

BASIS OF PAYMENT. No separate payment will be made for costs incurred due to compliance with this Special Provision.

No additional time will be provided to the contract unless approved in writing by the Engineer.

MUSSEL CONSERVATION

DESCRIPTION. Part of the work under this contract is located in an environmentally sensitive area within the Mississippi River (the River). This work has the potential to impact state and federally threatened and endangered mussels living in the River. In environmentally sensitive areas of the River the Contractor's work area shall be restricted to the areas shown on Figure 1 to construct the project and to accomplish related work. Contractor shall make every reasonable effort to execute the construction in a manner so as to minimize any adverse impact of the construction or work on fish, mussels, wildlife, or natural areas. Contractor's work is not restricted outside of the work areas identified on Figure 1 and the restricted areas on Figure 2.

Areas required for equipment movement, stockpiling, service repairs, and storage shall be kept to a minimum and shall be restricted to occur within the boundaries noted in Figure 1 in the River and outside of the areas noted on Figure 2 on the Illinois and Iowa banks of the River.

WORK ZONE REQUIREMENTS

- A. Any construction related conditions deemed to be potentially damaging to environmentally sensitive resources by the Engineer shall be rectified immediately or construction will cease until such time as the condition is rectified. At the discretion of the Engineer, construction activities may resume once provisions to rectify the situation are made.
- B. The Contractor shall confine equipment and operations in the River to the project areas shown in Figure 1. These designated construction zones will be protected with temporary sediment control measures by others, in accordance with the details in the contract documents for Iowa Project IM-NHS-074-1(197)5--03-82. No work shall commence on work in the River until temporary sediment control measures identified in the plans have been installed.
- C. Concurrently with construction, prior to work in the water, silt curtains will be deployed by others, as depicted in Figure 1 and as detailed in projects IM-NHS-074-1(197)5--03-82 and IM-NHS-074-1(198)5--03-82. Any additional sediment control measures will be employed as needed, and at the Engineer's discretion, to protect waters of the U.S., threatened and endangered mussels and the City of Moline drinking water intake.
- D. Construction in the River will require access to the River via the Iowa or Illinois bank. Figure 2 identifies areas that are restricted from being used as River access due to endangered mussel inhabitation. No river access will be allowed within the restricted areas identified on Figure 2.

- E. Areas affected by dredging shall be returned to preconstruction elevations with Special Revetment as backfill, within 30 days of the time when barge access is no longer needed by the Contractor.
- F. It is the goal of Iowa's and Illinois' Water Quality Standards that all uses of the River be maintained and protected. The dredging will cease if the water quality standards of either the State of Iowa or the State of Illinois are violated.

PROTECTED SPECIES

- A. Sylvan Slough, downstream of the project area, has been identified by the US Fish and Wildlife service as an Essential Habitat Area for the federally endangered Higgins eye pearly mussels. In addition, Sylvan Slough is inhabited by two other federally endangered mussels: spectacle case mussel and sheepsnose mussel.
- B. If during the course of construction, any discoveries of additional protected plants or animals are made in the project area, the Contractor shall notify the Engineer immediately.
- C. It will be the Contractor's responsibility to ensure that the day-to-day operations of the project comply with this Special Provision. The Engineer will be available throughout the project to offer guidance to the Contractor regarding compliance with this Special Provision. Any environmental monitoring, required by the US Fish and Wildlife Service, of environmentally sensitive areas or areas where mussels could be present will be performed by the contracting authority or its designee and coordinated with the Contractor through the Engineer.

MATERIALS

- A. Backfill for areas disturbed by dredging shall be Special Revetment, in accordance with the following: Special Revetment shall be granite material from an approved source, has a nominal 1.5 foot size. 100% of the material shall pass through the 2-foot r while 100% shall be retained on a 1-foot screen
- B. Silt curtain is included in project IM-NHS-074-1(197)5--03-82 and project IM-NHS-074-1(198)5--03-82.

PAYMENT

- A. No separate payment will be made for costs incurred due to compliance with this Special Provision.
- B. No additional time will be provided to the contract unless approved in writing by the Engineer.

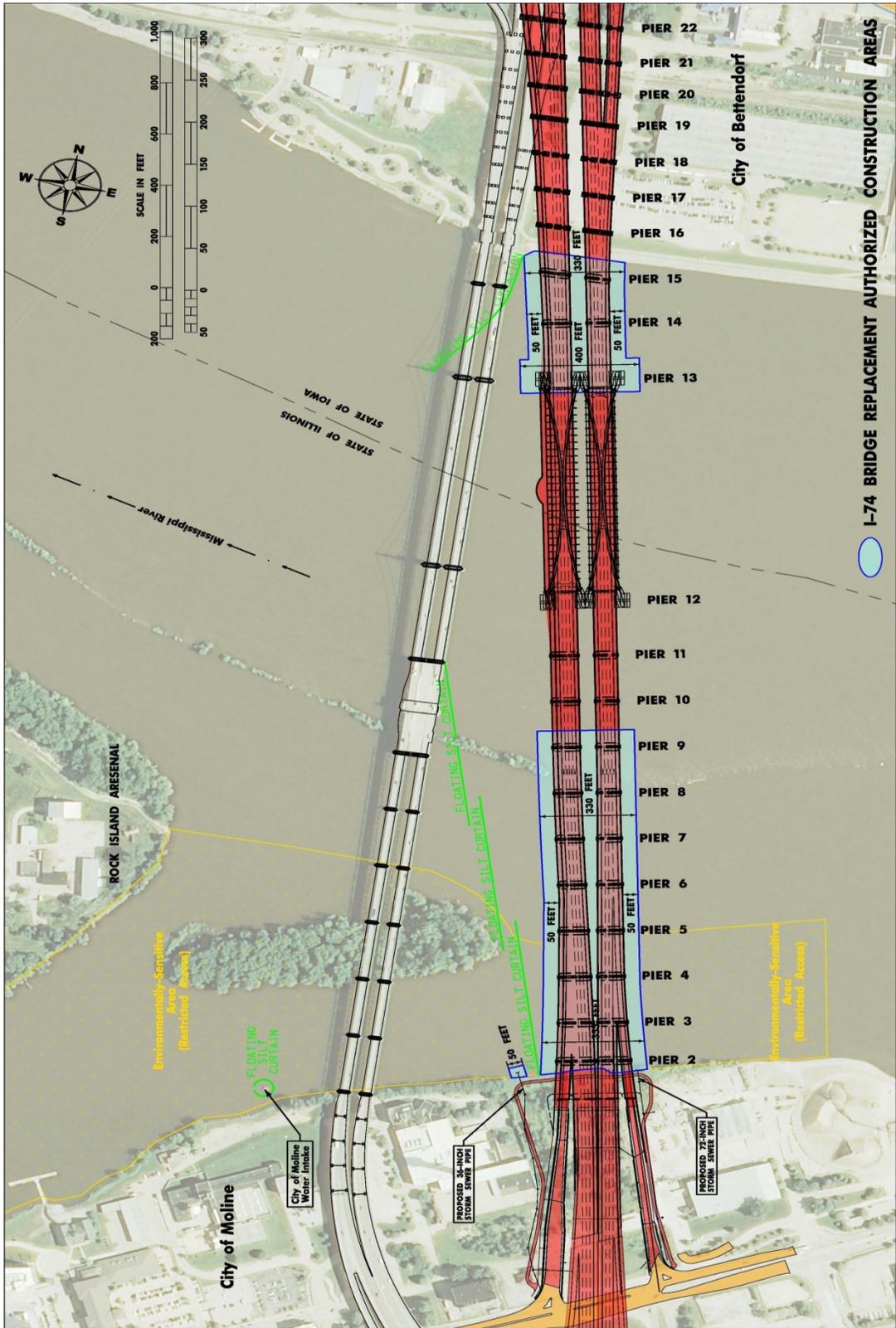


Figure 1. Construction area map, I-74 over the Mississippi River.

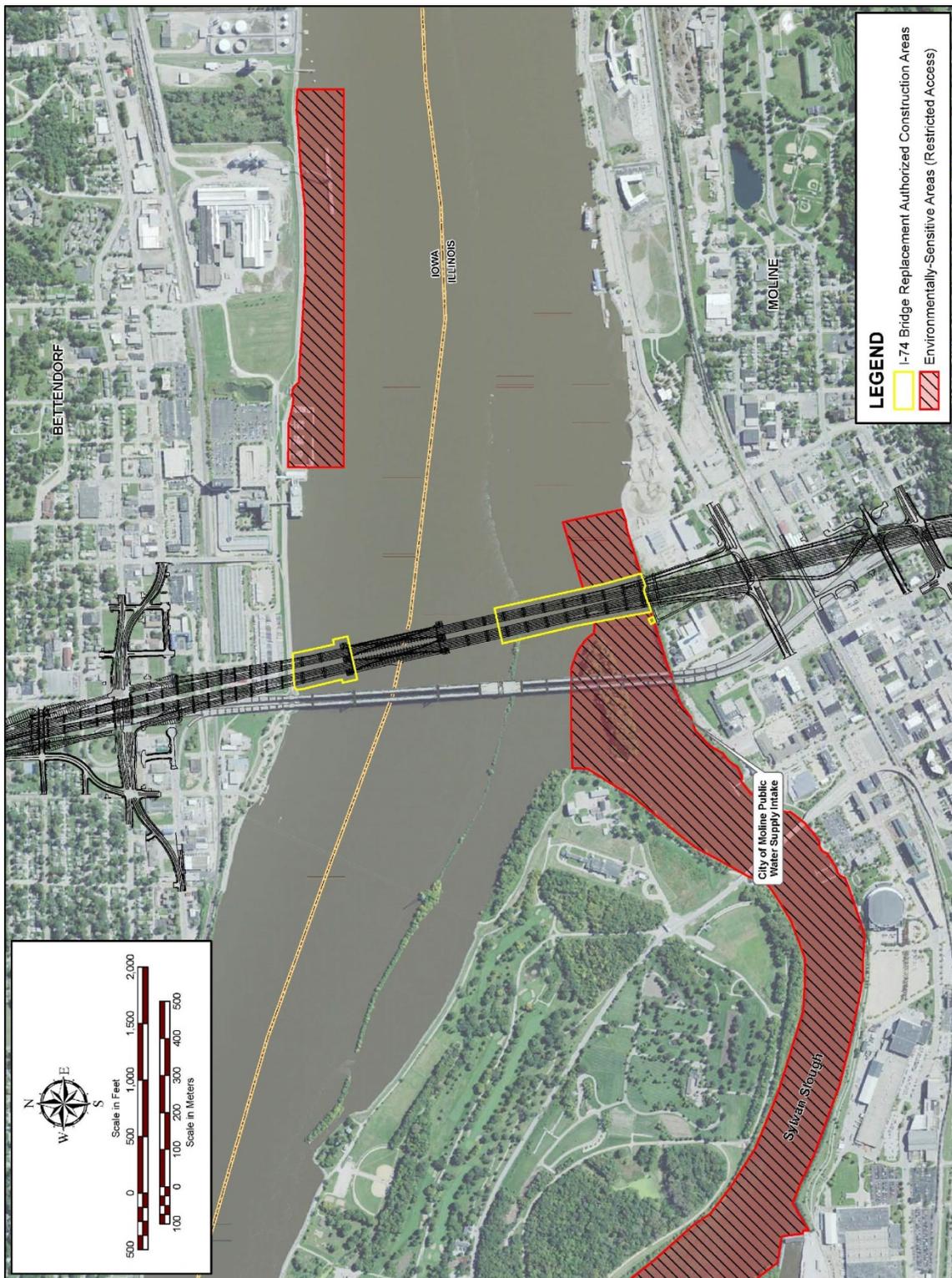


Figure 2. Project constraints map, I-74 over the Mississippi River.

FIRE HYDRANTS TO BE ADJUSTED

DESCRIPTION. This item consists of vertical adjustment of fire hydrants, including auxiliary valves that are to remain in place. All applicable portions of Section 564 of the Standard Specifications will apply and work shall be in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois, latest edition.

Water main shut-offs, if required, shall be coordinated with the agency owning the watermain. Shut downs may be required to occur on weekend days. No additional compensation shall be due the Contractor for performing this work on the weekend.

METHOD OF MEASUREMENT. This work shall be measured per each hydrant to be adjusted.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per EACH for FIRE HYDRANTS TO BE ADJUSTED.

FULL-ACTUATED CONTROLLER AND TYPE IV CABINET

This work shall be in accordance with Sections 857, 1073, and 1074 of the Standard Specifications except as modified herein.

The Contractor shall provide all labor, materials, and equipment required for the work described above. The cost of this work shall be included in the bid price for this pay item. There will be no additional compensation for this work.

The cabinet and controller shall be compatible with the existing Eagle closed loop system and Siemens remote monitoring software.

The traffic signal cabinet shall have a NEMA TS-2 back panel. The cabinet shall include a malfunction management unit to allow enhanced fault monitoring capabilities.

The malfunction management unit shall be equipped with the latest software and firmware revisions.

The traffic signal cabinet shall be equipped with a sixteen load switch back panel to accommodate future expansion.

The cabinet shall be equipped with a twenty-four fiber wall-mountable interconnect center and two six-fiber bulkheads. The cabinet and controller shall also be equipped with any and all other components necessary to provide for a complete and functional fiber optic telemetry.

The cabinet shall be equipped with toggle switch guards for all switches located on the door to prevent accidental switching. The cabinet shall include a high quality deluxe pleated filter.

The Contractor shall set up each cabinet in his or her shop for inspection by the Engineer. All phases that are utilized shall be hooked up to a light board to provide observation for each signal indication. The Engineer shall be notified when the set up is complete so that all pertinent timings may be entered into the each traffic signal controller. The facility shall be subject to a seven day burn-in period before installation will be allowed.

The Contractor shall ground and safety-bond the controller cabinet in accordance with NEC requirements.

After installing the cabinet in the field, prior to resuming normal signal operation, the Contractor shall test the cabinet by connecting a jumper to the cabinet field terminals to ensure that all conflicting signals will place the cabinet into conflict flash and to verify that the cabinet, controller, and malfunction management unit are operating correctly. The Contractor shall make arrangements with the local police agency to provide traffic control during the conflict test.

BASIS OF PAYMENT. This work will be paid for at the contract unit price each for FULL ACTUATED CONTROLLER AND TYPE IV CABINET.

HANDHOLE

This work shall consist of furnishing the materials and constructing a handhole in accordance with the applicable Articles of Section 814 and 1088 of the Standard Specifications with the following modifications:

The lift ring for the cover shall consist of a solid closed ring of stainless steel at least 3/8 inch in diameter. The lift ring shall be attached to the cover by a loop of stainless steel at least 3/8 inch in diameter. The lift ring and loop shall be recessed in the cover.

The Contractor shall install heavy-duty, fully-galvanized hooks, with a minimum diameter of 1/2" in the proposed handhole. The Contractor shall submit this material to the Engineer prior to construction of the handholes.

The lid shall be marked with the legend "Traffic Signals".

Pre-cast handholes are not allowed.

All unsuitable materials shall be disposed of by the Contractor outside the job limits.

BASIS OF PAYMENT. This work shall be paid for at the contract unit price each for HANDHOLE.

HANDHOLE TO BE ADJUSTED

This work shall be completed according to Section 814 of the Standard Specifications and as noted herein. The handholes located in the existing sidewalk at the intersection of 4th Avenue and 19th Street will need to be adjusted to match the finished grade of the sidewalk/ramp. All work and materials necessary to achieve a functioning handhole at finished grade, including replacing the handhole if necessary, is included in this pay item.

Existing handholes to be used in place may require modification to be flush with the finished grade. This work shall be included within this pay item.

Basis of Payment. This work will be paid for at the contract unit price per each for HANDHOLE TO BE ADJUSTED.

INLET BOXES TO BE ADJUSTED (SPECIAL)

Description: This work shall consist of all material and labor required to adjust inlets to match the proposed median surface and to salvage and reinstall grates as specified in Standard 542546.

Construction Requirements: The Contractor shall salvage the existing grate, remove the concrete around the casting as specified in the plan detail, build up the inlet with polymer concrete and set the salvaged grate as shown on the detail sheet in the plans.

Materials: Materials shall meet the requirements of Recurring Special Provision #16 POLYMER CONCRETE. Reinforcement and expansion bolts shall meet the standards of Article 1006. If directed by the Engineer, the Contractor shall supply new grates as detailed on Standard 542546 and as specified in Article 1006 of the Standard Specifications.

Method of Measurement: This work will be measured for payment in units of EACH, at locations specified. Polymer concrete, concrete removal, reinforcement, and expansion bolts will not be paid for separately but shall be included in the cost of INLET BOXES TO BE ADJUSTED (SPECIAL).

Basis of Payment: This work shall be paid for at the contract unit price per each for INLET BOXES TO BE ADJUSTED (SPECIAL) at the locations specified in the plans.

MILE POST MARKER ASSEMBLY (SPECIAL)

DESCRIPTION. This work shall consist of furnishing and installing mile post marker assemblies, including steel posts, angles, threaded anchor rods, sign panels and hardware mounted on concrete bridge and retaining wall parapets according to applicable portions of Sections 505, 584, 720 and 726 of the Standard Specifications, as shown on the plans, and as approved by the Engineer.

Materials. Materials shall be according to applicable portions of Articles 505.02, 584.02, 720.02 and 726.02 of the Standard Specifications and as shown on the plans.

CONSTRUCTION REQUIREMENTS: The Contractor shall verify the locations of parapet joints and railing posts in the field prior to installing the mile post marker assemblies. The mile post marker assemblies shall be installed as close as possible to the I-74 stations shown on the plans and according to the spacing requirements shown on the plans.

The steel post, post cap plate, and angle of the mile post marker assemblies shall be fabricated and inspected according to Articles 505.04 and 505.05 of the Standard Specifications.

All fabrication shall be completed in the shop before galvanizing. Cutting, punching, drilling or field welding is prohibited after galvanizing.

METHOD OF MEASUREMENT. This work will be measured for payment, complete in place, in units of each.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per each for MILE POST MARKER ASSEMBLY (SPECIAL).

PARAPET MOUNTED SIGN SUPPORT ASSEMBLY

DESCRIPTION. This work shall consist of furnishing and installing parapet mounted sign support assemblies, including steel posts, plates, shims, threaded anchor rods and hardware according to applicable portions of Sections 505, 584 and 720 of the Standard Specifications, as shown on the plans, and as approved by the Engineer. The sign support assemblies are attached to the back face of concrete bridge parapets and MSE retaining wall anchorage and approach slab parapets as shown on the plans.

MATERIALS. Materials shall be according to applicable portions of Articles 505.02, 584.02 and 720.02 of the Standard Specifications and as shown on the plans.

CONSTRUCTION REQUIREMENTS: The Contractor shall verify the locations of parapet joints and railing posts in the field prior to installing the parapet mounted sign support assemblies. The parapet mounted sign support assemblies shall be installed as close as possible to the stations shown on the plans and according to the spacing requirements shown on the plans.

The steel post, post cap plate, and plates of the parapet mounted sign support assemblies shall be fabricated and inspected according to Articles 505.04 and 505.05 of the Standard Specifications.

All fabrication shall be completed in the shop before galvanizing. Cutting, punching, drilling or field welding is prohibited after galvanizing.

METHOD OF MEASUREMENT. This work will be measured for payment, complete in place, in units of each.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per each for PARAPET MOUNTED SIGN SUPPORT ASSEMBLY.

The sign panels, support channels and mounting hardware to be attached to the parapet mounted sign support assembly posts will be paid for according to Article 720.06.

JUNCTION BOX

DESCRIPTION. This work shall consist of furnishing all labor, materials, tools and equipment necessary to construct the junction box, together with the necessary cast iron frames and lids, conforming to the lines, grades, details and dimensions as shown on the plans or as directed by the Engineer. The work shall be done in accordance with the applicable portions of Sections 504, 508, and 602 of the Standard Specifications.

CONSTRUCTION REQUIREMENTS. Excavation shall be to the established bottom of the foundation as shown on the plans or as directed by the Engineer. The surface shall be firm and smooth. If soft or yielding material is encountered at this elevation, it shall be removed and backfilled with suitable material, thoroughly compacted in place. To permit proper compaction of the backfill material, the excavation shall be made to a horizontal distance extending 2 feet outside the footing of the structure. The cost for dewatering is included in the cost of Junction Box. After construction, the excavated volume not occupied by the finished structure shall be filled in accordance with the applicable portions of Section 602 of the Standard Specifications. Any excess material from excavation shall be disposed of as directed by the Engineer.

Shop drawings, complete with all details and related data for the junction box shall be submitted to the Engineer in accordance with the requirements of Article 1042.03(b) of the Standard Specifications before any fabrication is begun. Such submittal shall be prepared by an Illinois Licensed Structural Engineer. The Contractor shall design and detail the lifting devices.

The junction box shall be a precast, reinforced concrete unit of the size and shape as shown on the plans and as specified herein. The Contractor shall furnish and install the unit with openings in the sides to receive storm sewer pipes of the size, line, and grade indicated on the plans. Flexible pipe to junction box connectors shall be provided at all junction box penetrations. The connector shall be sized specifically for the type of pipe being used. Connector and connecting pipe installation shall be according to the recommendations of the connector manufacturer. Where feasible, the concrete fill at the base of the junction box shall be poured to provide drainage and eliminate standing water. If the Contractor chooses to construct the junction box in horizontal segments or use cast-in-place sections, the Contractor shall submit signed and sealed calculations and drawings from an Illinois Licensed Structural Engineer.

Connections to existing storm sewer shall be completed by removing the existing storm sewer to the first joint outside the working area required to construct the junction box wall and constructing a new sewer section according to Section 550 of the Standard Specifications of sufficient length to extend through the junction box wall. If the first joint is located outside of the temporary soil retention system, the retention system shall be adjusted at no additional cost to the Department.

If the junction box is cast in sections, the sections shall be laid in accordance with the requirements of Article 602.07 of the Standard Specifications. The precast concrete junction box base shall be installed on a 3" thick sand cushion of FA1 or FA2 conforming to Article 1003.01 of the Standard Specifications.

METHOD OF MEASUREMENT. Junction Box constructed as shown in the plans, and in conformance with these Special Provisions will be measured for payment, in place, per lump sum. Inlet pipes and storm sewers embedded in the walls will be measured for payment as specified in Section 540 and Section 542 or in other applicable section of these Specifications.

BASIS OF PAYMENT. All labor, equipment and materials required to complete this item and the temporary soil retention system as specified herein shall be paid for at the contract unit price per L SUM for the JUNCTION BOX, JUNCTION BOX, NUMBER 1, JUNCTION BOX, NUMBER 2, JUNCTION BOX, NUMBER 3, JUNCTION BOX, NUMBER 4 and JUNCTION BOX, NUMBER 5.

RAILROAD COORDINATION

In order to work within the Burlington Northern Santa Fe's (BNSF) right-of-way the Contractor is encouraged to develop their own safety rules that meet or exceed the requirements established by the BNSF. A web site has been set up to assist in preparation of a safety plan—www.bnsfcontractor.com. Contractors will not be allowed to occupy or work on BNSF right-of-way prior to registering on the web site and completing the course.

Contractors working on the railroad right of way will need to obtain a right of entry permit prior to entering railroad property and obtain flagging protection in accordance with the latest version of the "**BNSF Utility Accommodation Policy**." The cost for the right of entry permit and flagging are included in the cost of RAILROAD PROTECTIVE LIABILITY INSURANCE. Contractors working on the railroad right of way will need to obtain the additional insurance policies specified by the railroad and shall be in accordance with the railroad protective liability insurance BDE special provision.

Utility crossings and relocations shall conform to BNSF standards as outlined in the latest version of the "**BNSF Utility Accommodation Policy**." This policy is to prescribe the accommodation, location and method of installation, adjustments, removal, relocation and maintenance of utility facilities within the property of Burlington Northern & Santa Fe Railway Company.

The Contractor shall coordinate with the BNSF and the Department prior to the commencement of work in the vicinity of the railroad. Permits for the proposed jacked in place pipes will be coordinated with the BNSF by the City of Moline. The Contractor is to confirm the appropriate permits have been obtained prior to the commencement of work in the vicinity of the railroad.

RELOCATE EXISTING SIGN (SPECIAL)

This work shall be in accordance with Section 895 of the Standard Specifications except as modified herein.

The Contractor shall relocate the illuminated Rt-turn blank-out sign at the intersection of 4th Avenue and 19th Street to the proposed signal. All cable, wiring, connections and testing associated with this relocation are to be paid for in this pay item.

Basis of Payment. This work will be paid for at the contract unit price per each for RELOCATE EXISTING SIGN (SPECIAL).

RELOCATE INTERCONNECT CABLE

The railroad interconnect with the intersection of 4th Avenue and 19th Street will need to be maintained and relocated to the new handholes and conduit. All cable, wiring, connections and testing associated with this relocation are to be paid for in this pay item.

Basis of Payment. This work will be paid for at the contract unit price per each for RELOCATE INTERCONNECT CABLE.

REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL

Various unsuitable materials are known to exist within the footprint of the roadway embankment between the Mississippi River and River Drive. These materials consist of uncompacted earth fill, vegetative debris, concrete foundations (various thicknesses), paved driveways, construction debris located in mounds above the surrounding ground surface, and organic debris located below the prevailing ground surface. The Contractor shall sequence earthwork in this area to determine the extents of unsuitable materials and remove them within the limits shown on the plans.

Prior to placing embankment or removing any unsuitable material below the prevailing ground surface, the Contractor shall excavate the mounds of miscellaneous materials to the prevailing ground surface shown in the Plans. The Contractor shall place suitable excavated materials in fills or embankments in lifts and compact according to Section 205 of the Standard Specifications. The Contractor shall dispose of unsuitable materials in such a manner that public or private property will not be damaged or endangered. The cost of sorting and reuse of suitable material shall be included in the cost of the associated excavation. Removal and disposal of sorted unsuitable material shall be paid for according to Article 109.04.

After excavation of the mounds, the Contractor shall commence removal of buried organic debris, concrete debris larger than 18 inches in any dimension, soils with moisture contents greater than 50 percent, and soils with organic contents greater than 10 percent from beneath the footprint of the proposed embankment. The estimated extent of the buried debris is shown on the Plans. Removal and disposal shall be to the extent actually encountered during excavation as determined by the Engineer. Unsuitable material outside of the maximum limits shown on the Plans shall remain in place. Where the excavation continues below the water level, the material shall be stockpiled or otherwise processed to remove excess water and allow it to be observed by the Engineer. The Contractor shall dispose of excavated materials in such a manner that public or private property will not be damaged or endangered. The Contractor shall sort excavated materials and incorporate suitable material into embankment when approved by the Engineer. All work associated with excavation, stockpiling, processing and sorting shall be included in the cost of EARTH EXCAVATION. Removal and disposal of sorted unsuitable material shall be included in the cost of REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL.

The Contractor shall excavate test pits where ordered by the Engineer. This work shall be included in the cost of the associated pay item(s) and no additional payment shall be made.

An "obstruction" shall be defined as any object that cannot be removed and hauled with normal earth moving equipment, but requires concrete breakers, saws, cutting torches or other special handling to remove. When obstructions are encountered, the Contractor shall notify the Engineer and upon concurrence of the Engineer, the Contractor shall begin working to break up, remove, and dispose of the obstruction.

Unsuitable material and obstructions removed in accordance with this special provision shall be replaced with rock fill up to the surface of any standing water, but not less than Elev. 561.0. Positive drainage and dewatering shall be used to direct water away from the embankment and grading site, and shall be included in the cost of the associated work. Additional lifts of rock fill shall be placed until general embankment material can be satisfactorily placed and compacted, as determined by the Engineer. The remainder of any backfill shall be embankment in accordance with Section 205 of the Standard Specifications. All backfill shall be classified according to the actual material placed and paid for as specified in other items of work.

BASIS OF PAYMENT. This work will be measured according to Section 202 of the Standard Specifications. The work will be paid for at the contract unit prices per cubic yard for EARTH EXCAVATION and/or REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL, depending on the nature of the material excavated. Backfill shall be classified as described above and shall be paid for according to the Rock Fill (Z0054500) Special Provision and Article 205.09. Obstruction removal shall be paid for according to Article 109.04.

REMOVE EXISTING FLAGPOLE

DESCRIPTION. This work shall consist of removal and disposal of the existing flagpoles and foundations located within the infield of the Interstate 74 ramps to/from River Drive.

METHOD OF MEASUREMENT. This work will be measured for payment per EACH for each flagpole being removed.

BASIS OF PAYMENT. This work shall be paid for at the contract unit price per EACH for REMOVE EXISTING FLAGPOLE.

REMOVE EXISTING FLARED END SECTION

DESCRIPTION: This work shall consist of the removal and disposal of flared end sections at locations shown on the plans, in accordance with the applicable portion of Section 551 of the standard Specifications, and as directed by the Engineer.

METHOD OF MEASUREMENT: Removal of existing flared end sections will be measured for payment in units of each at the locations designated on the plans.

BASIS OF PAYMENT: This work will be paid for at the contract unit price per each for REMOVE EXISTING FLARED END SECTION.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

This work shall be in accordance with Section 895 of the Standard Specifications except as modified herein.

The Contractor shall remove all wires pertaining to existing traffic signals, grounding, and loops at the intersection of 4th Avenue and 19th Street, 6th Avenue and 19th Street, and 7th Avenue and 19th Street, with the exception of the service wires to the controller, and where noted on plans. The contractor shall remove all signal posts and poles, corresponding foundations, handholes and electrical cable. This work shall be included in the bid price for this pay item.

The illuminated Rt-turn blank-out sign at the intersection of 4th Avenue and 19th Street shall be relocated to the proposed traffic signal, paid as REMOVE AND RELOCATE SIGN (SPECIAL).

The Contractor shall dispose of all other items off of the right-of-way and reflect the salvage value of this equipment in the unit bid price for this pay item.

Method of Measurement: All Traffic signal equipment to be removed including but not limited to handholes, signal posts, mast arms, concrete foundations, cable, pedestrian signal heads, and vehicle signal heads for a particular intersection will be paid for as each (per intersection).

BASIS OF PAYMENT: The above work will be paid for at the contract unit price each (per intersection) for REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT and shall be payment in full for removing, disposing of, and transporting the equipment described above, complete. No additional compensation will be allowed.

MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION

The Contractor shall maintain the existing traffic signals located at River Drive and 19th Street, River Drive and the I-74 Ramps, and River Drive and 23rd Street during construction. Changes to the signal timing and sequencing may be required during construction.

The maintenance and possible timing changes shall be included in the bid price for this pay item.

BASIS OF PAYMENT: The above work will be paid for at the contract unit price each (per intersection) for MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION.

MODIFY EXISTING CONTROLLER

The Contractor shall modify the existing controller at the intersection of the I-74 ramps and River Drive. This shall include the connection of new cables and the reprogramming of the controller to new phases and timing.

BASIS OF PAYMENT: The above work will be paid for at the contract unit price each (per intersection) for MODIFY EXISTING CONTROLLER.

PEDESTRIAN PUSH BUTTON

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

All push buttons shall be parallel to the crosswalk and be a maximum of 10 inches from the edge of sidewalk. No additional compensation is allowed if an extender is needed to meet requirement.

Basis of Payment: This work shall be paid for at the contract unit price each for PEDESTRIAN PUSH BUTTON.

ROCK FILL (Z0054400)

GENERAL. This work consists of constructing a layer of rock fill below mechanically stabilized earth retaining walls and drainage structures. The layer of rock fill is to be used where the theoretical top of leveling pad is above existing grade or where the proposed structure bears on unsuitable soils. When removal of unsuitable soils is shown on the plans, the rock fill limits and thickness shall be confirmed by the Engineer prior to excavating below the theoretical top of leveling pad or base of structure.

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

- CA-6 1004.04
- Rock fill 1005.01

All rock fill shall be well graded. The gradation of rock fill shall be selected based on layer thickness as shown below:

- Less than or equal to 1 ft Gradations with a max size of 4 inches^a
- Greater than 1 ft Primary Crusher Run
- Greater than 3 ft Primary Crusher Run or Quarry Run (18 inches max size)

^a Gradations with a maximum size of 2 inches or smaller shall have less than 6% passing the No. 200 sieve.

Excavation shall be performed according to Section 502 of the Standard Specifications.

The method of rock fill placement shall be approved by the Engineer. Rock fill shall be capped with 4 to 6 inches of compacted CA-6 unless where groundwater may encroach the final construction limits of the rock fill, CA-7 shall be substituted in place of the CA-6.

BASIS OF PAYMENT. This work will be measured and paid for at the contract unit price per CU YD for ROCK FILL.

ROCK FILL (Z0054500)

GENERAL. This work consists of constructing a layer of rock fill to replace unsuitable soils and provide a stable platform for earth embankment construction. When shown on the plans, the rock fill limits and thickness shall be confirmed by the Engineer prior to starting this work.

Rock fill materials shall meet the requirements of Article 1005.01 of the Standard Specifications. The gradation of rock fill shall be quarry run with a top size of not more than 24 inches in any dimension. The rock shall be sufficiently well graded from coarse to fine to produce a layer with minimal voids. The rock shall be obtained from a quarry ledge capable of producing Class D quality aggregate and shall contain no more than 10% visible seams of clay.

Rock fill shall be placed starting at one end of the designated area and advancing from previously placed material. It shall be placed in a manner to minimize intermixing with native material. No compaction of rock fill is required. Rock fill may be placed below the water elevation. Rock fill shall not be incorporated within the top 2 ft of embankments unless shown on the plans or approved by the Engineer.

Rock Fill placed in areas where piles will be driven (referred to as "clean aggregate" in the plans) shall be any of the following gradations: CA-1, CA-3, CA-5, CA-7, CA-11, CA-16, or RR1. This material shall be placed to the minimum limits shown on the plans.

BASIS OF PAYMENT. This work will be measured and paid for at the contract unit price per ton for ROCK FILL.

STORM SEWER REMOVAL, 31" X 20"

DESCRIPTION. This work consists of removing storm sewer, elliptical size 31" x 20", as designated on the plans or as directed by the Engineer, meeting the requirements of Section 551 of the Standard Specifications.

METHOD OF MEASUREMENT. STORM SEWER REMOVAL, 31"x 20" will be measured in place and computed in linear feet.

BASIS OF PAYMENT. This work shall be paid for at the contract unit price per foot for STORM SEWER REMOVAL, 31" x 20".

TEMPORARY CHAIN LINK FENCE

This work shall consist of furnishing, installing and removing 4' chain link fence along the proposed access control line separating the IDOT right-of-way from the John Deere Generator Yard property. This work shall be completed according to Standard 664001 and Section 664 of the Standard Specifications and as noted herein. The Contractor shall submit details of the fence, mounting, hardware, and other appurtenances for approval by the Engineer.

Section 664.11 of the Standard Specifications shall not be required.

Posts and concrete foundations will be completely removed. The resulting holes will be filled with a material meeting the requirements of Section 1003.04, except the top three (3) inches. The top three (3) inches will be of a like material to the existing surface. No additional compensation will be provided for this work.

The contractor shall give the property owner 45 calendar days' notice prior to removal of fence.

METHOD OF MEASUREMENT. Temporary chain link fence will be measured for in feet, along the top of the fence from center to center of end posts.

BASIS OF PAYMENT. Following approval of each installation, 60 percent of the bid price will be eligible for payment. The remaining 40 percent will be paid following removal of each installation. This work shall be paid for at the contract unit price per foot for TEMPORARY CHAIN LINK FENCE.

TEMPORARY CHAIN LINK FENCE (PORTABLE)

DESCRIPTION. The Contractor shall erect a temporary chain link fence (portable), four feet in height, between the first two existing I-74 bridge piers north of 5th Avenue adjacent to the John Deere property. This work shall be performed in accordance with Section 664 of the Standard Specifications, except as modified herein. The temporary chain link fence shall be mounted on stands or other such devices as approved by the Engineer so that the fence is portable and easily relocated as conditions change during construction. The individual fence panels shall be securely fastened together and the stands or other mounting devices shall be weighted with sandbags as necessary to prevent movement. The Contractor shall submit a catalog cut or details of the fence, mounting stands, hardware, and other appurtenances for approval by the Engineer. The contractor shall be responsible for removing the fence after construction.

The chain link fabric shall be in accordance with Article 1006.27 of the Standard Specifications. The fence shall be supported by tee-bar stands weighted with sandbags or other means as approved by the Engineer.

MEASUREMENT AND PAYMENT. This work will be paid for at the contract unit price per foot for
TEMPORARY CHAIN LINK FENCE (PORTABLE).

TEMPORARY INFORMATION SIGNING

Description.

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

Materials.

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

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

Note 1. The Contractor may use 5/8 inch (16 mm) instead of 3/4 inch (19 mm) thick plywood.

Note 2. Type A sheeting can be used on the plywood base.

Note 3. All sign faces shall be Type A except all orange signs shall meet the requirements of Article 1106.01.

Note 4. The overlay panels shall be 0.08 inch (2 mm) thick.

GENERAL CONSTRUCTION REQUIREMENTS

Installation.

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

Signs which are placed along the roadway and/or within the construction zone shall be installed according to the requirements of Article 701.14 and Article 720.04. The signs shall be 7 ft (2.1 m) above the near edge of the pavement and shall be a minimum of 2 ft (600 mm) beyond the edge of the paved shoulder. A minimum of two (2) posts shall be used.

The attachment of temporary signs to existing sign structures or sign panels shall be approved by the Engineer. Any damage to the existing signs due to the Contractor's operations shall be repaired or signs replaced, as determined by the Engineer, at no additional cost to the Department.

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

Method Of Measurement.

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

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

Basis Of Payment.

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

TEMPORARY TRAFFIC SIGNAL INSTALLATION

This work shall be in accordance with Section 890 of the Standard Specifications except as modified herein.

The modification of the temporary traffic signals per the plan sheets per construction stage is included in this pay item. Additional modifications to the location of the signal heads to line up over their corresponding lane may be necessary during construction. These changes shall be included in this pay item. All luminaires associated with temporary signals are to be 250 watt.

BASIS OF PAYMENT. The above work will be paid for in a lump sum for TEMPORARY TRAFFIC SIGNAL INSTALLATION. No additional compensation will be allowed.

TEMPORARY TRAFFIC SIGNAL TIMING

The temporary traffic signal timing shall be in accordance with the plan sheets or as directed by the engineer. Temporary traffic signal timing may change as traffic patterns or construction requires.

BASIS OF PAYMENT. The above work will be paid for at the contract unit price each (per intersection) for TEMPORARY TRAFFIC SIGNAL TIMING. No additional compensation will be allowed.

UNINTERRUPTABLE POWER SUPPLY, STANDARD

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

Alpha Novus XFM 1100
Techpower Development M-E XL 1000

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

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

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

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

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

All Uninterruptible Power Supply shall include four batteries.

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

The UPS shall conform to the following specifications:

OPERATION

The UPS shall be on line and provide voltage regulation and power conditioning when utilizing utility power.

The UPS shall provide a minimum two (2) hours of full run-time operation and four (4) hours all-red flash operation for an "LED-only" intersection (minimum 700W/1000VA active output capacity, with 80% minimum inverter efficiency).

The UPS shall be equipped with an integrated safety switch that will interrupt inverter output power in the event of a cabinet knockdown. The safety switch may be either internal to the inverter/charger or externally mounted inside of the UPS cabinet. The safety switch shall be designed to interrupt output power in the event that the charger/inverter is tilted more than twenty degrees on any axis. The switch shall be mechanically latching to ensure that power is not automatically restored to the UPS until the charger/inverter has been "reset". The switch shall also be resettable and reusable unless it has been physically damaged.

The maximum transfer time from loss of utility power to switchover to battery backed inverter power shall be 150 milliseconds.

The UPS shall provide the user with 4-sets of normally open (NO) and normally closed (NC) single-pole double-throw (SPDT) relay contact closures, available on a panel-mounted terminal block, rated at a minimum 120V/1A, and labeled so as to identify each contact. For typical configuration, see the plan detail sheet.

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."

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."

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."

The fourth set of NO and NC contact closures shall be energized in the event of inverter/charger failure, battery failure or complete battery discharge. Contact shall be labeled or marked "UPS Fail or Status."

A surge suppression unit shall be provided for the output power if available as an option by the UPS manufacturer.

Operating temperature for both the inverter/power transfer relay and manual bypass switch shall be $-37\text{ }^{\circ}\text{C}$ to $+74\text{ }^{\circ}\text{C}$.

The Power Transfer Relay shall be rated at 240VAC/30AMPS minimum and Manual Bypass Switch shall be rated at 240VAC/20 amps, minimum.

The manual bypass switch shall be wired to provide power to the UPS when the switch is set to manual bypass.

The UPS shall use a temperature-compensated battery charging system. The charging system shall compensate over a range of $2.5 - 4.0\text{ mV}/^{\circ}\text{C}$ per cell.

The temperature sensor shall be external to the inverter/charger unit. The temperature sensor shall come with 2 meters (6'6") of wire.

Batteries shall not be recharged when battery temperature exceeds $50^{\circ}\text{C} \pm 3^{\circ}\text{C}$.

UPS shall bypass the utility line power whenever the utility line voltage is outside of the following voltage range: 100VAC to 130VAC ($\pm 2\text{VAC}$).

When utilizing battery power, the UPS output voltage shall be between 110 VAC and 125 VAC, pure sine wave output, $\pm 3\%$ THD, $60\text{Hz} \pm 3\text{Hz}$.

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

When the utility line power has been restored at above $105\text{ VAC} \pm 2\text{ VAC}$ for more than 30 seconds, the UPS shall dropout of battery backup mode and return to utility line mode.

When the utility line power has been restored at below $125\text{VAC} \pm 2\text{ VAC}$ for more than 30 seconds, the UPS shall dropout of battery backup mode and return to utility line mode.

UPS shall be equipped to prevent a malfunction feedback to the cabinet or from feeding back to the utility service.

In the event of inverter/charger failure, battery failure or complete battery discharge, the power transfer relay shall revert to the NC state, where utility line power is reconnected to the cabinet. The UPS shall always revert back to utility line power and shall be designed to revert back to utility line power in the event of a UPS fault condition.

Recharge time for the battery, from "protective low-cutoff" to 80% or more of full battery charge capacity, shall not exceed twenty (20) hours.

When the intersection is in battery operation, the UPS shall bypass all internal cabinet lights, ventilation fans, heater strips, and service receptacles.

The manual bypass switch shall be wired to provide power to the UPS when the switch is set to manual bypass.

A blue LED indicator light shall be mounted on the front of the traffic signal cabinet or on the side of the UPS cabinet facing traffic and shall turn on to indicate when the cabinet power has been disrupted and the UPS is in operation. The light shall be a minimum 1" diameter, be viewable from the driving lanes, and shall be large enough and visible enough to be seen from 200 ft. away.

All 36 volt and 48 volt systems shall include an external component that monitors battery charging to ensure that every battery in the string is fully charged. The device shall compensate for the effects of adding a new battery to an existing battery system by ensuring that the charge voltage is spread equally across all batteries. All cables, harnesses, cards, and other components that are required to provide the functionality described above shall be included in the unit bid price for the Uninterruptible Power Supply. The following products are currently approved for use within District 4: Alpha Technologies: AlphaGuard with Charge Management Technology Module and Approved Equivalent

The UPS shall be equipped with an integrated safety switch that will interrupt inverter output power in the event of a cabinet knockdown. The safety switch may be either internal to the inverter/charger or externally mounted inside of the UPS cabinet. The safety switch shall be designed to interrupt output power in the event that the charger/inverter is tilted more than twenty degrees on any axis. The switch shall be mechanically latching to ensure that power is not automatically restored to the UPS until the charger/inverter has been "reset". The switch shall also be resettable and reusable unless it has been physically damaged.

MOUNTING AND CONFIGURATION

GENERAL

Inverter/Charger Unit shall be rack or shelf-mounted.

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.

Relay contact wiring provided for each set of NO/NC relay contact closure terminals shall be #18 AWG wire.

All necessary hardware for mounting (shelf angles, rack, etc) shall be included in the bid price of the UPS. The swing-trays shall be screwed to the Type IV or Type V NEMA cabinets using continuous stainless steel or aluminum piano hinge. All bolts/fasteners and washers shall meet the following requirements:

EXTERNAL BATTERY CABINET

The external cabinet shall be a rated NEMA Type 3R Cabinet.

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.

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.

The external battery cabinet shall mount to the Type IV or Type V NEMA Cabinet with a minimum of four (4) bolts.

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.

The cabinet shall include heater mats for each battery shelf and/or battery. If the UPS charger/inverter does not have facilities to accommodate heater mat connections, thermostatically controlled heater mats shall be provided with the system. The heater mat thermostat shall be a separate thermostat (from the ventilation fan thermostat) and be adjustable from 0°F to 32°F for heater mat turn-on.

A warning sticker shall be placed on the outside of the cabinet indicating that there is an Uninterruptible Power Supply inside the cabinet.

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.

External battery cabinet fan shall be AC operated from the same line output of the Manual Bypass Switch that supplies power to the Type IV or Type V Cabinet.

The UPS with external battery cabinet shall come with all bolts, conduits and bushings, gaskets, shelves, and hardware needed for mounting. The external battery cabinet shall have a hinged door opening to the entire cabinet. The cabinet shall include a bottom constructed from the same material as the cabinet.

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.

MAINTENANCE, DISPLAYS, CONTROLS AND DIAGNOSTICS

The UPS shall include a display and /or meter to indicate current battery charge status and conditions.

The UPS shall have lightning surge protection compliant with IEEE/ANSI C.62.41.

The UPS shall be equipped with an integral system to prevent battery from destructive discharge and overcharge.

The UPS and batteries shall be easily replaced with all needed hardware and shall not require any special tools for installation.

The UPS shall be equipped with an RS-232 port.

The UPS shall include a resettable front-panel event counter display to indicate the number of times the UPS was activated and a front-panel hour meter to display the total number of hours the unit has operated on battery power.

Manufacturer shall include two (2) sets of equipment lists, operation and maintenance manuals, and board-level schematic and wiring diagrams of the UPS, and the battery data sheets. Manufacturer shall include any software needed to monitor, diagnose, and operate the UPS. The manufacturer shall include any required cables to connect to a laptop computer.

The UPS shall include a data cable for the serial connection to the RS232 port and diagnostic software if it is available as an option with the unit.

Two copies of the owner/maintenance manuals shall be provided with the UPS.

BATTERY SYSTEM

Individual batteries shall be 12V type and shall be easily replaced and commercially available off the shelf.

The batteries shall be premium gel type with a 5 year full replacement warranty.

Batteries used for UPS shall consist of a minimum of four (4) to eight (8) batteries with a cumulative minimum rated capacity of 240 amp-hours.

Batteries shall be deep cycle, completely sealed, silver alloy VRLA (Valve Regulated Lead Acid) requiring no maintenance with maximum run time.

Batteries shall be certified by the manufacturer to operate over a temperature range of – 40°C to +71°C.

The batteries shall be provided with appropriate interconnect wiring and corrosion-resistant mounting trays and/or brackets appropriate for the cabinet into which they will be installed.

Batteries shall indicate maximum recharge data and recharging cycles.

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.

Battery terminals shall be covered and insulated so as to prevent accidental shorting.

QUALITY ASSURANCE

UPS shall be manufactured in accordance with a manufacturer quality assurance (QA) program. The QA program shall include two types of quality assurance: (1) Design quality assurance and (2) Production quality assurance. The production quality assurance shall include statistically controlled routine tests to ensure minimum performance levels of UPS units built to meet this specification and a documented process of how problems are to be resolved.

QA process and test results documentation shall be kept on file for a minimum period of seven years.

Uninterruptible Power Supply designs not satisfying design qualification testing and the production quality assurance testing performance requirements described below shall not be labeled, advertised, or sold as conforming to this specification.

DESIGN QUALIFICATION TESTING

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

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.

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

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

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

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

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

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

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

Backfeed voltage to utility when in battery backup mode.

IEEE/ANSI C.62.41 compliance.

Battery charging time.

Event counter and runtime meter accuracy.

PRODUCTION QUALITY CONTROL TESTING

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.

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

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

WARRANTY

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

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

BASIS OF PAYMENT. The above work will be paid for at the contract unit price each for UNINTERRUPTABLE POWER SUPPLY, STANDARD.

WIDE AREA VIDEO DETECTION SYSTEM COMPLETE

GENERAL. This specification sets forth the minimum requirements for a system that detects vehicles on a roadway using only video images of vehicle traffic.

The system shall include software that detects vehicles in multiple lanes using only the video image. Detection zones shall be defined using only an on board video menu and a pointing device to place the zones on a video image. Up to 144 detection zones shall be available. A separate computer shall not be required to program the detection zones.

FUNCTIONAL CAPABILITIES. The video detection system shall be compatible with the controller and cabinet identified in these specifications. The VDP shall process video from up to six video sources simultaneously. The sources can be video cameras or S-VHS video tape players. The video shall be input to the VDP in RS170 format and shall be digitized and analyzed in real time. A separate microprocessor for each video input shall be used.

The VDP shall detect the presence of vehicles in up to 24 detection zones per camera. A detection zone shall be approximately the width and length of a car.

Detection zones shall be programmed via an on board menu displayed on a video monitor and a pointing device connected to the VDP. The menu shall facilitate placement of the detection zones quickly and easily. A separate computer shall not be required for programming detection zones.

The VDP shall store up to three different detection zone patterns. The VDP can switch to any one of the three different detection patterns within 1 second of user request via menu selection with the pointing device.

The VDP shall detect vehicles in real time as they travel across each detection zone.

The VDP shall accept new detection patterns when requested when the external computer uses the correct communications protocol for uploading detection patterns.

VEHICLE DETECTION. Up to 144 detection zones shall be supported and each detection zone can be sized to suit the site and the desired vehicle detection region.

Detection zones shall be capable of being Or'ed or ANDed together to indicate vehicle presence on a single detector output channel.

Placement of detection zones shall be done by using only a pointing device, and a graphical interface built into the VDP and displayed on a video monitor, to draw the detection zones on the video image from each video camera. No separate computer shall be required to program the detection zones.

Up to 3 detection zone patterns shall be saved for each camera within the VDP memory and this memory shall prevent loss during power outages.

The selection of detection zone pattern for current use shall be done through a menu. It shall be possible to activate a detection zone pattern from VDP memory and have that detection zone pattern available within 1 second of activation.

When a vehicle is detected crossing a detection zone, the corners of the detection zone will flash on the video overlay display to confirm the detection of the vehicle.

Detection shall be at least 98% accurate in good weather conditions, with slight degradation possible under adverse weather conditions (e.g. rain, snow, or fog) which reduce visibility. Detection accuracy is dependent upon camera placement, camera quality and detection zone location, and these accuracy levels do not include allowances for occlusion or poor video due to camera location or quality. See Camera section for recommended camera placement.

The VDP shall provide 32 channels of detection through either a NEMA TS1 port or a NEMA TS2 port.

The VDP shall provide dynamic zone reconfiguration (DZR). DZR enables normal operation of existing detection zones when one zone is being added or modified during the setup process. The VDP shall output a constant call on any detector channel corresponding to a zone being modified.

Detection zones shall be directional to reduce false detections from objects traveling in directions other than the desired direction of travel in the detection area.

Detection zone setup shall not require site specific information such as latitude and longitude to be entered into the system.

Detection zone setup shall not require temporal information such as date and time.

The VDP shall output a constant call for each enabled detector output channel if a loss of video signal occurs. The VDP shall output a constant call during the background of the learning period.

VDP HARDWARE. The VDP shall be housed in a durable metal enclosure suitable for shelf mounting or rack mounting in the specified traffic equipment cabinet.

The VDP shall be powered by 120 VAC 60 Hz single-phase power. Surge settings shall be set forth in NEMA specifications. Power consumptions shall not exceed 135 watts.

The VDP shall include ports for communications with a remote computer.

The VDP shall include ports for transmitting TS1 and TS2 detections to the specified traffic controller.

The front of the VDP shall include one video output. Any one of the video inputs shall be switch selectable for output on this connection via the pointing device at the VDP, or through software and a personal computer connected.

The VDP enclosure shall include provisions to be bonded to a good earth ground.

The front face of the VDP shall contain indications, such as LED displays, to enable the user to view real time detections for up to 8 detector output channels at a time.

A portable monitor shall be provided with the VDP.

CAMERA. The video cameras used for traffic detection shall be furnished by the VDP supplier and shall be qualified by the supplier to ensure proper system operation and be compatible with specified controller.

The camera shall produce a useable video image of the bodies of vehicles under all roadway lighting conditions, regardless of time of day. The minimum range of scene luminance over which the camera shall produce a useable video image shall be the minimum range from nighttime to daytime, but not less than the range of 0.1 lux to 10,000 lux.

The camera shall use a CCD sensing element and shall output monochrome video with resolution of not less than 380 lines vertical and 380 lines horizontal.

The camera shall include an electronic shutter control lens.

The camera shall include a variable focal length lens with variable focus that can be adjusted, without opening up the camera housing, to suit the site geometry. A single camera configuration shall be used for all approaches in order to minimize the setup time and spares required by the user.

The camera electronics shall include AGC to produce a satisfactorily image at night.

The camera shall be housed in a weather-tight sealed enclosure. The housing shall be field rotatable to allow proper alignment between the camera and the traveled road surface.

The camera enclosure shall be equipped with a sun shield. The sunshield shall include a provision for water diversion to prevent water from flowing in the cameras field of view.

The camera enclosure shall include a thermostatically controlled heater to assure proper operation of the lens shutter at low temperatures and prevent moisture condensation on the optical faceplate of the enclosure.

When mounted outdoors in the enclosure, the camera shall operate satisfactory in a temperature range from -34° C to +60° C and a humidity range from 0% RH to 100%RH.

The camera shall be powered by 120 VAC 60 HZ. Power consumption shall be 15 watts or less under all conditions.

Recommended camera placement shall be over the traveled way on which vehicles are to be detected. For optimum detection the camera should be centered above the traveled roadway. Camera placement and field of view (FOV) shall be unobstructed and as noted in the installation documentation provided by the supplier.

The camera enclosure shall be equipped with separate, weather-tight connections for power and video cables at the rear of the enclosure. These connections may also allow diagnostic testing and viewing of video at the camera while the camera is installed on a mast arm or pole using a lens adjustment module (LAM) supplied by the VDP supplier. Video and power shall not be connected within the same connector.

The video signal shall be fully isolated from the camera enclosure and power cabling.

INSTALLATION. The coax cable shall be a continuous unbroken run from the camera to the VDP. This cable shall be suitable for installation in conduit or overhead with appropriate span wire. The coaxial cable, BNC connector, and crimping tool shall be approved by the supplier of the video detection system, and the manufacturer's instructions must be followed to ensure proper connection.

The power cabling shall be 16 AWG three conductor cable. The cabling shall comply with the National Electric code, as well as local electric codes.

The video detection system shall be installed by supplier factory certified installers and as recommended by the supplier and documented in installation materials provided by the supplier.

Video cable and AWG cable shall not be paid for separately but shall be included in the cost of WIDE AREA VIDEO DETECTION SYSTEM COMPLETE.

WARRANTY. The supplier shall provide a limited warranty on the video detection system. See suppliers standard warranty included in the Terms and Conditions of Sale documentation.

During the warranty period, technical support shall be available from the supplier via telephone within 4 hours of the time the call is made by a user, and this support shall be available from factory-certified installers.

During the warranty period, updates to VDP software shall be available from the supplier without charge.

Before the end of the warranty period, an inspection shall be conducted to insure proper function.

MAINTENANCE AND SUPPORT. The supplier shall maintain an adequate inventory of parts to support maintenance and repair of the video detection system. These parts shall be available for delivery within thirty days of placement of an acceptable order at the supplier's then current pricing and terms of sale for said parts.

The supplier shall maintain an ongoing program of technical support for the video detection system. This technical support shall be available via telephone, or via personnel sent to the installation site upon placement of an acceptable order at the supplier's then current pricing and terms of sale for on site technical support services.

Installation or training support shall be provided by a factory authorized representative.

All product documentation shall be written in the English language.

MEASUREMENT AND PAYMENT. This work shall be measured and paid for at the contract unit price each for WIDE AREA VIDEO DETECTION SYSTEM COMPLETE.

HANDHOLE (SPECIAL)

Description. This work shall consist of furnishing and installing the special handholes at the locations shown in the plans.

Materials.

- a. Supply handholes constructed of epoxy or polyester resin mortar with woven glass fiber reinforcement and an appropriate aggregate dimensioned as indicated in the Contract Documents.
- b. Handhole materials shall not support combustion when tested in accordance with "Standard Test Method for Rate of Burning and/or Extent and Time of Burning of Plastics in a Horizontal Position" ASTM D-635.
- c. Water absorption shall not exceed two percent of the original weight of material under test conditions per "Standard Test Method for Water Absorption of Plastics" ASTM D-570.
- d. The handhole shall be functional without failure throughout a temperature range of -50 to +170 deg. F.
- e. The handhole walls shall not deflect more than 0.24 inches per foot of length of box when installed and subject to an ASTM C-857 TIER 22 load.
- f. Handholes shall meet ANSI/SCTE 77 standards and be verified by a registered third party and stamped by a registered Professional Engineer.
- g. Handhole lid strength shall be tested to 33,750 lbs (Tier 22).
- h. Handhole lids shall be labeled as indicated in the plans or as directed by the Engineer.
- i. The Engineer shall provide approval prior to use of any handholes satisfying the Contract Documents requirements for structural, physical, and chemical properties.

Test Stations.

- a. Supply Rhino part TVTI780B-EM9125-0R or approved equivalent test stations at all Handhole (Special) handholes.
- b. Test Stations shall be 78 inch triangular flexible orange plastic marker with 5 separate access terminals, isolation lever, and set screw to hold terminal concealment cap on.
- c. Place custom warning decals on all sides, the Engineer shall provide prior approval of decals.

Labeling Requirement.

- a. Place tags on each tracer wire at each termination point, and in every handhole, handhole (special), and test station.
- b. Tags shall clearly identify the owner. Tags shall also clearly identify the bearing, distance, and end feature (handhole, cabinet, pole, etc.) for each run.

Construction.

- a. Install the type and size of handholes at the locations indicated in the Contract Documents.
- b. Construct all Handhole (Special) handholes as located by the Engineer.
- c. Set handholes flush with the surface when constructing in a sidewalk or driveway. Set handholes approximately six (6) to twelve (12) inches below the finished surface of the surrounding ground when constructing in an earth embankment or non-paved surface.
- d. Install course aggregate bedding to a depth of one (1) foot below the handhole.
- e. Conduit shall enter the handhole from the bottom and extend conduit ends between four (4) and six (6) inches above the aggregate bedding.
- f. Side penetrations of the handholes are not permitted.
- g. Terminate each tracer wire run in test stations at Handhole (Special) locations.
- h. Label all ground wires and tracer wires in test stations.
- i. Install ground rods at all Handhole (Special) handholes as indicated in the Contract Documents.
- j. Plug all open conduit ends within the handhole in a manner acceptable to the Engineer.
- k. Handholes shall be effectively sealed to prevent the entry of rodents.

Basis of Payment. Measurement and payment for handhole shall be paid for at the contract unit price per each for the pay item HANDHOLE (SPECIAL).

Payment is full compensation for:

- a. The furnishing and installation of all handholes,
- b. Including all surface excavations, repair or restoration of any nearby areas, concrete, proper water/moisture drainage materials, all necessary electric grounding materials and installation,
- c. Furnishing and installing all test stations at Handhole (Special) locations, and
- d. Furnishing all materials, labor, equipment, and other incidental items necessary to meet the requirements of the Contract Documents.

REMOVE EXISTING ITS EQUIPMENT

Description. This work shall consist of removing existing ITS equipment and associated cabling at the locations indicated in the plans.

Items that may be removed include but are not limited to cables, wires, conduits, handholes, poles, cabinets, and relevant ITS equipment. Items designated to be salvaged shall be removed in such a manner as to avoid damage to said items. The Contractor shall stockpile and secure or deliver to the local DOT Maintenance Shop such salvaged items as directed by the Engineer.

The DOT plans to utilize the Statewide ITS Maintenance contract to remove all LED signs, wireless communications equipment, cameras, sensors, and relevant ITS cabinet equipment. The Contractor shall notify Scott Kullerstrand at 815-284-5468 or Scott.Kullerstrand@illinois.gov prior to construction to facilitate the removal of those items.

The Contractor shall coordinate the removal of the ITS devices with the DOT Statewide ITS Maintenance contract. The Contractor shall be required to salvage the automated gates, LED sign poles, pole mounted cabinets, and camera poles, and cabling to the DOT Maintenance Shop as directed by the Engineer.

Basis of Payment. This work will be paid for at the contract unit price per each for REMOVE EXISTING ITS EQUIPMENT.

EQUIPMENT CABINET

Description. This work shall be completed according to Section 857 of the Standard Specifications and as noted herein. This work shall consist of furnishing and installing Pole Mounted Cabinets and Pad Mounted Cabinets, in accordance with the plans and the manufacturer's recommendations. Pole Mounted Cabinets shall include confirming the required mounting and pole brackets per AASHTO loading at the pole locations. Pad Mounted Cabinets shall include confirming the required foundations. Cabinets shall include all necessary electric grounding materials, and installation. The work includes but is not limited to required submittals, unloading, storing, and all other miscellaneous work required for complete installation. All work shall conform to the Standard Specifications and Special Provisions.

General. Do not penetrate the top of any cabinets without prior authorization by the Engineer. All connections shall be watertight. Orient cabinets as directed by the Engineer. Contact the Engineer a minimum of one (1) week in advance of installation to arrange a field review prior to placing the cabinets or installing fiber into the cabinets.

Materials.

- a. Supply device cabinets, clean-cut in design and appearance
- b. Cabinets shall be dimensioned as identified in the Contract Documents and have a typical internal layout as identified in the detailed drawings.
- c. Cabinets shall be corrosion resistant, UL-50 approved, NEMA Type 3R compliant, constructed of welded sheet aluminum with a minimum nominal thickness of one-eighth (0.125) inch.
- d. Cabinets shall be complete with all required internal components, fully wired back panel, side mount DIN rails, terminal strips, and stainless steel hardware.
- e. Cabinets shall include one (1) mounting shelf.
- f. Cabinets shall meet the requirements of ASTM B-209 for 5052 H-32 aluminum sheet. The aluminum shall be smooth and the exterior shall be left in its unpainted natural color.
- g. The cabinet structure shall be effectively sealed to prevent the entry of rain, dust, and dirt.
- h. All exterior seams for cabinet and doors shall be continuously welded. All edges shall be filed to a radius of 1/32 inch minimum.
- i. All pole mount cabinets shall be equipped with top and bottom mounting flanges and include pole mounting reinforcement/stiffener plates as part of the cabinet design. Mounting brackets shall be fabricated from .250" thick aluminum, 5052-H32, mill finish.

Cabinet Doors.

- a. The cabinet door shall be sturdy, torsionally rigid, and attached by a continuous heavy duty gauge aluminum butt hinge utilizing a stainless steel hinge. The door shall substantially cover the full area of the front of the cabinet and have a stainless steel, pad-lockable handle.
- b. The cabinet shall be hinged on the right side (as viewed from the front).
- c. The cabinet door shall be provided with a door stop catch mechanism to hold the door open at three positions – 90 degrees, 120 degrees and 180 degrees, with plus or minus 10 degrees accuracy. Both the door and door stop mechanism shall be of sufficient strength to withstand a simulated wind load of five pounds per square foot of door area applied to both inside and outside surfaces.
- d. A closed-cell neoprene gasket shall be provided to act as a permanent and weather resistant seal at the cabinet door facing. The gasket material shall be of a non-absorbent material and shall maintain its resiliency after long term exposure to the outdoor environment. The gasket shall have a minimum thickness of 1/3 inch. The gasket shall be located in a channel provided for this purpose either on the cabinet or on the door. An “L” bracket is acceptable in lieu of this channel if the gasket is fitted snugly against the bracket to insure a uniformly dust and weather resistant seal around the entire door facing.
- e. Cabinet light (LED) with light bulb provided operated by door switch.
- f. Each cabinet door shall be provided with a high quality, heavy duty tumbler-type lock. Two #2 keys for each tumbler lock shall be provided for each cabinet. All locks for the project shall be keyed identically to key pattern 9R46142 or as otherwise identified by the Engineer. Keys shall be given to the Engineer. Do not attach keys to the exterior of the cabinet at any time during storage or installation.
- g. A heavy-duty clear plastic envelope shall be provided, securely attached to the inside wall of the cabinet or cabinet door, for stowing cabinet wiring diagrams and equipment manuals. Minimum dimensions shall be nine (9) inches wide by twelve (12) inches deep.

Power Panels, Connecting Cables and Wiring

- a. Provide cabinets equipped and configured with internal power components as shown in the Contract Documents.
- b. One (1) 3 pole service entrance terminal block with tin plated aluminum connectors, nickel plated steel screws, and a current rating up to 70 Amps.
- c. One (1) 20 Amp single pole breaker (Main).
- d. One (1) 15 Amp single pole breaker (Equipment)

- e. One (1) 15 Amp single pole breaker (Auxiliary)
- f. A 120/240 VAC surge protector with surge current at minimum of 100KA, nanosecond response time, and an operating temperature of -40°C to +85°C.
- g. An auxiliary four (4) terminal electrical block rated for a maximum 250 VAC RMS maximum voltage and 20 Amps current
- h. A 15 Amp GFCI receptacle in Ivory color
- i. An 8 outlet Power Distribution Unit with built in surge suppressor (1800 Joules of surge/lightning protection) that includes a resettable circuit breaker and minimum cord length of 6 feet.
- j. One (1) 7 TAP Ground Bar
- k. One (1) 7 TAP Neutral Bar
- l. All miscellaneous wiring, harnesses connectors and attachment hardware
- m. All conductors used on the cabinet wiring shall be No. 14 AWG or larger with a minimum of 19 strands. Conductors shall conform to MIL SPEC MIL-W-168780, Type B or D. The insulation shall have a minimum thickness of 10 MILS. All wiring containing line voltage shall be a minimum size of No. 12 AWG.

Ventilation.

- a. Furnish cabinets containing a suitably designed rain tight vent or vents that:
 - Are equipped with suitable screens or dust filters, and
 - Allow the release of excessive heat and/or any explosive gases which may enter the cabinet.
- b. Ensure when filters are utilized, positive retainment is provided on all sides to prevent warpage and entry of foreign matter around the edges.
- c. The filters shall be dry type, easily removed and replaced, and standard dimensions commercially available.

- d. Vent Fan need to meet the following requirements:
- A thermostatically controlled vent fan is furnished to provide air circulation within the cabinet.
 - The thermostat controlling the fan is manually adjustable to turn on between 90°F and 150°F (32°C and 66°C) with a differential of not more than 10°F (6°C) between automatic turn on and turn off.
 - The fan is located with respect to the vent holes to direct the bulk of the air flow over the internal components within the cabinet.
 - Ventilation fan shall be fused separately and wired after the main AC+ circuit breaker.

Grounding.

- a. The cabinet internal ground shall consist of one or more ground bus-bars permanently affixed to the cabinet and connected to the grounding electrode.
- b. Use bare stranded No. 6 AWG copper wire between bus-bars and between the bus-bar and grounding electrode.
- c. Each copper ground bus-bar shall have a minimum of 20 connector points. Each connector point shall be capable of securing at least one (1) #6 AWG conductor.
- d. AC neutral and equipment ground wiring shall return to bus-bars.

Pedestal.

- a. Supply cabinet pedestals, clean-cut in design and appearance
- b. Cabinet pedestals shall be dimensioned as identified in the Contract Documents.
- c. Cabinet pedestals shall be corrosion resistant, UL-50 approved, NEMA Type 3R compliant, constructed of welded sheet aluminum with a minimum nominal thickness of one-eighth (0.125) inch.
- d. Cabinet pedestals shall be complete with all stainless steel hardware.
- e. Cabinet pedestals shall meet the requirements of ASTM B-209 for 5052 H-32 aluminum sheet. The aluminum shall be smooth and the exterior shall be left in its unpainted natural color.
- f. The cabinet pedestal shall be effectively sealed to prevent the entry of rain, dust, and dirt.
- g. All exterior seams for cabinet pedestals shall be continuously welded. All edges shall be filed to a radius of 1/32 inch minimum.

Cabinet Foundations.

- a. All cabinet concrete foundations shall meet the requirements of Section 503 of the Standard Specifications and current supplements. Use Class SI concrete for cabinet footings and all other non-paving concrete construction.

Construction.

- a. Install cabinets in accordance with the Contract Documents and the manufacturer's recommendations.
- b. Do not penetrate the top of any cabinets without prior authorization by the Engineer.
- c. Do not allow screws used for mounting shelves or other mounting purposes to protrude beyond the outside wall of the cabinet.
- d. All connections shall be watertight.
- e. Contact the Engineer a minimum of one (1) week in advance to arrange a field review prior to placing the cabinets.

Mounting.

- a. Orient cabinets as shown in the Contract Documents unless otherwise directed by the Engineer.
- b. Ensure sufficient clamps, nuts, hardware, etc., as required for the specified mounting type, are furnished with each cabinet.
- c. Seal all conduit openings in the controller cabinet with a sealing compound that meets the following requirements:
 - Readily workable, soft plastic
 - Workable at temperatures as low as 30°F (-1°C), and
 - Does not melt or run at temperatures as high as 300°F (150°C).
- d. Do not install the controller cabinet on preplaced caulking material on the concrete base or place caulking material around the base of the cabinet after installation.

Cabinet Foundations.

- a. Install cabinet footings in accordance with the Contract Documents and the manufacturer's recommendations.
- b. All cabinet footings shall include a full depth 4 feet concrete maintenance pad area that is cast and reinforced as a single unit with the cabinet footing.
- c. Prepare and submit for Engineer approval, design plans and details for all cabinet footings at no additional cost to the Engineer. Such plans and details shall be sealed by a professional engineer licensed in the State of Illinois.
- d. Contact the Engineer a minimum of one (1) week in advance to arrange a field review prior to placing the cabinet footing.
- e. Notify the Engineer immediately if an obstruction conflicts with a footing. The Engineer is responsible for relocating or determining another effective means of supporting the structure to eliminate the conflict. Payment shall not be made for re-work or extra work as the result of an unauthorized relocation of a footing.
- f. Construct all footings as located by the Engineer. Securely rest all footings on firm undisturbed ground and set level and to the proper elevation.
- g. Form the upper portion of all concrete footings and for all instances where the excavation is irregular in shape to provide the proper dimensions. Forming materials shall be level and braced to avoid displacement, warping, or deflection from the specified pattern during construction and curing.
- h. Install and secure anchor bolts, conduits, and reinforcement before concrete placement. Use a rigid template to position anchor bolts in accordance with the appropriate pattern. The center of the template and the center of the concrete base shall coincide unless otherwise directed by the Engineer.
- i. Install a sufficient number of conduits sized as indicated in the Contract Documents. All conduits shall be located as indicated in the Contract Documents.
- j. Place all concrete within ninety (90) minutes of batching and consolidate using a high-frequency vibrator during construction.
- k. Modification of a footing after construction is not allowed.
- l. Cover all anchor bolts to protect them against damage and to protect the public from possible injury until erecting poles.
- m. Allow a minimum of seven (7) calendar days curing of concrete footings before setting cabinets.

- n. Remove and reconstruct, at no additional cost to the Engineer, all footings improperly constructed or with improperly installed anchor bolts, conduit, or any other footing components as determined by the Engineer.

Basis of Payment. Measurement and payment for this work shall be paid for at the contract unit price per each for EQUIPMENT CABINET.

45 FT STEEL ITS POLE, BLACK PAINTED

Description. This work shall be completed according to Section 877 of the Standard Specifications and as noted herein. This work shall consist of all effort, apparatus, and materials to install the device poles on which ITS equipment will be mounted for the planned ITS system.

The ITS poles will be supplied through a separate contract. All ITS poles shall be a 45 feet tall, conventional type, tapered steel pole. All poles shall be either round, 12-sided, or 16-sided.

Materials. The Contractor shall supply all necessary materials required to install the steel, black painted pole furnished under separate contract. The Contractor shall contact Tony Taylor, 515-239-1902, TONY.TAYLOR@DOT.IOWA.GOV, to procure poles for installation. The Contractor shall notify Iowa DOT of their procurement of this contract upon execution.

Construction.

The Contractor shall erect poles and securely bolt to the foundation base plate such that the pole is vertically plumb.

The Contractor shall use leveling nuts on each anchor bolt installed below the pole flange. Adjust the pole's vertical position by adjusting both the upper and lower nuts. Nuts shall be tightened per the manufacturer's recommendation.

For bridge-mounted poles, the pole shall be set plumb on the foundation and fastened to the anchor bolts with self-locking nuts or double nuts (2 per anchor bolt) and washers. Flat washers shall be installed below and above the isolation washer. A 0.5" minimum isolation pad and a 0.5" minimum leveling plate shall be installed between the light pole base plate and the bottom nut (leveling nut) with a steel washer between the leveling nut and the leveling plate. The nuts shall be tightened in compliance with torque specifications recommended by the manufacturer of the isolation pad. See plans for attachment detail.

The space between the finished top of the foundation and the bottom of the base plate of the pole shall be enclosed with an expanded metal screen made of stainless steel. The mesh of the screen shall be 6.00 mm (0.250 inch) or less as approved by the Engineer. The screen shall be held in place with bands made of stainless steel. At least two bands shall be installed around the pole base plate. The bands shall be held tight by a ratchet-type device. Grouting shall not be used to enclose the above described space.

Bridge Mounted Pole Accessories.

When mounted on bridges, a vibration isolation mounting pad, isolation washers, and a galvanized steel leveling plate shall be included with the pole. The pad and leveling plate shall have the same shape as the bottom of the pole base with appropriate bolt holes and opening for the center of the pole. Included with the pad shall be four washers. The pad and washers shall be made from a rugged elastomeric material with a minimum thickness of 0.5 in (13 mm) or as recommended by the manufacturer. The ultimate breakdown of the pad and washers under compressive load shall be not less than 10,000 psi (69,000 kPa) for the specified thickness without extrusion or detrimental reduction in thickness. The material shall also have a Shore-A Durometer reading of not less than 85. The isolation washers shall be installed with galvanized steel washers of the same diameter and adequate thickness top and bottom to prevent overstressing of the isolation washer. The leveling plate shall be according to AASHTO M 270 Grade 50 or 50S (M 270M Grade 345 or 345S) and shall be galvanized according to AASHTO M 111.

Method of Measurement & Basis of Payment. This work will be paid for at the contract unit price per each for 45FT STEEL ITS POLE, BLACK PAINTED.

POWER INSTALLED FOUNDATION

Description. This work shall consist of installing Power Installed Foundations at the locations shown in the plans.

Materials. The Contractor shall supply all necessary materials required to install the power installed foundations furnished under separate contract. Contractor shall contact Tony Taylor, 515-239-1902, TONY.TAYLOR@DOT.IOWA.GOV, to procure foundations for installation. The Contractor shall notify Iowa DOT of their procurement of this contract upon execution.

General.

- a. Install the power installed foundations in accordance with the Contract Documents and the manufacturer's recommendations.
- b. Contact the Engineer a minimum of one (1) week in advance to arrange a field review prior to placing the power installed foundation.
- c. Notify the Engineer immediately if an obstruction conflicts with a proposed power installed foundation location. The Engineer is responsible for relocating or determining another effective means of supporting the structure to eliminate the conflict. Payment shall not be made for re-work or extra work as the result of an unauthorized relocation of a power installed foundation.

Installation Details.

- a. Construct all power installed foundations as located by the Engineer and set level and to the proper elevation.
- b. Hand dig with shovel after power installed foundation is in place in order to install conduits into the provided conduit entrances.
- c. Install a sufficient number of conduits sized as indicated in the Contract Documents. All conduits shall be located as indicated in the Contract Documents.
- d. Modification of a footing after construction is not allowed.

Improper Construction. Remove and reconstruct, at no additional cost to the Engineer, all power installed foundations improperly constructed or with improperly installed anchor bolts, conduit, or any other foundations components as determined by the Engineer.

Basis of Payment. Measurement and payment for power installed foundations shall be paid for at the contract unit price per each for POWER INSTALLED FOUNDATION.

MVDS CABLE, INSTALL ONLY

Description. This work shall consist of installing Microwave Vehicle Detection System (MVDS) cable at the locations shown in the plans.

Materials. The Contractor shall supply all necessary materials required to install the MVDS cable furnished under separate contract. The Contractor shall contact Tony Taylor, 515-239-1902, TONY.TAYLOR@DOT.IOWA.GOV, to procure cable for installation. The Contractor shall notify Iowa DOT of their procurement of this contract upon execution.

Construction. Installations shall meet the construction requirements listed in Section 817.03 of the Standard Specifications for Road and Bridge Construction.

Contractor shall provide equipment to demonstrate to the Engineer that at no time will a pulling tension of 0.008 pound per circular mil (70 N/mm^2) of the cable be exceeded.

The use of graphite or petroleum lubricants will not be permitted for cable installation.

MVDS cable shall be installed in continuous runs and splicing shall not be permitted.

To aid future MVDS device installation (by others), additional slack shall be installed at the locations shown in the plans.

Basis of Payment. This work will be paid for at the contract unit price per linear foot for installing MVDS COMM CABLE, INSTALL ONLY and MVDS POWER CABLE, INSTALL ONLY.

ROADWAY LUMINAIRE, SPECIAL (INSTALL ONLY)

Description. This work shall consist of receiving, assembling, and installing a Roadway Lighting Luminaire and lamp as shown on the plans. The work includes but is not limited to shop drawing submittals, unloading, storing, and all other miscellaneous work required for a complete installation. Included in this item is coordination with the Luminaire Supply Contractor for delivery and installation requirements. All work shall conform to Section 821 of the Standard Specifications as applicable and as specified herein.

General.

RELATED DOCUMENTS

Drawings and general provisions of the Contract.

DEFINITIONS

Luminaire Supply Contractor: Supplier of the Street Lighting Luminaire.

Contractor: The general contractor(s) awarded a highway construction contract, includes responsibility for street lighting luminaire installation.

Engineer: IDOT's designated representative.

Street Lighting Luminaire: LED luminaire to be installed on a light pole arm. Includes all electrical components required for a complete, fully functional luminaire.

WORK UNDER SEPARATE CONTRACT

Street Lighting luminaires will be furnished and delivered by others.

Delivery, Storage, and Handling. The Contractor shall supply the Engineer with a required delivery schedule for the Street Lighting luminaires within 6 weeks of contract award. The Contractor shall supply the delivery schedule to the Supply Contractor upon approval. It shall be the responsibility of the Contractor to coordinate delivery with the Supply Contractor.

- a) Delivery should be coordinated as to minimize handling and on-site storage requirements. If required, storage at the project site shall be provided by the Contractor at no additional cost.
- b) A minimum of 20 luminaires per delivery is required.
- c) The luminaires shall be stored in such a manner as to prevent damage.
- d) Obtain and follow the Manufacturer's recommendations for the handling and installation of the luminaires.

Inspection and Acceptance. The Contractor shall examine and document the condition of the Luminaires, in the presence of the Engineer, before accepting delivery. The Contractor shall be held responsible for fully functional luminaires as well as any repairs or replacements required due to any change in condition caused by site handling, storage, and installation. All repairs are subject to approval by the Engineer. The Contractor shall:

- a) Remove and replace damaged Luminaires if repairs do not comply with requirements.
- b) Clean exposed surfaces of the Luminaires after installation to remove dirt, stains, and other markings.
- c) Do not use cleaning materials or processes that could change the appearance of exposed finishes.

Installation

- a) Install all components and accessories furnished with each luminaire including all electrical components and wiring.
- b) Each luminaire shall be mounted as indicated and as required for permanent lighting installation.

Basis of Payment. This work will be paid for at the contract unit price per each for ROADWAY LUMINAIRE, SPECIAL (INSTALL ONLY), including all material, hardware, storage, and labor required for complete installation of the Street Lighting Luminaires, as shown on the contract plans and as specified herein.

ROADWAY LIGHTING MODIFICATIONS

Description. This work shall consist of modifying an existing light pole to reduce the height of the pole and all appurtenances required for a complete operating unit. The work includes but is not limited to required modifications, removal, storage, reinstallation, and all other miscellaneous work required for complete installation. All work shall conform to the Standard Specifications and as specified herein.

Storage and Handling. Modifications should be coordinated as to minimize handling and on-site storage requirements. If required, storage at the project site shall be provided by the Contractor. The light poles shall be stored in such a manner as to prevent staining, discoloration, or other damage. The Contractor shall examine and document the condition of the Light Pole, in the presence of the Engineer, before modification or removal of the existing light pole. The Contractor shall be held responsible for a fully functional light pole as well as for any repairs or replacements required due to any change in condition caused by site handling, storage and installation.

Modification and Installation. The square tubular light pole shall be modified to reduce the height of the pole and associated mounting height of the luminaire. The height of the pole shall be reduced to match the adjacent shorter light pole that is being relocated. It is estimated that the reduction in pole height should be from 30 feet down to 20 feet. Exposed metal surfaces from the modifications shall be painted to match the existing pole finish. After modifications to reduce the pole height, the luminaire and bracket arm shall be reinstalled on the light pole. The lighting unit shall be reassembled and installed upon its foundation in accordance with Section 830 of the Standard Specifications.

Prior to reinstallation, the modified pole and all its components shall be inspected by the contractor, in the presence of the Engineer. Any parts found to be defective shall be repaired or replaced.

The pole shall be set plumb on the foundation and fastened to the anchor bolts with double nuts and washers. Flat washers shall be installed below and above the base plate of the pole. Lock washers shall be installed on top of the top flat washer. The nuts shall be tightened in compliance with torque specifications recommended by the manufacturer of the lighting unit. The base cover shall be reinstalled to close the space between the base plate and the foundation. Grouting shall not be used to enclose the above described space.

Method of Measurement. The roadway lighting modifications will be measured on a lump sum basis, complete. All related work, apparatus, wiring and testing shall be included.

Basis of Payment. This work will be paid for at the contract lump sum price for ROADWAY LIGHTING MODIFICATIONS, which shall be payment in full for modifying the light pole as described in these specifications.

ROADWAY LIGHT POLE, INSTALL ONLY

Description. This work shall consist of receiving and installing a light pole complete with arm(s) and all appurtenances required for a complete operating unit and installing it on a concrete foundation. The work includes but is not limited to shop drawing submittals, unloading, storing, and all other miscellaneous work required for a complete installation. Included in this item is coordination with the light pole Supply Contractor for delivery and installation requirements. All work shall conform to Section 830 of the Standard Specifications as applicable and as specified herein.

General

RELATED DOCUMENTS

Drawings and general provisions of the Contract.

DEFINITIONS

Supply Contractor: Supplier of the Light Poles.

Contractor: The general contractor(s) awarded a highway construction contract, includes responsibility for Light Pole installation.

Engineer: IDOT's designated representative.

Light Pole: Light Pole complete with arm(s), when specified, and all hardware and accessories required for a complete operating unit.

WORK UNDER SEPARATE CONTRACT

Light Poles will be furnished and delivered by others.

Delivery, Storage, and Handling. The Contractor shall supply the Engineer with a required delivery schedule for the light poles within 6 weeks of contract award. The contractor shall supply the delivery schedule to the Supply Contractor upon approval. It shall be the responsibility of the contractor to coordinate delivery with the Supply Contractor.

- a) Delivery should be coordinated as to minimize handling and on-site storage requirements. If required, storage at the project site shall be provided by the Contractor.
- b) A minimum of 10 Light Poles per delivery is required.
- c) The light poles shall be stored in such a manner as to prevent staining, discoloration, or other damage.
- d) Obtain and follow the Manufacturer's recommendations for the handling and installation of the Light Poles.

- e) **Inspection and Acceptance:** The Contractor shall examine and document the condition of the Light Poles, in the presence of the Engineer, before accepting delivery. The Contractor shall be held responsible for fully functional light poles as well as for any repairs or replacements required due to any change in condition caused by site handling, storage and installation.

Installation. Each light pole shall be assembled and installed upon its foundation in accordance with Section 830 of the Standard Specifications and the manufacturer's recommendations.

Prior to installation, the pole and all its components shall be inspected by the contractor, with the help of the manufacturer's representative in the presence of the Engineer. Any parts found to be defective shall be repaired or replaced.

Light Pole Identification

Each light pole shall be labeled by the Contractor as indicated in the plans and in accordance with the provisions of Section 830 of the Standard Specifications to correspond to actual circuiting, and as designated by the Engineer. The materials for pole identification shall be furnished by the Contractor in accordance with the provisions of Article 1069.06 of the Standard Specifications.

Method of Measurement. The Light Pole will be measured by the unit "Each", complete. All related apparatus, wiring and testing shall be included.

Basis of Payment. This work shall be paid for at the contract unit price each for ROADWAY LIGHT POLE, INSTALL ONLY, of the mounting height and arm length indicated.

UNDERPASS LUMINAIRE, (INSTALL ONLY)

Description

This work shall consist of receiving, assembling, and installing an Underpass Luminaire as shown on the plans. The work includes but is not limited to luminaire hanger assembly, shop drawing submittals, unloading, storing, and all other miscellaneous work required for a complete installation. Included in this item is coordination with the Luminaire Supply Contractor for delivery and installation requirements. All work shall conform to Section 821 of the Standard Specifications as applicable and as specified herein.

General

RELATED DOCUMENTS

Drawings and general provisions of the Contract.

DEFINITIONS

Luminaire Supply Contractor: Supplier of the Underpass Luminaires.

Contractor: The general contractor(s) awarded a highway construction contract, includes responsibility for Underpass Luminaire installation.

Engineer: IDOT's designated representative.

Underpass Luminaire: LED underpass luminaire to be installed as shown on the contract plans. Includes all electrical components required for a complete, fully functional luminaire.

WORK UNDER SEPARATE CONTRACT

Underpass Luminaires will be furnished and delivered by others.

Delivery, Storage, and Handling

The Contractor shall supply the Engineer with a delivery schedule for the Underpass Luminaires within 6 weeks of contract award. The Contractor shall supply the delivery schedule to the Supply Contractor upon approval. It shall be the responsibility of the Contractor to coordinate delivery with the Supply Contractor.

- a) Delivery should be coordinated as to minimize handling and on-site storage requirements. If required, storage at the project site shall be provided by the Contractor at no additional cost.
- b) A minimum of 10 Luminaires per delivery is required.
- c) The Luminaires shall be stored in such a manner as to prevent damage.
- d) Obtain and follow the Manufacturer's recommendations for the handling installation of the Luminaires.
- e) Inspection and Acceptance: The Contractor shall examine and document the condition of the Luminaires, in the presence of the Engineer, before accepting delivery. The Contractor shall be held responsible for fully functional luminaire as well as any repairs or replacements required due to any change in condition caused by site handling, storage and installation.

Installation

Install all components and accessories furnished with each luminaire including all electrical components and wiring.

- a) Each luminaire shall be mounted as indicated and as required for permanent lighting installation.

Repair and Cleaning

All repairs are subject to approval by the Engineer. Remove and replace damaged Luminaires if repairs do not comply with requirements.

- a) Clean exposed surfaces of the Luminaires after installation to remove dirt, stains, and other markings.
- b) Do not use cleaning materials or processes that could change the appearance of exposed finishes.

Basis of Payment

This work will be paid for at the contract unit price per each for UNDERPASS LUMINAIRE, (INSTALL ONLY).

AESTHETIC LUMINAIRE, (INSTALL ONLY)

Description. This work shall consist of receiving, assembling, and installing an Aesthetic Lighting Luminaire as shown on the plans. The work includes but is not limited to required submittals, unloading, storing, and all other miscellaneous work required for a complete installation. Included in this item is coordination with the Aesthetic Luminaire Supply Contractor for delivery and installation requirements. All work shall conform to Section 821 of the Standard Specifications as applicable and as specified herein.

General.

RELATED DOCUMENTS

Drawings and general provisions of the Contract.

DEFINITIONS

Aesthetic Luminaire Supply Contractor: Supplier of the Aesthetic Luminaire.

Contractor: The general contractor(s) awarded a highway construction contract, includes responsibility for aesthetic luminaire installation.

Engineer: IDOT's designated representative.

Aesthetic Luminaire: LED luminaire to be installed as detailed in the plans. Includes all electrical components required for complete, fully functional luminaire.

WORK UNDER SEPARATE CONTRACT

Aesthetic Luminaires will be furnished and delivered by others.

Delivery, Storage, and Handling. The Contractor shall supply the Engineer with a required delivery schedule for the aesthetic luminaires within 6 weeks of contract award. The Contractor shall supply the delivery schedule to the Supply Contractor upon approval. It shall be the responsibility of the Contractor to coordinate delivery with the Supply Contractor.

- a) Delivery should be coordinated as to minimize handling and on-site storage requirements. If required, storage at the project site shall be provided by the Contractor at no additional cost to the contract.
- b) A minimum of 20 Luminaires per delivery is required.
- c) The Luminaires shall be stored in such a manner as to prevent damage.
- d) Obtain and follow the Manufacturer's recommendations for the handling and installation of the Luminaires.

Inspection and Acceptance. The Contractor shall examine and document the condition of the Luminaires, in the presence of the Engineer, before accepting delivery. The Contractor shall be held responsible for fully functional luminaires as well as any repairs or replacements required due to any change in condition caused by site handling, storage, and installation. All repairs are subject to approval by the Engineer. The Contractor shall:

- a) Remove and replace damaged Luminaires if repairs do not comply with requirements.
- b) Clean exposed surfaces of the Luminaires after installation to remove dirt, stains, and other markings.
- c) Do not use cleaning materials or processes that could change the appearance of exposed finishes.

Installation

- a) Install all components and accessories furnished with each luminaire including all electrical components and wiring.
- b) Each luminaire shall be mounted as indicated and as required for permanent lighting installation.
- c) Unless otherwise indicated, each luminaire shall be aimed as shown in the plans.
- d) The installation shall be complete with fusing and connection to the applicable lighting feeder circuits.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per each for AESTHETIC LUMINAIRE, (INSTALL ONLY).

LIGHT POLE FOUNDATION, 30" DIAMETER SPECIAL

DESCRIPTION: This work shall be performed in accordance with the Section 836 of the Standard Specifications and as detailed in the plans for a special foundation integral to a single face barrier wall. The rebar, anchor rods, grounding electrode, ground wire, and conduit within the foundation shall also be included in this work.

The foundation shall be according to the lighting structural plan details. The barrier base shall match the adjacent barrier base and lighting conduit shall be as shown on lighting plans.

METHOD OF MEASUREMENT: This work will be measured for payment as defined in Article 836.04 of the Standard Specifications.

BASIS OF PAYMENT: This work will be paid for at the contract unit price per foot for LIGHT POLE FOUNDATION, 30" DIAMETER, SPECIAL.

LIGHT POLE FOUNDATION, SPECIAL

DESCRIPTION: This work shall consist of furnishing all labor and materials required to construct a foundation for a light pole, including the construction of the portion of median barrier and concrete barrier base that sits above the grade beam. All work and materials shall be per Section 836 of the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction (SSRBC), adopted January 1, 2012 and the following provisions.

Add the following paragraphs to Article 836.02:

- (f) Reinforcement bars shall comply with Section 508.
- (g) Prefomed Expansion Joint Fillers shall comply with Section 1051.

Replace the first paragraph of Article 836.03(a) with the following paragraphs:

- (a) Drilled Shaft Foundations. Drilled shaft foundations shall be to the depth shown on the contract plans or as directed by the Engineer. Each foundation shall be constructed in accordance with the details shown in the contract plans unless directed otherwise by the Engineer. Drilled shaft foundations shall be constructed according to Section 516 and the following.

Add the following paragraphs to Article 836.03:

(c) Median Barrier Wall Foundations. The top portion of the foundation shall be integrated with a portion of the median barrier wall, as shown on the contract plans and as directed by the Engineer. The portion of the foundation above the drilled shafts shall be constructed according to the applicable portions of Section 503, except protective coat, when required, should be applied to the concrete barrier according to Article 420.18. Any required sheeting, cribbing or other associated work required to complete the foundation work shall be included. Reinforcement bars shall be installed per the applicable portion of Section 508. The length of the wall included shall be as shown on the contract plans.

The drilled shaft portion of the foundation shall be constructed in accordance of the requirements of Article 836.03(a).

A ground rod and connecting wire shall be installed in conjunction with each foundation as shown on the contract plans.

If detailed in the plans expansion couplings shall be used at the expansion joints at either end of the foundation. If no specific details are included in the contract plans, a PVC coupling shall be installed at each preformed expansion joint as shown on the contract plans.

Finishing. The surface of the concrete barrier shall be finished according to Article 503.15, except all holes and honeycombs shall be patched immediately.

METHOD OF MEASUREMENT. Light Pole Foundation, Special will be measured per each complete and in place.

Relocation of a foundation due to an obstruction and any shaft excavation to that point will not be measured for payment. Excavation in rock will be measured for payment according to Article 502.12.

BASIS OF PAYMENT. This work will be paid at the contract unit price per each for LIGHT POLE FOUNDATION, SPECIAL. Excavation in rock will be paid for according to Article 502.13.

TEMPORARY LIGHTING SYSTEM

This work shall consist of providing temporary lighting circuit feeds, wood poles, mast arms, luminaires, and maintaining electrical continuity of lighting circuits as needed within the project limits to maintain the illumination of I-74, ramps and local roads as shown on the plans. The Contractor shall provide all labor, material, and equipment necessary to furnish, install, maintain, and remove the temporary lighting system. This work shall also include the relocation of temporary lighting facilities as necessary to accommodate the various stages of construction and removal of all temporary lighting facilities at the completion of the project. All work shall be performed in accordance with the plans, Standard Specifications, and as directed herein.

The Contractor shall submit for the Engineer's approval, a sketch of the temporary lighting feeds showing the proposed locations of all temporary wood poles/aerial cable or underground duct/cable for each stage of construction associated with the project. The Contractor's temporary lighting feeds shall meet the requirements of Department's BDE Design Manual, Chapter 56 and no wood poles/duct/cable shall be installed until the Contractor's revised lighting sketch is approved by the Engineer.

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

The Contractor shall be responsible to maintain the temporary lighting system throughout the project and no additional compensation will be allowed for this work, no matter how many times temporary and/or permanent lighting facilities are relocated.

Dragging cable on the ground will not be permitted. Splices shall be rated for and designed to connect aluminum conductors to copper (or aluminum as applicable) conductors of the size range required. The cable shall be installed in one continuous length with no splices where possible. No underground splicing of cable will be permitted. The cable shall be carefully installed in trench or conduit as indicated on the plans and according to manufacturer's recommendations. The installation shall be inspected by the Engineer before it is backfilled.

For any long underground power feeds required, temporary direct burial power cable 600V secondary UD aluminum conductors with XLP insulation will be allowed. The aluminum conductors shall meet ASTM B-230, B-231, B-609, and B-901. The cable insulation shall meet ICEA S-105-692 for XLP insulated conductors and UL Standard 854 for Type USE-2. Cables may be triplexed by the manufacturer to promote ease of installation with approval of the Engineer. The splices shall meet the applicable portions of Article 1066.06 of the Standard Specifications. The cable shall be installed directly from the reels on which the cable was shipped. Installation, after inspection by the Engineer, shall be backfilled according to Section 810. Plowing will not be allowed.

Cable splicing, luminaire fusing, and lightning protection shall be submitted for approval. All work required to keep the temporary lighting system operational shall be at no additional cost to the Department. No lighting circuit or portion thereof shall be removed from nighttime operation without the approval of the Engineer.

An inspection and approval by the Engineer shall take place before the temporary lighting circuit feeds or modified system is approved for operation. Any damage to the existing lighting units and their circuitry as a result of the Contractor's negligence shall be repaired or replaced at no cost to the Department. All burnouts shall be replaced on a next day basis and temporary wiring shall be installed as necessary to keep all lights functioning every night. Contractor shall furnish to the Engineer the names and phone numbers of two persons responsible for call-out work on the lighting system on a 24/7 basis.

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

Basis of Payment: This work shall be paid for at the contract lump sum price for TEMPORARY LIGHTING SYSTEM.

REMOVE AND REPLACE EXISTING CIRCUIT BREAKER WITH 40AMP, 2-POLE

DESCRIPTION

This item shall consist of the removal of an existing circuit breaker, furnishing and installing a new circuit breaker in an existing lighting controller as shown on the plans.

MATERIAL

Material shall be according Article 1068.01 (e) (3) of the Standard Specifications. Breaker shall match existing breaker frame size and be rated for 240V, 40 Amps, 2-pole. Breaker shall be suitable for mounting onto cabinet back panel.

INSTALLATION

Installation shall be according to plans and Illinois Department of Transportation standards. The existing circuit breaker shall be removed and the new circuit breaker shall be mounted in its place. New permanent labeling shall be provided on the circuit breaker designating the lighting circuit letter. The removed breaker shall remain the property of the Department and shall be delivered to a Department facility within the District.

BASIS OF PAYMENT

This work will be paid for at the contract unit price per each for REMOVE AND REPLACE EXISTING CIRCUIT BREAKER WITH 40AMP, 2-POLE.

GRANULAR BACKFILL FOR STRUCTURES

Revise the third sentence of the first paragraph of Article 586.03 of the Supplemental Specifications to read:

“The backfill volume shall be placed in convenient lifts for the full width to be backfilled and shall be compacted to not less than 95 percent of the standard laboratory density.”

Delete the fourth sentence of the first paragraph of Article 586.03 of the Supplemental Specifications.

SLIPFORM PARAPET

The following shall be added to the end of Article 503.16(b) of the Standard Specifications.

- (3) Slipforming parapets. Unless otherwise prohibited herein or on the plans, at the option of the Contractor, concrete parapets on bridge decks and anchorage slabs may be constructed by slipforming in lieu of the conventional forming methods. Slipforming will not be permitted for curved parapets on a radius of 1500 ft (457m) or less.

The slipform machine shall be self-propelled and have automatic horizontal and vertical grade control. For parapets up to 34 inches (864 mm) tall, the machine shall be equipped with a minimum of four (4) vibrators. For 42 inch (1.067m) tall parapets, the machine shall be equipped with a minimum of five (5) vibrators. The equipment shall be approved by the Engineer before use.

If the Contractor wishes to use the slipform parapet option for 42 inch (1.067 m) tall parapets he/she shall construct a test section in a temporary location to demonstrate his/her ability to construct the parapets without defect. The test section shall be constructed under similar anticipated weather conditions, using the same means and methods, equipment, operator, concrete plant, concrete mix design, and slump as proposed for the permanent slipform parapets.

The test section shall be at least 50 feet (15 meters) in length and shall be of the same cross section shown on the plans. The Contractor shall place all of the reinforcement embedded in the parapet shown on the plans. Upon completion of the test section, the Contractor shall saw cut the test section into 2 foot (600 mm) segments and separate the segments for inspection by the Engineer.

The test section shall demonstrate that the Contractor can slipform the parapets on this project without defects. The acceptance of the test section does not constitute acceptance of the slipform parapets in place.

The concrete mix design may combine two or more coarse aggregate sizes, consisting of CA-7, CA-11, CA-13, CA-14, and CA-16, provided a CA-7 or CA-11 is included in the blend in a proportion approved by the Engineer.

The slipform machine speed shall not exceed 3 ft (0.9 m) per minute. Any section of parapet placed with the slipform machine moving in excess of the maximum allowed speed will be rejected. Any time the speed of the machine drops below 0.5 ft (150 mm) per minute will be considered a stoppage of the slipforming operation, portions of parapet placed with three or more intermittent stoppages within any 15 ft (4.6 m) length will be rejected. The Contractor shall schedule concrete delivery to maintain a uniform delivery rate of concrete into the slipform machine. If delivery of concrete from the truck into the slipforming machine is interrupted by more than 15 minutes, the portion of the wall within the limits of the slipform machine will be rejected. Any portion of the parapet where the slipforming operation is interrupted or stopped within the 15 minute window may be subject to coring to verify acceptance.

The use of cast-in-place anchorage devices for attaching appurtenances and/or railings to the parapets will not be allowed in conjunction with slipforming of parapets. Alternate means for making these attachments shall be as detailed on the plans or as approved by the Engineer.

All reinforcement bar intersections within the parapet cross section shall be 100 percent tied utilizing saddle ties, wrap and saddle ties or figure eight ties to maintain rigidity during concrete placement. At pre-planned sawcut joints in the parapet, Glass Fiber Reinforced Polymer (GFRP) reinforcement shall be used to maintain the rigidity of the reinforcement cage across the proposed joints as detailed in the plans for the Slipformed Parapet Joint Details.

Glass Fiber Reinforced Polymer (GFRP) reinforcement shall be subject to approval by the Engineer. Other non-ferrous reinforcement may be proposed for use but shall be subject to approval by the Engineer. GFRP reinforcement shall be tied the same as stated in the previous paragraph.

The Contractor may propose supplemental reinforcement for stiffening to prevent movement of the reinforcement cage and/or for conduit support subject to approval by the Engineer.

Clearances for these bars shall be the same as shown for the required bars and these bars shall be epoxy coated. If the additional reinforcement is used, it shall be at no additional cost to the Department.

For projects with plan details specifying parapet joints spaced greater than 20 ft (6 m) apart, additional sawcut joints, spaced between 10 ft (3 m) and 20 ft (6 m), shall be placed as directed by the Engineer. The horizontal reinforcement extending through the proposed joints shall be precut to provide a minimum of 4 in. (100 mm) gap, centered over the joint, between rebar ends. The ends of the reinforcement shall be repaired according to Article 508.07.

After the slipform machine has been set to proper grade and prior to concrete placement, the clearance between the slipform machine inside faces and reinforcement bars shall be checked during a dry run by the Contractor in the presence of the Engineer. The dry run shall not begin until the entire reinforcing cage has been tied and the Engineer has verified and approved the placement and tying of the reinforcing bars. Any reinforcement bars found to be out of place by more than ½ in. (13 mm), or any dimensions between bars differing from the plans by more than ½ in. (13 mm) shall be re-tied to the plan dimensions.

During the dry run and in the presence of the Engineer, the Contractor shall check the clearance of the reinforcement bars from the inside faces of the slipform mold. In all locations, the Contractor shall ensure the reinforcement bars have the minimum cover distance shown on the plans. This dry run check shall be made for the full distance that is anticipated to be placed in the subsequent pour. Reinforcement bars found to have less than the minimum clearance shall be adjusted and the dry run will be performed again, at least in any locations that have been readjusted.

For parapets adjacent to the watertable, the Contractor shall, for the duration of the construction and curing of the parapet, provide and maintain an inspection platform along the back face of the parapet. The inspection platform shall be rigidly attached to the bridge superstructure and be of such design to allow ready movement of inspection personnel along the entire length of the bridge.

The aluminum cracker plates as detailed in the plans shall be securely tied in place and shall be coated or otherwise treated to minimize their potential reaction with wet concrete. In lieu of chamfer strips at horizontal and vertical edges, radii may be used. Prior to slipforming, the Contractor shall verify proper operation of the vibrators using a mechanical measuring device subject to approval by the Engineer.

The top portion of the joint shall be sawcut as specified in the plans. Sawing of the joints shall commence as soon as the concrete has hardened sufficiently to permit sawing without excessive raveling. All joints shall be sawed to the full thickness before uncontrolled shrinkage cracking takes place but no later than 8 hours after concrete placement. The sawcut shall be approximately 3/8 in. (10 mm) wide and shall be performed with a power circular concrete saw. The joints shall be sealed with an approved polyurethane sealant, conforming to ASTM C 920, Type S, Grade NS, Class 25, Use T, to a minimum depth of 1/2 in. (12 mm), with surface preparation and installation according to the manufacturer's written instructions. Cork, hemp or other compressible material may be used as a backer. The sawcut will not require chamfered edges.

Ends of the parapet shall be formed and the forms securely braced. When slipforming of parapets with cross sectional discontinuities such as light standards, junction boxes or other embedded appurtenances except for name plates, is allowed, the parapet shall be formed for a minimum distance of 4 ft (1.2 m) on each side of the discontinuity.

For acceptance and rejection purposes a parapet section shall be defined as the length of parapet between adjacent vertical parapet joints.

The maximum variance of actual to proposed longitudinal alignment shall not exceed $\pm 3/4$ in. (20 mm) with no more than 1/4 inch in 10 ft (6 mm in 3 m). Notwithstanding this tolerance, abrupt variance in actual alignment of 1/2 inch in 10 ft (13 mm in 3 m) will be cause for rejection of the parapet section.

In addition, all surfaces shall be checked with a 10 ft (3 m) straight edge furnished and used by the Contractor as the concrete is extruded from the slipform mold. Continued variations in the barrier surface exceeding 1/4 inch in 10 ft (6 mm in 3 m) will not be permitted and remedial action shall immediately be taken to correct the problem.

The use of equipment or methods which result in dimensions outside the tolerance limits shall be discontinued. Parapet sections having dimensions outside the tolerance limits will be rejected.

Any visible indication that less than specified cover of concrete over the reinforcing bars has been obtained, or of any cracking, tearing or honeycombing of the plastic concrete, or any location showing diagonal or horizontal cracking will be cause for rejection of the parapet section in which they are found.

The vertical surfaces at the base of the barrier within 3 in. (75 mm) of the deck surface shall be trowelled true after passage of the slipform machine. Hand finishing of minor sporadic surface defects may be allowed at the discretion of the Engineer. All surfaces of the parapet except the top shall receive a final vertical broom finish. Any deformations or bulges remaining after the initial set shall be removed by grinding after the concrete has hardened.

Slipformed parapets shall be cured according to either Article 1020.13(a)(3) or Article 1020.13(a)(5). For either method, the concrete surface shall be covered within 30 minutes after it has been finished. The cotton mats or burlap covering shall be held in place with brackets or other method approved by the Engineer. The Contractor shall have the option to substitute linseed oil emulsion for protective coat and delay the start of wet curing during the period from April 16 through October 31. The linseed oil emulsion shall be applied according to Articles 1020.13 Notes-General 8/ and 1020.13(a)(4). The delay for wet curing shall not exceed 3 hours after application of the linseed oil emulsion.

A maximum of three random 4 in. (100 mm) diameter cores per 100 ft (30 m) of parapet shall be taken as directed by the Engineer, but no less than three random cores shall be taken for each parapet pour. At least two cores shall be located to intercept the top horizontal bar. Unless otherwise directed by the Engineer, coring shall be accomplished within 48 hours following each parapet pour. Separate parapets poured on the same date shall be considered separate pours. Random cores will not be measured for payment.

The Engineer will mark additional locations for cores where, in the sole opinion of the Engineer, the quality of the slipformed parapet is suspect.

The Engineer or his representative will be responsible for evaluation of the cores. Any cores showing voids of any size adjacent to the reinforcement bars, or showing voids not adjacent to reinforcement bars of 1/4 square inch (160 square millimeters) in area or more, or showing signs of segregation, or showing signs of cracking shall be considered failures and the parapet section from which it was taken will be rejected. Parapets with less than 1 ½ inches of concrete cover over the reinforcement shall be rejected.

Rejected parapet sections shall be removed and replaced for the full depth cross-section of the parapet except that concrete covers between 1 inch and 1 ½ inches may be open to remedial action subject to the approval of the Engineer. Such action could entail up to and including removal and replacement.

The minimum length of parapet removed and replaced shall be 3 ft (1 m). Additional cores may be required to determine the longitudinal extent of removal and replacement if it cannot be determined and agreed upon by other means (i.e. visual, sounding, non-destructive testing, etc.).

Any parapet section with more than one half of its length rejected or with remaining segments less than 10 ft (3 m) in length shall be removed and replaced in its entirety.

If reinforcement bars are damaged during the removal and replacement, additional removal and replacement shall be done, as necessary, to ensure minimum splice length of replacement bars. Any damage to epoxy coating of bars shall be repaired according to Article 508.04.

All core holes will be filled with a non-shrink grout meeting the requirements of Section 1024.

Basis of Payment. When the Contractor, at his/her option, constructs the parapet using slipforming methods, no adjustment in the quantities for Concrete Superstructures and Reinforcement Bars, Epoxy Coated to accommodate this option will be allowed. Compensation under the contract bid items for Concrete Superstructures and Reinforcement Bars, Epoxy Coated shall cover the cost of all work required for the construction of the parapet and any test section(s) required, and for any additional costs of work or materials associated with slipforming methods.

STEEL RAILING (SPECIAL)

GENERAL. Work shall be according to the applicable portions of Section 509 of the Standard Specifications except as modified herein.

DESCRIPTION. This work shall consist of furnishing and erecting steel railings according to the details and locations shown in the plans. The steel railings shall be in accordance with the details shown in the Plans.

METHOD OF MEASUREMENT. This work will be measured for payment in place in feet. The length measured will be the overall length along the top longitudinal railing member through all posts and gaps.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per foot for STEEL RAILING (SPECIAL).

FENCE, PERFORATED ALUMINUM

GENERAL. Work shall be according to the applicable portions of Section 509 of the Standard Specifications except as modified herein.

DESCRIPTION. This work shall consist of furnishing and erecting aluminum railings according to the details and locations shown in the plans. The aluminum railings shall be in accordance with the details shown in the Plans.

METHOD OF MEASUREMENT. This work will be measured for payment in place in feet. The length measured will be the overall length along the top longitudinal railing member through all posts and gaps.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per foot for FENCE, PERFORATED ALUMINUM.

STRUCTURAL STEEL RAILING, TRAFFIC AND BICYCLE

GENERAL. Work shall be according to the applicable portions of Section 509 of the Standard Specifications except as modified herein.

DESCRIPTION. This work shall consist of furnishing and erecting steel railings according to the details and locations shown in the plans. The steel railings shall be in accordance with the details shown in the Plans.

METHOD OF MEASUREMENT. This work will be measured for payment in place in feet. The length measured will be the overall length along the top longitudinal railing member through all posts and gaps.

BASIS OF PAYMENT. This work will be paid for at the contract unit price per foot for STRUCTURAL STEEL RAILING, TRAFFIC AND BICYCLE.

CLEANING AND PAINTING STRUCTURAL STEEL

Effective: March 19, 2013

DESCRIPTION. The material and construction requirements that apply to cleaning and painting new structural steel shall be according to the applicable portion of Sections 506 of the Standard Specifications except as modified herein. The three coat paint system(s) shall be the system as specified on the plans and as defined herein.

MATERIALS. When a fluoropolymer top coat is specified it shall only be applied to the surfaces designated on the plans. The top coat shall be one of the following listed below except that the paint shall be from the same manufacturer supplying the primer and intermediate coat.

Manufacturer	Product	DFT(mils)
Carboline	Carboxane 950	2 – 3
Sherwin Williams	Fluorokem Fluoropolymer Urethane	2 – 3
PPG Industries	Corafon ADS	1.5 – 2

Batch testing of fluoropolymer top coats will not be required, but shall be approved based on manufacturer's certification. The specified colors shall be produced in the coating manufacturer's facility. Tinting of the coating after it leaves the manufacturer's facility is not allowed. A color sample shall be submitted to the Engineer for approval prior to ordering material.

PILING

This Special Provision amends the following provisions of the Standard Specifications for Road and Bridge Construction.

512.10 Driving Equipment. Revise the first, second and third paragraphs of Article 512.10(a) to read as follows:

- (a) Hammers. Piles shall be driven with an impact hammer such as a drop, steam/air, hydraulic, or diesel. The driving system selected by the Contractor shall not result in damage to the pile. The impact hammer shall be capable of being operated at an energy which will maintain a pile penetration rate between 1 and 10 blows per 1 in. (25 mm) when the nominal driven bearing of the pile approaches the nominal required bearing in soil for the end-of-driving condition described in Article 512.14. To avoid potential damage to steel piles driven to rock, the impact hammer shall operate at an energy corresponding to a pile penetration rate between 4 and 20 blows per 1 in. (25 mm) as the pile nears and develops the nominal required bearing in rock.

For hammer selection purposes, the minimum and maximum hammer energy necessary to achieve these penetrations may be estimated as follows.

<u>Soil</u>	<u>Rock</u>
$E \geq \frac{32.9 R_N}{F_{eff}}$ (English)	$E \geq \frac{28.6 R_N}{F_{eff}}$ (English)
$E \leq \frac{65.8 R_N}{F_{eff}}$ (English)	$E \leq \frac{41.1 R_N}{F_{eff}}$ (English)
$E \geq \frac{10.0 R_N}{F_{eff}}$ (metric)	$E \geq \frac{8.7 R_N}{F_{eff}}$ (metric)
$E \leq \frac{20.0 R_N}{F_{eff}}$ (metric)	$E \leq \frac{12.5 R_N}{F_{eff}}$ (metric)

Where:

- R_N = Nominal required bearing in kips (kN)
- E = Energy developed by the hammer per blow in ft-lb (J)
- F_{eff} = Hammer efficiency factor according to Article 512.14.

The above hammer options, hammer energy range, and pile penetration rates shall be applicable unless noted otherwise in the construction documents.

512.11 Penetration of Piles. Revise Article 512.11 to read as follows:

Piles shall be installed to a penetration that satisfies all of the following.

- (a) The nominal driven bearing, as determined by the formula in Article 512.14, is not less than the nominal required bearing shown on the plans except as permitted below for piles driven to rock.
- (b) The pile tip elevation is at or below the minimum tip elevation shown on the plans. In cases where no minimum tip elevation is provided, the piles shall be driven to a penetration of at least 10 ft (3 m) below the bottom of footing or below undisturbed earth, whichever is greater.

Except as required to satisfy minimum tip elevations required in 512.11(b) above, piles not bearing on rock are not required to be driven more than one additional foot (300 mm) after the nominal driven bearing equals or exceeds the nominal required bearing; more than three additional inches (75 mm) after the nominal driven bearing exceeds 110 percent of the nominal required bearing; or more than one additional inch (25 mm) after the nominal driven bearing exceeds 150 percent of the nominal required bearing. For piles driven to rock, pile driving shall be stopped, independent of the nominal driven bearing predicted by the formula in Article 512.14, when the minimum penetration rate is $\frac{1}{4}$ in. over 5 blows (or equivalently a maximum penetration rate of 20 blows per 1 in. for no more than 5 blows). When piles not bearing on rock fail to achieve nominal driven bearings in excess of the nominal required bearing after driving the full furnished lengths, but are within 85 percent of nominal required bearing, these piles shall be left for a minimum of 24 hours to allow for soil setup and retesting before splicing and driving additional length. After the waiting period has passed, the pile shall be redriven to check the gain in nominal driven bearing upon soil setup. The soil setup nominal driven bearing shall be based on the number of redriving blows necessary to drive the pile an additional 2 in. (75 mm) using a hammer that has been warmed up by applying at least 20 blows to another pile. Within the additional 2 in., the redriving data should be carefully observed and the bearing determined for each $\frac{1}{2}$ in. of pile penetration. In addition to the pile penetration rate, field inspectors are encouraged to carefully monitor the hammer energy during the redrive as increased driving resistance from soil setup may result in greater rebound of the hammer ram and developed hammer energy than experienced during the initial pile driving procedure. The soil setup nominal driven bearing may be taken as the largest value recorded at the $\frac{1}{2}$ in. increments. These piles will be accepted if they exhibit a nominal driven bearing larger than nominal required bearing. In addition, piles within a group, and adjacent to a retested pile that has achieved the nominal required bearing within the additional 2 in. of pile penetration, may be accepted provided the piles exhibited driving behavior similar to the retested pile prior to the setup period. Acceptance of such piles shall be subject to approval of the Engineer and shall require that a minimum of 20 percent of the piles within the group, and no fewer than 2, be retested and achieve the nominal required bearing within the additional 2 in. of pile penetration. Locations of the retested piles should be uniformly scattered across the pile group.

When piles have been driven in excess of the indicated estimated pile length and are not within 85 percent of the nominal required bearing, piles should not be driven longer than the soil setup pile length indicated in the plans. When piles have been driven to this length, they shall be left for a minimum of 48 hours and redriven to check the gain in nominal driven bearing due to soil setup using the above procedure. The Bureau of Bridges and Structures should be contacted for further disposition when piles have not achieved the nominal required bearing upon redrive.

The above mentioned waiting periods for redriving piles to check for gain in nominal driven bearing due to soil setup are minimums and some soil types may exhibit greater soil setup with increased waiting period. When feasible, longer waiting periods that are a function of the soil type at the pile location are encouraged. The following waiting periods are recommended prior to redriving piles to try and maximize the gain in nominal driven bearing due to soil setup:

Recommended Waiting Periods for Redrive Based on Soil Type

Clean Sands	= 1 day
Silty Sands	= 2 days
Sandy Silts	= 4 days
Silts and Clays	= 8 days

512.14 Determination of Nominal Driven Bearing. Revise the first paragraph of Article 512.14 to read as follows:

The nominal driven bearing of each pile shall be determined by the WSDOT formula as follows.

$$R_{NDB} = \frac{6.6 C_s F_{eff} E \text{ Ln} (10N_b)}{1000} \text{ (English)}$$

$$R_{NDB} = \frac{21.7 C_s F_{eff} E \text{ Ln} (10N_b)}{1000} \text{ (metric)}$$

Where:

- R_{NDB} = Nominal driven bearing of the pile in kips (kN)
- C_s = Soil setup correction factor
 - 1.0 for EOD data
 - 0.8 for BOR data
- N_b = Number of hammer blows per inch (25 mm) of pile penetration
- E = Energy developed by the hammer per blow in ft lb (J)
- F_{eff} = Hammer efficiency factor taken as:
 - 0.55 for air/steam hammers
 - 0.47 for open-ended diesel hammers and steel piles or metal shell piles
 - 0.37 for open-ended diesel hammers and concrete or timber piles
 - 0.35 for closed-ended diesel hammers
 - 0.28 for drop hammers

End-of-driving (EOD) data refers to the information that is collected and analyzed during the initial pile installation procedure. Beginning-of-redrive (BOR) data refers to the redriving information that is collected and analyzed when the pile is driven less than 2 in. following a waiting period to check the gain in nominal driven bearing due to soil setup. When redriving piles, a significant reduction in R_{NDB} is often observed as the pile penetration exceeds 2 in. If the pile does not achieve the required nominal driven bearing within the 2 in. of additional penetration during the redrive, the nominal driven bearing of the pile shall continue to be determined using the WSDOT formula and soil setup correction factor for EOD data after the pile has been driven 4 additional inches.

Per Article 512.10, the hammer chosen by the contractor is required to be capable of developing the nominal required bearing capacity of piles bearing in soil at EOD at an N_b between 1 and 10. When evaluating R_{NDB} of piles bearing in soil for the same hammer using the WSDOT formula and BOR data, the permissible range of N_b is between 1 and 20.

As an alternative to the WSDOT formula, qualified personnel may analyze BOR data using the Wave Equation Analysis of Piles (WEAP) software program. When performing WEAP of BOR data using the Department's geotechnical pile design procedure, piles will only be required to achieve a nominal driven bearing equal to 85% of nominal required bearing indicated in the contract plans.

512.15 Test Piles. Revise the third paragraph of Article 512.15 to read as follows:

Test piles not bearing on rock shall be driven to a nominal driven bearing ten percent greater than the nominal required bearing shown on the plans. The Engineer may stop the driving of any test pile not bearing on rock at tip penetrations exceeding 10 ft (3 m) beyond the estimated length to check for pile setup according to Article 512.11. After any retesting, the Contractor shall recommence test pile driving, providing piling, splices, and any retests until the nominal driven bearing during driving reaches ten percent more than the nominal required bearing or the Engineer stops the driving due to having sufficient data to provide the itemized list of furnished lengths. Test piles bearing on rock shall be driven to the nominal required bearing shown on the plans except pile driving shall be stopped when the pile penetration rate satisfies the criteria indicated in Article 512.11.

1006.05 Metal Piling and Steel Casing. Replace 1006.05(a) and (b) with the following:

- (a) Metal Shell Piling. Metal shell piling shall be according to ASTM A 252, Grade 3 except the minimum yield strength shall be 50,000 psi (345,000 kPa).
- (b) Steel Piling. Steel piling shall be according to AASHTO M 270, Grade 50 (M 270M, Grade 345).

MECHANICALLY STABILIZED EARTH RETAINING WALLS

Effective: February 3, 1999

Revised: April 18, 2014

The following shall be used in the place of Article 522 in the Standard Specifications for Road and Bridge Construction, adopted April 1, 2016.

Description. This work shall consist of preparing the design, furnishing the materials, and constructing the mechanically stabilized earth (MSE) retaining wall to the lines, grades and dimensions shown in the contract plans and as directed by the Engineer.

General. The MSE wall consists of a concrete leveling pad, precast concrete face panels, a soil reinforcing system, select fill and concrete coping (when specified). The soil reinforcement shall have sufficient strength, quantity, and pullout resistance, beyond the failure surface within the select fill, as required by design. The material, fabrication, and construction shall comply with this Special Provision and the requirements specified by the supplier of the wall system selected by the Contractor for use on the project.

The MSE retaining wall shall be one of the following pre-approved wall systems:

Company Name: Wall System

Earth Tec International, LLC: EarthTrac HA

Sanders Pre-Cast Concrete Systems Company: Sanders MSE Wall

Shaw Technologies: Strengthened Soil

Sine Wall, LLC: Sine Wall

SSL Construction Products: MSE Plus

Vist-A-Wall Systems, LLC: Vist-A-Wall

Tensar Earth Technologies : ARES Wall

The Reinforced Earth Company: GeoMega System

The Reinforced Earth Company: Reinforced Earth

The Reinforced Earth Company: Retained Earth

Tricon Precast: Tricon Retained Soil

Tricon Precast: Tri-Web Retained Soil

Pre-approval of the wall system does not include material acceptance at the jobsite.

Submittals. The wall system supplier shall submit complete design calculations and shop drawings to the Engineer according to Article 1042.03(b) of the Standard Specifications no later than 90 days prior to beginning construction of the wall. No work or ordering of materials for the structure shall be done by the Contractor until the submittal has been approved in writing by the

Engineer. All submittals shall be sealed by an Illinois Licensed Structural Engineer and shall include all details, dimensions, quantities and cross sections necessary to construct the wall and shall include, but not be limited to, the following items:

- (a) Plan, elevation and cross section sheet(s) for each wall showing the following:
 - (1) A plan view of the wall indicating the offsets from the construction centerline to the face of the wall at all changes in horizontal alignment. The plan view shall show the limits of soil reinforcement and stations where changes in length and/or size of reinforcement occur. The centerline shall be shown for all drainage structures or pipes behind or passing through and/or under the wall.
 - (2) An elevation view of the wall indicating the elevations of the top of the panels. These elevations shall be at or above the top of exposed panel line shown on the contract plans. This view shall show the elevations of the top of the leveling pads, all steps in the leveling pads and the finished grade line. Each panel type, the number, size and length of soil reinforcement connected to the panel shall be designated. The equivalent uniform applied service (unfactored) nominal bearing pressure shall be shown for each designed wall section.
 - (3) A listing of the summary of quantities shall be provided on the elevation sheet of each wall.
 - (4) Typical cross section(s) showing the limits of the reinforced select fill volume included within the wall system, soil reinforcement, embankment material placed behind the select fill, precast face panels, and their relationship to the right-of-way limits, excavation cut slopes, existing ground conditions and the finished grade line.
 - (5) All general notes required for constructing the wall.
- (b) All details for the concrete leveling pads, including the steps, shall be shown. The top of the leveling pad shall be located at or below the theoretical top of the leveling pad line shown on the contract plans. The theoretical top of leveling pad line shall be 3.5 ft. (1.1 m) below finished grade line at the front face of the wall, unless otherwise shown on the plans.
- (c) Where concrete coping or barrier is specified, the panels shall extend up into the coping or barrier as shown in the plans. The top of the panels may be level or sloped to satisfy the top of exposed panel line shown on the contract plans. Cast-in-place concrete will not be an acceptable replacement for panel areas below the top of exposed panel line. As an alternative to cast in place coping, the Contractor may substitute a precast coping, the details of which must be included in the shop drawings and approved by the Engineer.
- (d) All panel types shall be detailed. The details shall show all dimensions necessary to cast and construct each type of panel, all reinforcing steel in the panel, and the location of soil reinforcement connection devices embedded in the panels. These panel embed devices shall not be in contact with the panel reinforcement steel.

- (e) All details of the wall panels and soil reinforcement placement around all appurtenances located behind, on top of, or passing through the soil reinforced wall volume such as parapets with anchorage slabs, coping, foundations, and utilities etc. shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular system shall also be submitted.
- (f) When specified on the contract plans, all details of architectural panel treatment, including color, texture and form liners shall be shown.
- (g) The details for the connection between concrete panels, embed devices, and soil reinforcement shall be shown.
- (h) When pile sleeves are specified, the pile sleeve material, shape, and wall thickness shall be submitted to the Engineer for approval. It shall have adequate strength to withstand the select fill pressures without collapse until after completion of the wall settlement. The annulus between the pile and the sleeve shall be as small as possible while still allowing it to be filled with loose dry sand after wall erection.

The initial submittal shall include three sets of shop drawings and one set of calculations. One set of drawings will be returned to the Contractor with any corrections indicated. After approval, the Contractor shall furnish the Engineer with ten (10) sets of corrected plan prints for distribution by the Department. No work or ordering of materials for the structure shall be done until the submittal has been approved by the Engineer.

Materials. The MSE walls shall conform to the supplier's standards as previously approved by the Department, and the following:

- (a) The soil reinforcing system, which includes the soil reinforcement, and all connection devices, shall be according to the following:
 - (1) Inextensible Soil Reinforcement. Steel reinforcement shall be according ASTM A 572 Grade 65 (450), ASTM A1064, ASTM A 1011 or ASTM A 463 Grade 50 (345). The steel reinforcement shall be either epoxy coated, aluminized Type 2, or galvanized. Epoxy coatings shall be according to Article 1006.10(a)(2), except the minimum thickness of epoxy coating shall be 18 mils (457 microns). No bend test will be required. Aluminized Type 2-100 shall be according to ASTM A 463. Galvanizing shall be according to AASHTO M 111 or ASTM A 653 with touch up of damage according to ASTM A 780.
 - (2) Extensible Soil Reinforcement. Geosynthetic reinforcement shall be monolithically fabricated from virgin high density polyethylene (HDPE) or high tenacity polyester (HTPET) resins having the following properties verified by mill certifications:

<u>Property for Geosynthetic Reinforcement</u>	<u>Value</u>	<u>Test</u>
Minimum Tensile Strength	**	ASTM D 6637

** as specified in the approved design calculations and shown on the shop drawings.

<u>Property for HDPE</u>	<u>Value</u>	<u>Test</u>
Melt Flow Rate (g/cm)	0.060 – 0.150	ASTM D 1238, Procedure B
Density (g/cu m)	0.941 – 0.965	ASTM D 792
Carbon Black	2% (min)	ASTM D 4218

<u>Property for HTPET</u>	<u>Value</u>	<u>Test</u>
Carboxyl End Group (max) (mmol/kg)	<30	GRI-GG7
Molecular Weight (Mn)	>25,000	GRI-GG8

(3) Panel Embed/Connection Devices. Panel embeds and connection devices shall be according to the following.

a. Metallic panel embed/connection devices and connection hardware shall be galvanized according to AASHTO M 232 and shall be according to the following.

Mesh and Loop Embeds	ASTM A1064 or ASTM A 706 Grade 60 (420)
Tie Strip Embeds	AASHTO M 270/M 270M Grade 50 (345) or ASTM A 1011 HSLAS Grade 50 (345) Class 2

b. Non metallic panel embed/connection devices typically used with geosynthetic soil reinforcement shall be manufactured from virgin or recycled polyvinyl chloride having the following properties:

<u>Property for Polyvinyl Chloride</u>	<u>Value</u>	<u>Test</u>
Heat Deflection Temperature (°F)	155 - 164	ASTM D 1896
Notched IZOD 1/8 inch @ 73°F (ft-lb/in)	4 – 12	ASTM D 256
Coefficient of Linear Exp. (in/in/°F)	3.5 – 4.5	ASTM D 696
Hardness, Shore D	79	ASTM D 2240

<u>Property for Polypropylene</u>	<u>Value</u>	<u>Test</u>
Melt Flow Rate (g/cm)	0.060 – 0.150	ASTM D 1238, Procedure B
Density (g/cu m)	0.88 – 0.92	ASTM D 792

(b) The select fill, defined as the material placed in the reinforced volume behind the wall, shall be according to Sections 1003 and 1004 of the Standard Specifications and the following:

(1) Select Fill Gradation. Either a coarse aggregate or a fine aggregate may be used. For coarse aggregate, gradations CA 6 thru CA 16 may be used. If an epoxy coated reinforcing is used, the coarse aggregate gradations shall be limited to CA 12 thru CA 16. For fine aggregate, gradations FA 1, FA 2, or FA 20 may be used.

(2) Select Fill Quality. The coarse or fine aggregate shall have a maximum sodium sulfate (Na₂SO₄) loss of 15 percent according to Illinois Modified AASHTO T 104.

- (3) Select Fill Internal Friction Angle. The effective internal friction angle for the coarse or fine aggregate shall be a minimum 34 degrees according to AASHTO T 236 on samples compacted to 95 percent density according to Illinois Modified AASHTO T 99. The AASHTO T 296 test with pore pressure measurement may be used in lieu of AASHTO T 236. If the vendor's design uses a friction angle higher than 34 degrees, as indicated on the approved shop drawings, this higher value shall be taken as the minimum required.
- (4) Select Fill and Steel Reinforcing. When steel reinforcing is used, the select fill shall meet the following requirements.
- a. The pH shall be 5.0 to 10.0 according to Illinois Modified AASHTO T 289.
 - b. The resistivity according to Illinois Modified AASHTO T 288 shall be greater than 3000 ohm centimeters for epoxy coated and galvanized reinforcement, and 1500 ohm centimeters for Aluminized Type 2. However, the resistivity requirement is not applicable to CA 7, CA 8, CA 11, CA 13, CA 14, CA 15, and CA 16.
 - c. The chlorides shall be less than 100 parts per million according to Illinois Modified AASHTO T 291 or ASTM D 4327. For either test, the sample shall be prepared according to Illinois Modified AASHTO T 291.
 - d. The sulfates shall be less than 200 parts per million according to Illinois Modified AASHTO T 290 or ASTM D 4327. For either test, the sample shall be prepared according to Illinois Modified AASHTO T 290.
 - e. The organic content shall be a maximum 1.0 percent according to Illinois Modified AASHTO T 267.
- (5) Select Fill and Geosynthetic Reinforcing. When geosynthetic reinforcing is used, the select fill pH shall be 4.5 to 9.0 according to Illinois Modified AASHTO T 289.
- (6) Test Frequency. Prior to start of construction, the Contractor shall provide internal friction angle and pH test results, to show the select fill material meets the specification requirements. In addition, resistivity, chlorides, sulfates, and organic content test results will be required if steel reinforcing is used. The laboratory performing the Illinois Modified AASHTO T 288 test shall be approved by the Department according to the current Bureau of Materials and Physical Research Policy Memorandum "Minimum Laboratory Requirements for Resistivity Testing". All test results shall not be older than 12 months. In addition, a sample of select fill material will be obtained for testing and approval by the Department. Thereafter, the minimum frequency of sampling and testing by the department at the jobsite will be one per 40,000 tons (36,300 metric tons) of select fill material. Testing to verify the internal friction angle will be required when the wall design utilizes a minimum effective internal friction angle greater than 34 degrees, or when crushed coarse aggregate is not used.
- (c) The embankment material behind the select fill shall be according to Section 202 and/or Section 204. An embankment unit weight of 120 lbs/cubic foot (1921 kg/cubic meter) and an effective friction angle of 30 degrees shall be used in the wall system design, unless otherwise indicated on the plans.

- (d) The geosynthetic filter material used across the panel joints shall be either a non-woven needle punch polyester or polypropylene or a woven monofilament polypropylene with a minimum width of 12 in. (300 mm) and a minimum non-sewn lap of 6 in. (150 mm) where necessary.
- (e) The bearing pads shall be rubber, neoprene, polyvinyl chloride, or polyethylene of the type and grade as recommended by the wall supplier.
- (f) All precast panels shall be manufactured with Class PC concrete according to Section 504, Article 1042.02, Article 1042.03, and the following requirements:
 - (1) The minimum panel thickness shall be 5 1/2 in. (140 mm).
 - (2) The minimum reinforcement bar cover shall be 1 1/2 in. (38 mm).
 - (3) The panels shall have a ship lap or tongue and groove system of overlapping joints between panels designed to conceal joints and bearing pads.
 - (4) The panel reinforcement shall be according to Article 1006.10(a)(2) or 1006.10(b)(1) except the welded wire fabric shall be epoxy coated according to ASTM A884.
 - (5) All dimensions shall be within 3/16 in. (5 mm).
 - (6) Angular distortion with regard to the height of the panel shall not exceed 0.2 inches in 5 ft (5 mm in 1.5 m).
 - (7) Surface defects on formed surfaces measured on a length of 5 ft. (1.5 m) shall not be more than 0.1 in. (2.5 mm).
 - (8) The panel embed/connection devices shall be cast into the facing panels with a tolerance not to exceed 1 in. (25 mm) from the locations specified on the approved shop drawings.

Unless specified otherwise, concrete surfaces exposed to view in the completed wall shall be finished according to Article 503.15(a). The back face of the panel shall be roughly screeded to eliminate open pockets of aggregate and surface distortions in excess of 1/4 in. (6 mm).

Design Criteria. The design shall be according to the appropriate AASHTO Design Specifications noted on the plans for Mechanically Stabilized Earth Walls except as modified herein. The wall supplier shall be responsible for all internal stability aspects of the wall design and shall supply the Department with computations for each designed wall section. The analyses of settlement, bearing capacity and overall slope stability will be the responsibility of the Department.

External loads, such as those applied through structure foundations, from traffic or railroads, slope surcharge etc., shall be accounted for in the internal stability design. The presence of all appurtenances behind, in front of, mounted upon, or passing through the wall volume such as drainage structures, utilities, structure foundation elements or other items shall be accounted for in the internal stability design of the wall.

The design of the soil reinforcing system shall be according to the applicable AASHTO or AASHTO LRFD Design Specifications for "Inextensible" steel or "Extensible" geosynthetic reinforcement criteria. The reduced section of the soil reinforcing system shall be sized to allowable stress levels at the end of a 75 year design life.

Steel soil reinforcing systems shall be protected by one of the following; epoxy coating, galvanizing or aluminizing. The design life for epoxy and aluminizing shall be assumed to be 16 years. The corrosion protection for the balance of the 75 year total design life shall be provided using a sacrificial steel thickness computed for all exposed surfaces according to the applicable AASHTO or AASHTO LRFD Design Specifications.

Geosynthetic soil reinforcing systems shall be designed to account for the strength reduction due to long-term creep, chemical and biological degradation, as well as installation damage.

To prevent out of plane panel rotations, the soil reinforcement shall be connected to the standard panels in at least two different elevations, vertically spaced no more than 30 in. (760 mm) apart.

The panel embed/soil reinforcement connection capacity shall be determined according to the applicable AASHTO or AASHTO LRFD Design Specifications.

The factor of safety for pullout resistance in the select fill shall not be less than 1.5, based on the pullout resistance at 1/2 in. (13 mm) deformation. Typical design procedures and details, once accepted by the Department, shall be followed. All wall system changes shall be submitted in advance to the Department for approval.

For aesthetic considerations and differential settlement concerns, the panels shall be erected in such a pattern that the horizontal panel joint line is discontinuous at every other panel. This shall be accomplished by alternating standard height and half height panel placement along the leveling pad. Panels above the lowest level shall be standard size except as required to satisfy the top of exposed panel line shown on the contract plans.

At locations where the plans specify a change of panel alignment creating an included angle of 150 degrees or less, precast corner joint elements will be required. This element shall separate the adjacent panels by creating a vertical joint secured by means of separate soil reinforcement.

Isolation or slip joints, which are similar to corner joints in design and function, may be required to assist in differential settlements at locations indicated on the plans or as recommended by the wall supplier. Wall panels with areas greater than 30 sq. ft. (2.8 sq. m) may require additional slip joints to account for differential settlements. The maximum standard panel area shall not exceed 60 sq. ft. (5.6 sq. m).

Construction. The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include any costs related to this technical assistance in the unit price bid for this item.

The foundation soils supporting the structure shall be graded for a width equal to or exceeding the length of the soil reinforcement. Prior to wall construction, the foundation shall be compacted with a smooth wheel vibratory roller. Any foundation soils found to be unsuitable shall be removed and replaced, as directed by the Engineer, and shall be paid for separately according to Section 202.

When structure excavation is necessary, it shall be made and paid for according to Section 502 except that the horizontal limits for structure excavation shall be from the rear limits of the soil reinforcement to a vertical plane 2 ft. (600 mm) from the finished face of the wall. The depth shall be from the top of the original ground surface to the top of the leveling pad. The additional excavation necessary to place the concrete leveling pad will not be measured for payment but shall be included in this work.

The concrete leveling pads shall have a minimum thickness of 6 in. (150 mm) and shall be placed according to Section 503.

As select fill material is placed behind a panel, the panel shall be maintained in its proper inclined position according to the supplier specifications and as approved by the Engineer. Vertical tolerances and horizontal alignment tolerances shall not exceed 3/4 in. (19 mm) when measured along a 10 ft. (3 m) straight edge. The maximum allowable offset in any panel joint shall be 3/4 in. (19 mm). The overall vertical tolerance of the wall, (plumbness from top to bottom) shall not exceed 1/2 in. per 10 ft. (13 mm per 3 m) of wall height. The precast face panels shall be erected to insure that they are located within 1 in. (25 mm) from the contract plan offset at any location to insure proper wall location at the top of the wall. Failure to meet this tolerance may cause the Engineer to require the Contractor to disassemble and re-erect the affected portions of the wall. A 3/4 in. (19 mm) joint separation shall be provided between all adjacent face panels to prevent direct concrete to concrete contact. This gap shall be maintained by the use of bearing pads and/or alignment pins.

The back of all panel joints shall be covered by a geotextile filter material attached to the panels with a suitable adhesive. No adhesive will be allowed directly over the joints.

The select fill and embankment placement shall closely follow the erection of each lift of panels. At each soil reinforcement level, the fill material should be roughly leveled and compacted before placing and attaching the soil reinforcing system. The soil reinforcement and the maximum lift thickness shall be placed according to the supplier's recommended procedures except, the lifts for select fill shall not exceed 10 in. (255 mm) loose measurement or as approved by the Engineer. Embankment shall be constructed according to Section 205.

At the end of each day's operations, the Contractor shall shape the last level of select fill to permit runoff of rainwater away from the wall face. Select fill shall be compacted according to the project specifications for embankment except the minimum required compaction shall be 95 percent of maximum density as determined by Illinois Modified AASHTO T 99. Select fill compaction shall be accomplished without disturbance or distortion of soil reinforcing system and panels. Compaction in a strip 3 ft. (1 m) wide adjacent to the backside of the panels shall be achieved using a minimum of 3 passes of a light weight mechanical tamper, roller or vibratory system. The Engineer will perform one density test per 5000 cu yd (3800 cu m) and not less than one test per 2 ft (0.6 m) of lift.

Method of Measurement. Mechanically Stabilized Earth Retaining Wall will be measured for payment in square feet (square meters). The MSE retaining wall will be measured from the top of exposed panel line to the theoretical top of leveling pad line for the length of the wall as shown on the contract plans.

Basis of Payment. This work, including placement of the select fill within the soil reinforced wall volume shown on the approved shop drawings, precast face panels, soil reinforcing system, concrete leveling pad and accessories will be paid for at the contract unit price per square foot (square meter) for MECHANICALLY STABILIZED EARTH RETAINING WALL.

Concrete coping when specified on the contract plans will be included for payment in this work. Other concrete appurtenances such as anchorage slabs, parapets, abutment caps, etc. will not be included in this work, but will be paid for as specified elsewhere in this contract, unless otherwise noted on the plans.

Excavation necessary to place the select fill for the MSE wall shall be paid for as STRUCTURE EXCAVATION and/or ROCK EXCAVATION FOR STRUCTURES as applicable, according to Section 502.

Fill placed within the foot print of the reinforced soil mass, above the top layer of soil reinforcement and below the bottom of the subgrade or top soil, shall be included in the cost of the MSE wall.

Embankment placed outside of the select fill volume will be measured and paid for according to Sections 202 and/or 204 as applicable.

**BUILDING REMOVAL - CASE I (NON-FRIABLE AND FRIABLE ASBESTOS ABATEMENT)
(BDE)**

Effective: September 1, 1990

Revised: April 1, 2010

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

<u>Bldg. No.</u>	<u>Parcel No.</u>	<u>Location</u>	<u>Description</u>
1	2120811	400 21 st Street, Moline 61265	Commercial Property
2	2XRI063	2101 5 th Avenue, Moline, 61265	Commercial Property

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

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

PROPERTY ACQUIRED FOR
HIGHWAY CONSTRUCTION
TO BE DEMOLISHED BY THE

VANDALS WILL BE PROSECUTED

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

All friable asbestos shall be removed from the building(s) prior to demolition. The Contractor has the option of removing the non-friable asbestos prior to demolition or demolishing the building(s) with the non-friable asbestos in place. Refer to the Special Provisions titled "Asbestos Abatement (General Conditions)", "Removal and Disposal of Friable Asbestos Building No. 1 & 2", and "Removal and Disposal of Non-Friable Asbestos Building No. 1 & 2" contained herein.

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

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

1. BUILDING REMOVAL NO. 1 & 2
2. REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1 & 2
3. REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1 & 2

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

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

ASBESTOS ABATEMENT (GENERAL CONDITIONS): This work consists of the removal and disposal of friable and non-friable asbestos from the building(s) to be demolished. All work shall be done according to the requirements of the U.S. Environmental Protection Agency (USEPA), the Illinois Environmental Protection Agency (IEPA), the Occupational Safety and Health Administration (OSHA), the Special Provisions for "Removal and Disposal of Friable Asbestos, Building No. 1" and "Removal and Disposal of Non-Friable Asbestos, Building No. 1", and as outlined herein.

Sketches indicating the location of Asbestos Containing Material (ACM) are included in the proposal on pages 169 thru 175 and 181 thru 182. Also refer to the Materials Description Table on pages 155 and 176 for a brief description and location of the various materials. Also included is a Materials Quantities Table on pages 156 thru 158 and 177. This table states whether the ACM is friable or non-friable and gives the approximate quantity. The quantities are given only for information and it shall be the Contractor's responsibility to determine the exact quantities prior to submitting his/her bid.

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

The Contractor shall provide a shipping manifest, similar to the one shown on page 183, to the Engineer for the disposal of all ACM wastes.

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

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

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

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

Submittals:

- A. All submittals and notices shall be made to the Engineer, except where otherwise specified herein.
- B. Submittals that shall be made prior to start of work:
 1. Submittals required under Asbestos Abatement Experience.
 2. Submit documentation indicating that all employees have had medical examinations and instruction on the hazards of asbestos exposure, on use and fitting of respirators, on protective dress, on use of showers, on entry and exit from work areas, and on all aspects of work procedures and protective measures as specified in Worker Protection Procedures.
 3. Submit manufacturer's certification stating that vacuums, ventilation equipment, and other equipment required to contain airborne fibers conform to ANSI 29.2.
 4. Submit to the Engineer the brand name, manufacturer, and specification of all sealants or surfactants to be used. Testing under existing conditions will be required at the direction of the Engineer.

5. Submit proof that all required permits, site locations, and arrangements for transport and disposal of asbestos-containing or asbestos-contaminated materials, supplies, and the like have been obtained (i.e., a letter of authorization to utilize designated landfill).
 6. Submit a list of penalties, including liquidated damages, incurred through non-compliance with asbestos abatement project specifications.
 7. Submit a detailed plan of the procedures proposed for use in complying with the requirements of this specification. Include in the plan the location and layout of decontamination units, the sequencing of work, the respiratory protection plan to be used during this work, a site safety plan, a disposal plan including the location of an approved disposal site, and a detailed description of the methods to be used to control pollution. The plan shall be submitted to the Engineer prior to the start of work.
 8. Submit proof of written notification and compliance with Paragraph "Notifications".
- C. Submittals that shall be made upon completion of abatement work:
1. Submit copies of all waste chain-of-custodies, trip tickets, and disposal receipts for all asbestos waste materials removed from the work area;
 2. Submit daily copies of work site entry logbooks with information on worker and visitor access;
 3. Submit logs documenting filter changes on respirators, HEPA vacuums, negative pressure ventilation units, and other engineering controls; and
 4. Submit results of any bulk material analysis and air sampling data collected during the course of the abatement including results of any on-site testing by any federal, state, or local agency.

Certificate of Insurance:

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

Asbestos Abatement Experience:

- A. Company Experience: Prior to starting work, the Contractor shall supply evidence that he/she has been prequalified with the Illinois Capital Development Board and that he/she has been included on the Illinois Department of Public Health's list of approved Contractors.
- B. Personnel Experience:
 1. For Superintendent, the Contractor shall supply:
 - a. Evidence of knowledge of applicable regulations in safety and environmental protection is required as well as training in asbestos abatement as evidenced by the successful completion of a training course in supervision of asbestos abatement as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to the Engineer prior to the start of work.
 - b. Documentation of experience with abatement work in a supervisory position as evidenced through supervising at least two asbestos abatement projects; provide names, contact, phone number, and locations of two projects in which the individual(s) has worked in a supervisory capacity.
 2. For workers involved in the removal of friable and non-friable asbestos, the Contractor shall provide training as evidenced by the participation and successful completion of an accredited training course for asbestos abatement workers as specified in 40 CFR 763, Subpart E, Appendix C, EPA Model Contractor Accreditation Plan. A copy of the certificate of successful completion shall be provided to all employees who will be working on this project.

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

- A. Personal Monitoring: All personal monitoring shall be conducted per specifications listed in OSHA regulation, Title 29, Code of Federal Regulation 1926.58. All area sampling shall be conducted according to 40 CFR Part 763.90. All air monitoring equipment shall be calibrated and maintained in proper operating condition. Excursion limits shall be monitored daily. Personal monitoring is the responsibility of the Contractor. Additional personal samples may be required by the Engineer at any time during the project.
- B. Contained Work Areas for Removal of Friable Asbestos: Area samples shall be collected for the department within the work area daily. A minimum of one sample shall be taken outside of the abatement area removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.

C. Interior Non-Friable Asbestos-Containing Materials: The Contractor shall perform personal air monitoring during removal of all nonfriable Transite and floor tile removal operations. The Engineer will also have the option to require additional personal samples and/or clearance samples during this type of work.

D. Exterior Non-Friable Asbestos-Containing Materials: The Contractor shall perform personal air monitoring during removal of all nonfriable cementitious panels, piping, roofing felts, and built up roofing materials that contain asbestos.

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

E. Air Monitoring Professional

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

REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1 & 2: This work consists of the removal and disposal of all friable asbestos from the building(s) prior to demolition. The work shall be done according to the Special Provision titled "Asbestos Abatement (General Conditions)" and as outlined herein.

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF FRIABLE ASBESTOS, BUILDING NO. 1 & 2 as shown.

REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1 & 2: The Contractor has the option of removing and disposing of the non-friable asbestos prior to demolition of the building(s) or demolishing the building(s) with the non-friable asbestos in place.

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

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

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

This work will be paid for at the contract unit price per lump sum for REMOVAL AND DISPOSAL OF NON-FRIABLE ASBESTOS, BUILDING NO. 1 & 2, as shown.

The cost for this work shall be determined as follows:

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

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

The cost of removing and disposing of the building(s), assuming all asbestos, friable and non-friable is removed first, shall be represented by the pay item "BUILDING REMOVAL NO. 1 & 2".

Regardless of the option chosen by the Contractor, this pay item will not be deleted, nor will the pay item BUILDING REMOVAL NO. 1 & 2 be deleted.

SECTION 1
 1.1 Survey Summary Sheet

SITE INFORMATION:

FAI Route:	<u>74</u>	Address:	<u>400 21st Street</u>
County:	<u>Rock Island</u>	Address:	
IDOT Job No:	<u>R-92-012-08</u>	City, State Zip	<u>Moline, Illinois 61265</u>
Section:	<u>81B</u>	Property Type:	<u>Commercial Property</u>
Parcel No:	<u>2120811</u>	Construction Date:	<u><Circa 1920's</u>
IDOT Work Order No:	<u>484</u>	Building Size (sqft):	<u>34,810 SF</u>

Asbestos Containing Materials	
Survey Date	<u>July 25th & 26th, 2013</u>
By Whom:	<u>PSI, Inc.</u> Firm <u>Tom Novatka</u> Inspector <u>100-09856</u> IDPH License No.
Results	
Number of Material Types Sampled:	<u>41</u>
Number of Samples Collected:	<u>125</u>
Number of Materials Testing Positive:	<u>13</u>
Was Friable ACM Found?	<u>Yes</u>
Were Roofing Materials Sampled?	<u>Yes</u>
Are There Unique State or Local Requirements?	<u>Yes</u>
Laboratory Utilized:	
Name:	<u>PSI, Inc.</u>
Address:	<u>850 Poplar Street</u> <u>Pittsburgh, PA 15220</u>
Building Access Limitations:	

SECTION 1
 1.2 Survey Summary & Results

ACM SURVEY RESULTS - Parcel No. 2120811
Commercial Property
400 21st Street
Moline, Illinois 61265

The following homogeneous building material types were sampled as part of this survey and their results are summarized in the table below:

MTL #	MATERIAL DESCRIPTION	LOCATION	F/NF ¹	COND. ²	% ACM ³	# SAMPLES	QUANTITY (ENG/MET)
01	Black patching material	East roof	NF	Good	ND	3	20 sf 1.9 sm
02	Built-up roofing	Middle field roof	NF	Good	ND	3	16,500 sf 1,532.9 sm
03	Edge flashing	Middle roof	NF	Good	ND	3	860 lf 262.1 lm
04	Parapet cap sealant	Middle roof	NF	Good	10%	3	200 lf 61.0 lm
05	White window glazing	Middle building, sky light	NF	Good	4%	3	2,000 lf 609.6 lm
06	Black sealant	Middle roof skylight, windows	NF	Good	12%	3	2,000 lf 609.6 lm
07	Built-up roofing	Warehouse 1 roof	NF	Good	ND	3	5,650 sf 524.9 sm
08	Edge and equipment flashing	Warehouse 1 roof	NF	Good	15%	3	460 lf 140.2 lm
09	Built-up roofing	Warehouse 2 roof	NF	Good	ND	3	2,020 sf 187.7 sm
10	Edge flashing	Warehouse 2 roof	NF	Good	10%	3	180 lf 54.9 lm
11	Built-up roofing	Warehouse 3 roof	NF	Good	ND	3	1,425 sf 132.4 sm
12	Edge flashing	Warehouse 3 roof	NF	Good	ND	3	110 lf 33.5 lm
13	2' x 4' white with thin fissures and dots lay-in ceiling tile	Middle building, locker room 2, above false ceiling	F	Good	ND	3	1,064 sf 98.8 sm
14	Textured ceiling material	Break room	NF	Good	ND	3	450 sf 41.8 sm
15	Drywall/joint compound	Middle building, locker room, office area, break room and restroom 2	F	Good	ND/ND	3	6,650 sf 617.8 sm
16	4" gray vinyl basecove/mastic	Office area, 10 restroom 1 and 2	NF	Good	ND/ND	3	146.3 lm 146.3 lm
17	12" x 12" gray with gray splotches vinyl floor tile/mastic	Office area 9	NF	Good	ND/ND	3	175 sf 16.3 sm
18	12" x 12" gray with gray and white splotches vinyl floor tile	Office area 10	NF	Good	ND/ND	3	110 sf 10.2 sm

¹ F = Friable; NF = Nonfriable Friability is further defined in section 4.
² Cond. = Condition Of Materials Either good, fair or poor.
³ ND = None Detected
 * Point Count Analysis

SECTION 1
 1.2 Survey Summary & Results

ACM SURVEY RESULTS - Parcel No. 2120811
Commercial Property
400 21st Street
Moline, Illinois 61265

The following homogeneous building material types were sampled as part of this survey and their results are summarized in the table below:

MTL #	MATERIAL DESCRIPTION	LOCATION	F/NF ¹	COND. ²	% ACM ³	# SAMPLES	QUANTITY (ENG/MET)
19	12" x 12" cream with gray splotches vinyl floor tile/mastic	Restroom 2	NF	Good	Tile ND Mastic 3%	3	35 sf 3.3 sm
20	12 x 12" gray vinyl floor tile/mastic	Restroom 1	NF	Good	ND/ND	3	80 sf 7.4 sm
21	12" x 12" beige with brown splotches vinyl floor tile/mastic	Restroom 1	NF	Good	Tile ND/ND Mastic 5%	3	80 sf 7.4 sm
22	12 x 12" tan with brown and white splotches vinyl floor tile/mastic	Office area	NF	Good	Tile ND Mastic 5%	3	1,920 sf 178.4 sm
23	2' x 4' white with medium fissures and dots lay-in ceiling tile	Office areas, 1, 3, 5, .6, and 7	F	Good	ND	3	1,515 sf 140.7 sm
24	2' x 4' white with medium gouges and dots lay-in ceiling tile	Office areas, 1, 3, 5, and 9	F	Good	ND	3	95 sf 8.8 sm
25	2' x 2' white with layered pattern lay-in ceiling tile	Office area 4, restroom 1	F	Good	ND	3	145 sf 13.5 sm
26	3" OD corrugated pipe insulation	Above ceiling, office area south end	F	Good	40%	3	40 lf 12.2 lm
27	Mudded joint packing on 3" OD pipe insulation	Office area 5, above ceiling	F	Fair	50%	3	1 ea
28	Original drywall/joint compound	Office area 1 and 2, upper ceilings and walls	F	Good	Drywall ND Joint Compound <1%	3	710 sf 66.0 sm
29	Drywall/joint compound	Restroom 2	F	Good	ND/ND	3	230 sf 21.4 sm
30	1' x 1' acoustical ceiling tile/mastic	Office area 1, above false ceiling	F	Good	Tile ND Mastic 3%	3	535 sf 49.7 sm
31	Vermiculite insulation	Office area 1 and 2 above ceilings	F	Good	ND	3	643 sf 59.7 sm
32	Layered plaster	Restroom 1, walls	NF	Good	ND	3	340 sf 31.6 sm
33	Window glazing	Office area 1, hallway windows	NF	Good	3%	3	20 lf 6.1 lm

¹ F = Friable; NF = Nonfriable Friability is further defined in section 4.
² Cond. = Condition Of Materials Either good, fair or poor.
³ ND = None Detected
 * Point Count Analysis

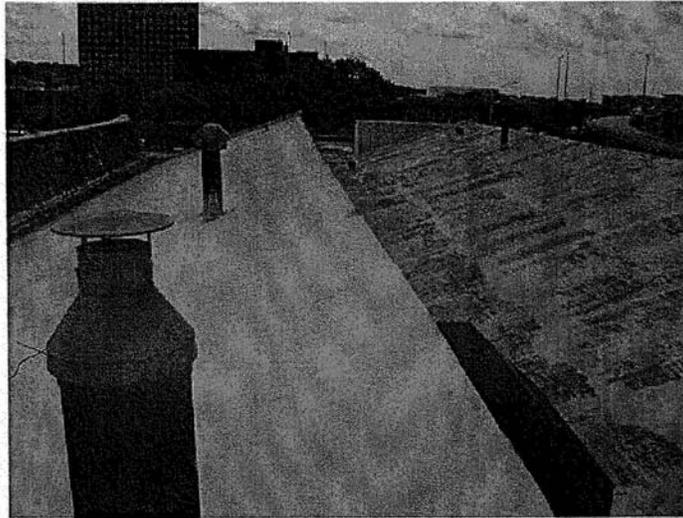
SECTION 1
 1.2 Survey Summary & Results

ACM SURVEY RESULTS - Parcel No. 2120811
Commercial Property
400 21st Street
Moline, Illinois 61265

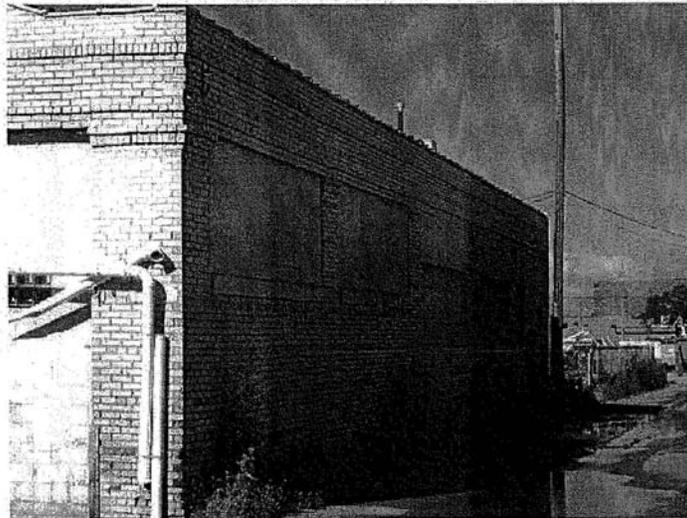
The following homogeneous building material types were sampled as part of this survey and their results are summarized in the table below:

MTL #	MATERIAL DESCRIPTION	LOCATION	F/NF ¹	COND. ²	% ACM ³	# SAMPLES	QUANTITY (ENG/MET)
34	Stucco material	Old walls	NF	Good	ND	5	2,500 sf 232.3 lm
35	Window glazing	Around glass block windows	NF	Good	3%	3	15 lf 4.6 lm
36	4" gray vinyl basecove/mastic	Office area 10	NF	Good	ND/ND	3	40 lf 12.2 lm
37	Window glazing	Warehouse 2, south windows	NF	Good	ND	3	365 lf 111.3 lm
38	2' x 4' white with random hole pattern lay-in ceiling tile	Warehouse 2, north side	F	Good	ND	3	1,055 sf 98.0 sm
39	2' x 4' white with gouges and dots lay-in ceiling tile	East bay, metrology lab	F	Good	ND	3	400 sf 37.2 sm
40	Drywall/joint compound	East bay, metrology lab	F	Good	ND/ND	3	360 sf 33.4 sm
41	3" gray vinyl basecove/mastic	East bay, metrology lab	NF	Good	ND/ND	3	35 lf 10.7 lm
TOTAL QUANTITY OF ACM							4,915 lf 2,570 sf
ESTIMATED ABATEMENT COST							\$33,662.75

¹ F = Friable; NF = Nonfriable Friability is further defined in section 4.
² Cond. = Condition Of Materials Either good, fair or poor.
³ ND = None Detected
^{*} Point Count Analysis



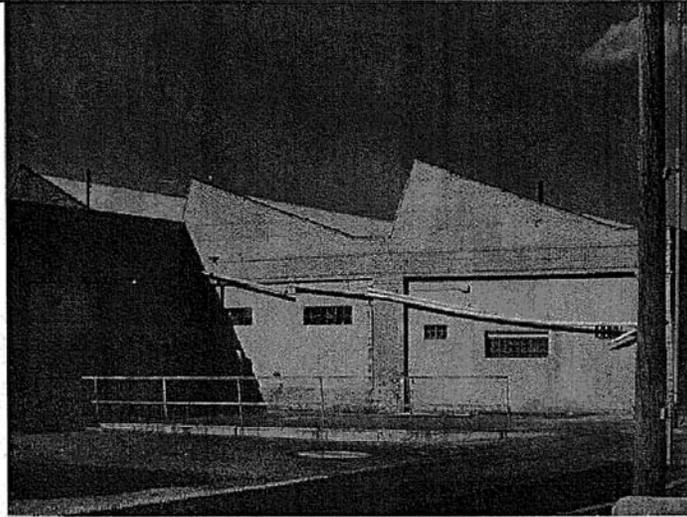
Main Building North Face



Main Building South Face

8070 North Route 47
Rock Island County
Moline, Illinois

Parcel No.	3VC0008
Work Order No.	484
PSI Project No.	0047-162

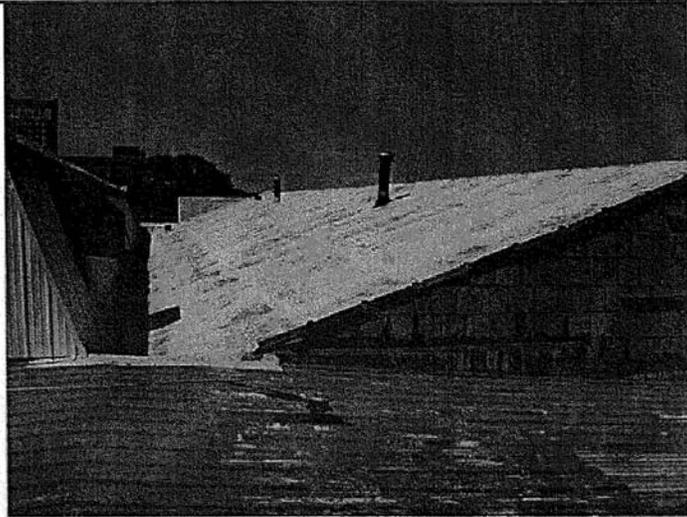


Main Building West Face



Main Building East Face

8070 North Route 47	Parcel No.	3VC0008
Rock Island County	Work Order No.	484
Moline, Illinois	PSI Project No.	0047-162

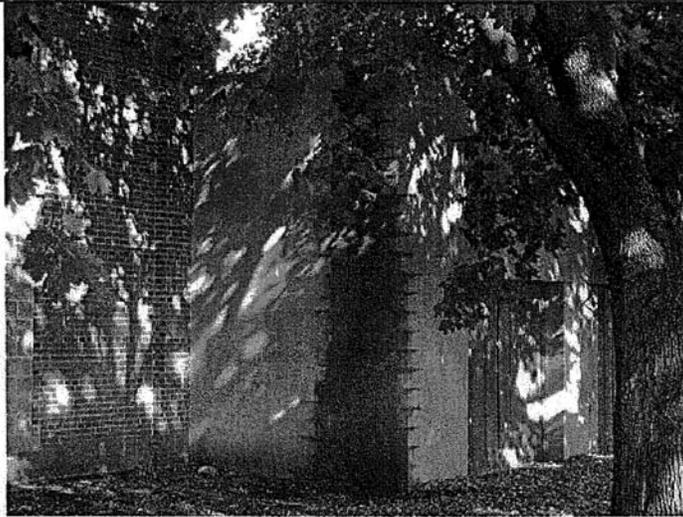


Main Building Roof

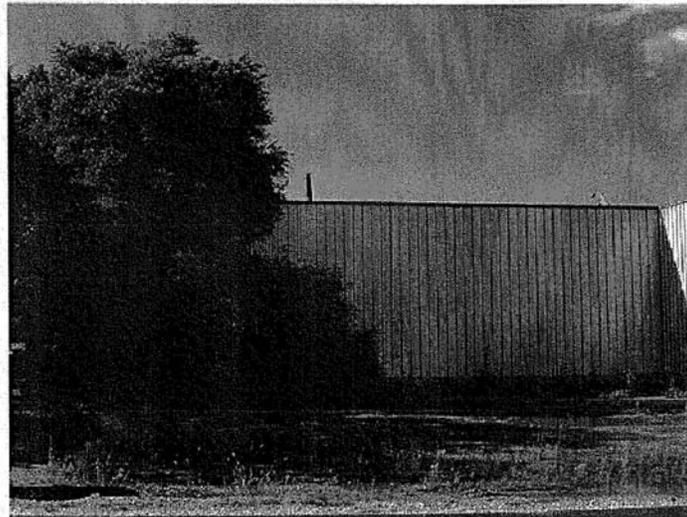
Main Building East Face

8070 North Route 47
Rock Island County
Moline, Illinois

Parcel No.	3VC0008
Work Order No.	484
PSI Project No.	0047-162



West Building North Face

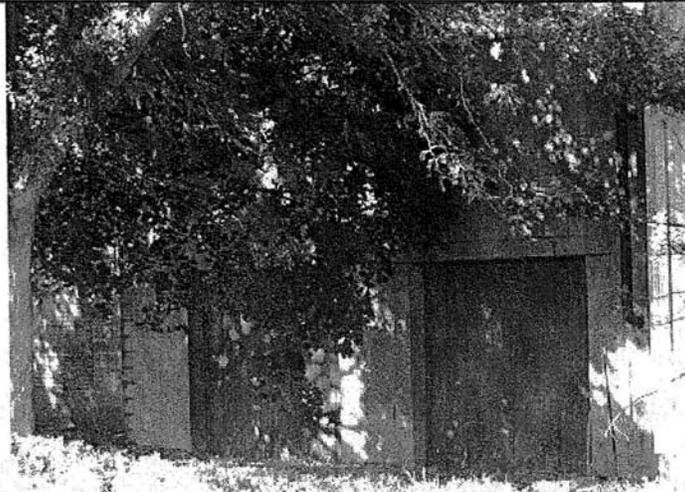


West Building South Face

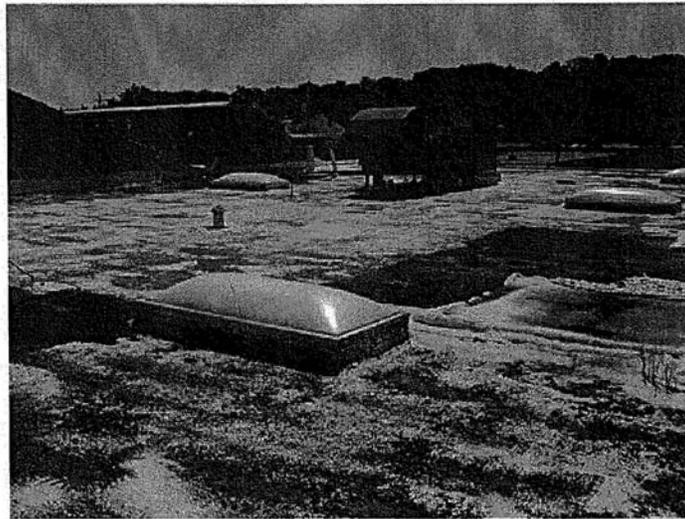
8070 North Route 47
Rock Island County
Moline, Illinois

Parcel No.
Work Order No.
PSI Project No.

3VC0008
484
0047-162



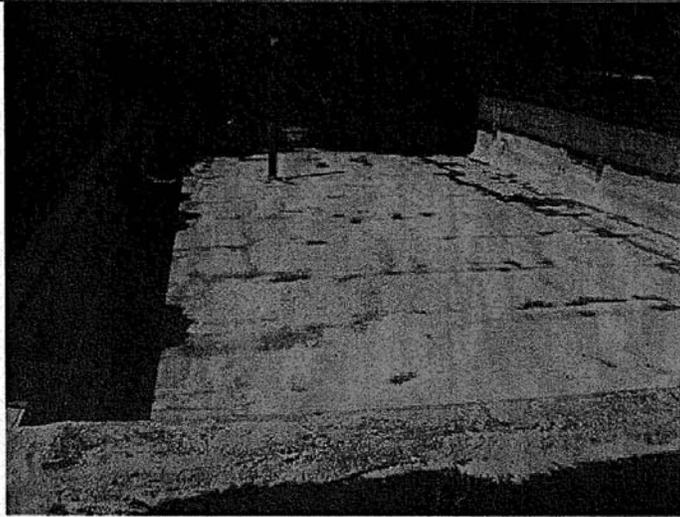
West Building West Face



West Building East Face

8070 North Route 47
Rock Island County
Moline, Illinois

Parcel No.	3VC0008
Work Order No.	484
PSI Project No.	0047-162



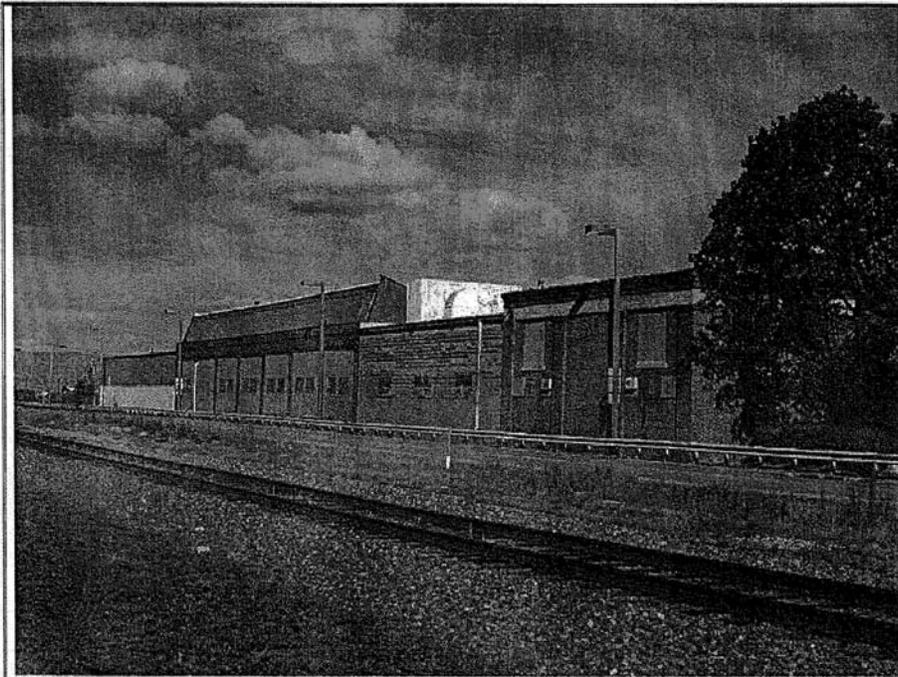
West Building Roof



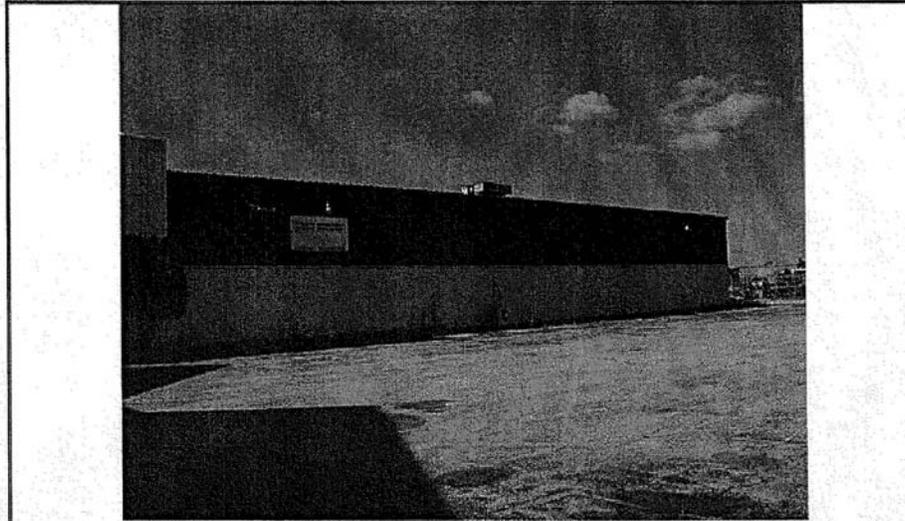
West Building Roof

8070 North Route 47
Rock Island County
Moline, Illinois

Parcel No.	3VC0008
Work Order No.	484
PSI Project No.	0047-162



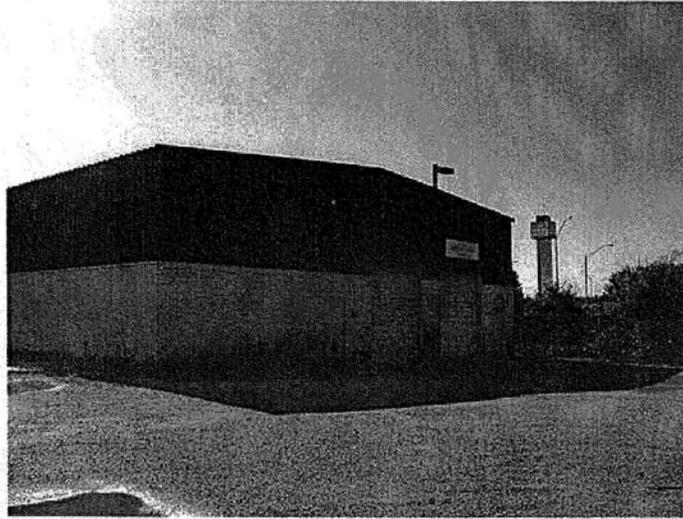
East Building North Face



East Building South Face

400 21st Street
Rock Island County
Moline, Illinois

Parcel No.	2120811
Work Order No.	484
PSI Project No.	0047-162



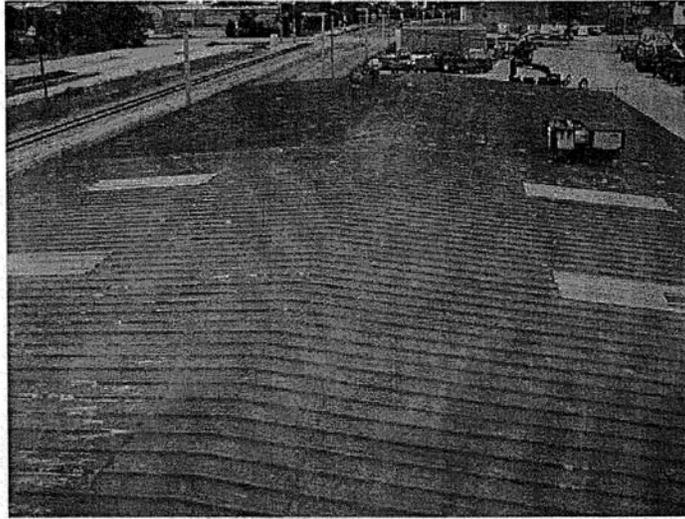
East Building East Face



East Building West Face

400 21st Street
Rock Island County
Moline, Illinois

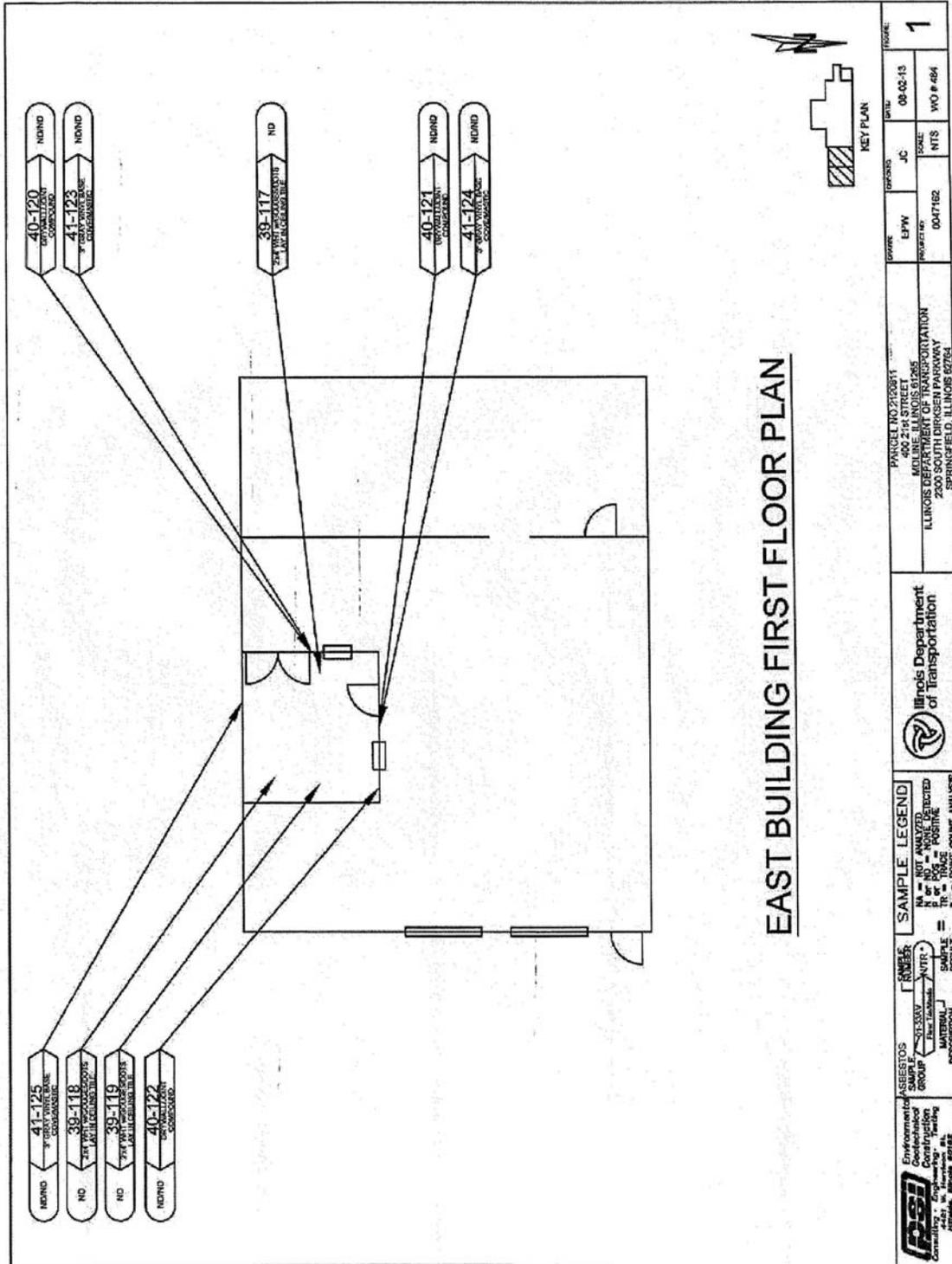
Parcel No.	2120811
Work Order No.	484
PSI Project No.	0047-162



East Building Roof

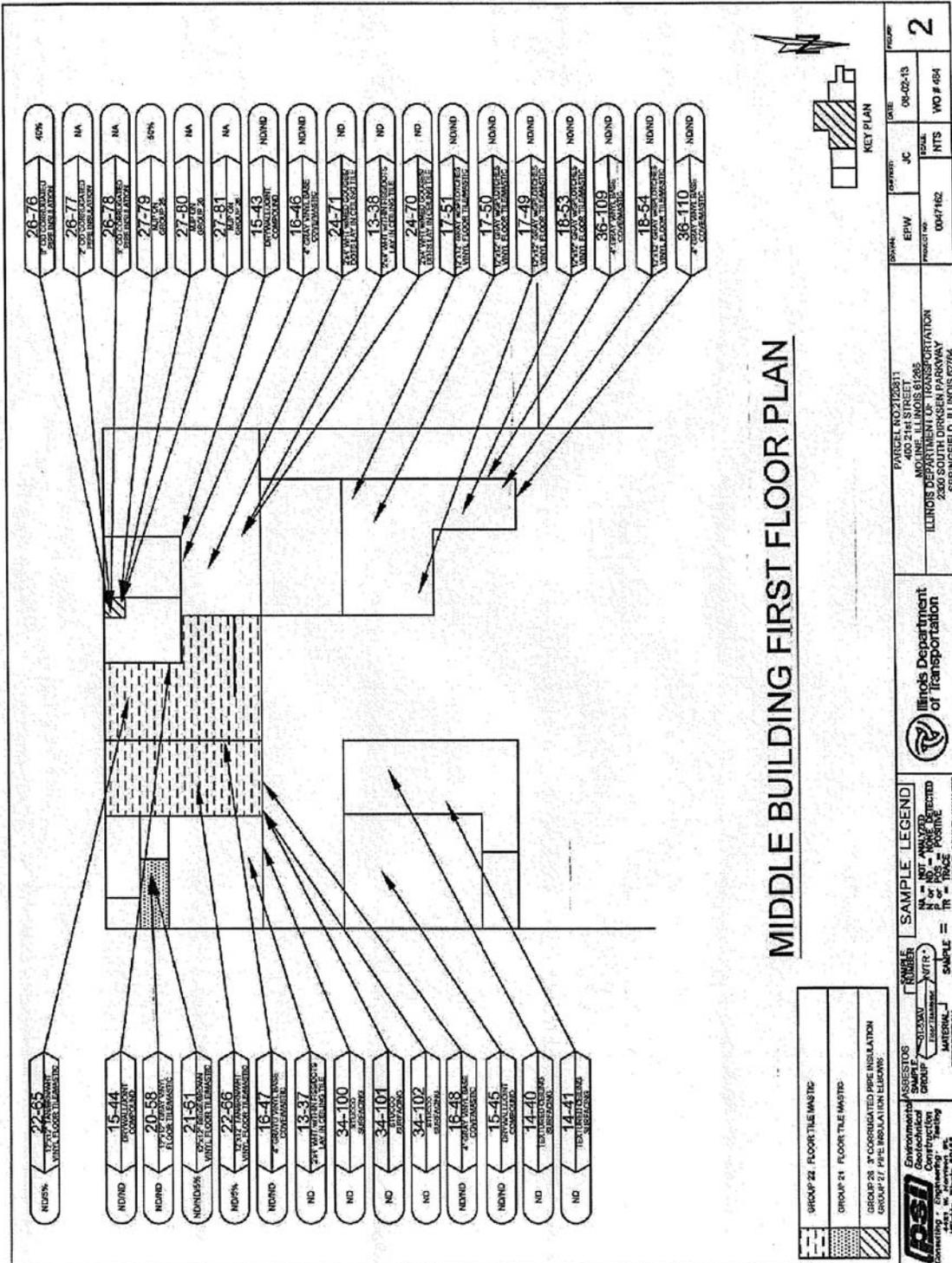
400 21st Street
Rock Island County
Moline, Illinois

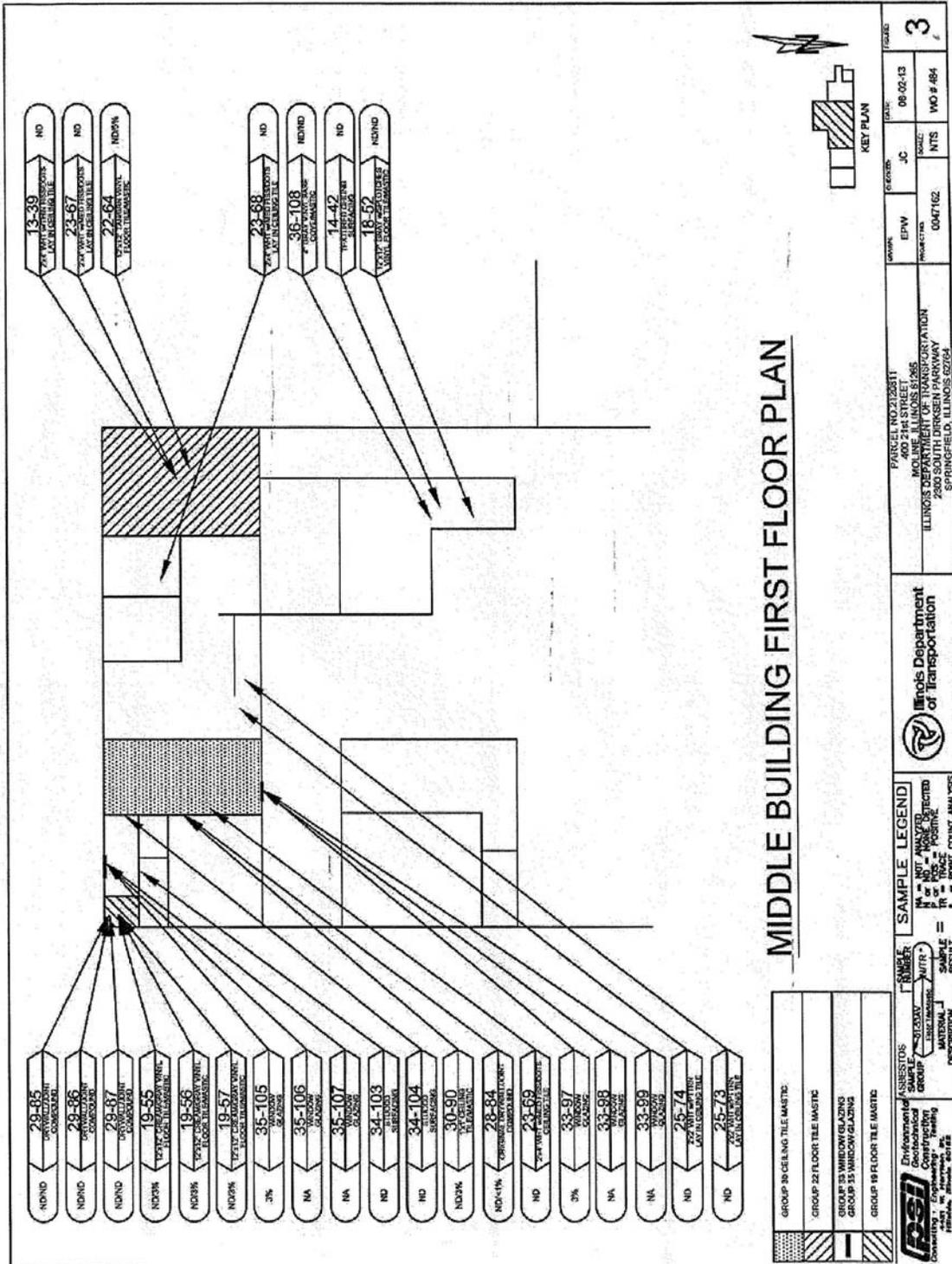
Parcel No.	2120811
Work Order No.	484
PSI Project No.	0047-162



EAST BUILDING FIRST FLOOR PLAN

PSI Environmental Geotechnical Construction Consulting, Inc. 14241 W. Lincoln Ave. Chicago, Illinois 60658 (773) 338-7200	SAMPLE LEGEND NA = NOT ANALYZED N = NO TRACE DETECTED R = NO TRACE POSITIVE TR = TRACE * = POINT COUNT ANALYSIS	SAMPLE GROUP [ASBESTOS] [LEAD] [PCB] [MERCURY] [MTR] [MATERIAL] [PAINT] [PAINT] [PAINT] [PAINT] [PAINT] [PAINT]	Illinois Department of Transportation	PROJECT NO. 0047162 PROJECT NAME: 0047162	DRAWN BY: EPWY CHECKED BY: JC	DATE: 08-02-13 SCALE: NTS W/O # 484	FIGURE: 1
				PARCEL NO. 2103871 402 21st STREET MCHINE, ILLINOIS 61265 ILLINOIS DEPARTMENT OF TRANSPORTATION 2300 SOUTH ILLINOIS STREET SPRINGFIELD, ILLINOIS 62764			





MIDDLE BUILDING FIRST FLOOR PLAN

- | | | |
|--------|--------------|----|
| 29-85 | UNIDENTIFIED | NO |
| 29-86 | UNIDENTIFIED | NO |
| 29-87 | UNIDENTIFIED | NO |
| 19-85 | UNIDENTIFIED | NO |
| 19-86 | UNIDENTIFIED | NO |
| 19-87 | UNIDENTIFIED | NO |
| 35-105 | UNIDENTIFIED | NO |
| 35-106 | UNIDENTIFIED | NO |
| 35-107 | UNIDENTIFIED | NO |
| 34-103 | UNIDENTIFIED | NO |
| 34-104 | UNIDENTIFIED | NO |
| 30-90 | UNIDENTIFIED | NO |
| 28-84 | UNIDENTIFIED | NO |
| 23-69 | UNIDENTIFIED | NO |
| 33-97 | UNIDENTIFIED | NO |
| 33-98 | UNIDENTIFIED | NO |
| 33-99 | UNIDENTIFIED | NO |
| 25-74 | UNIDENTIFIED | NO |
| 25-73 | UNIDENTIFIED | NO |
-
- | | | |
|--------|--------------|----|
| 13-39 | UNIDENTIFIED | NO |
| 23-67 | UNIDENTIFIED | NO |
| 22-64 | UNIDENTIFIED | NO |
| 23-88 | UNIDENTIFIED | NO |
| 36-108 | UNIDENTIFIED | NO |
| 14-42 | UNIDENTIFIED | NO |
| 18-52 | UNIDENTIFIED | NO |

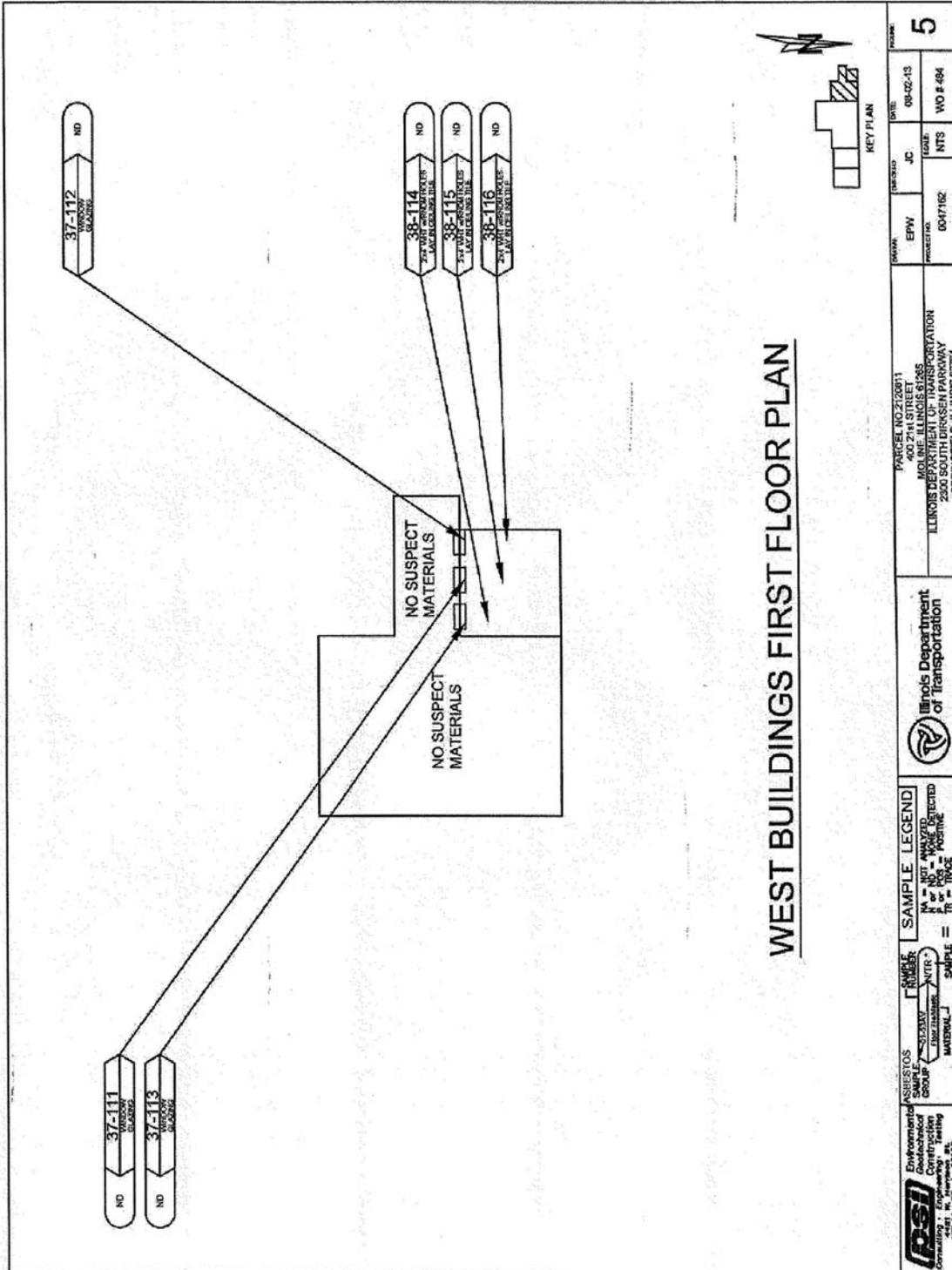
GROUP 30 CEILING TILE MATRIC	GROUP 22 FLOOR TILE MATRIC	GROUP 15 WINDOW GLAZING	GROUP 19 FLOOR TILE MATRIC
------------------------------	----------------------------	-------------------------	----------------------------

GROUP	ANALYSIS	RESULT
GROUP 15 WINDOW GLAZING	NOT ANALYZED	
GROUP 19 FLOOR TILE MATRIC	NOT ANALYZED	
GROUP 22 FLOOR TILE MATRIC	NOT ANALYZED	
GROUP 30 CEILING TILE MATRIC	NOT ANALYZED	

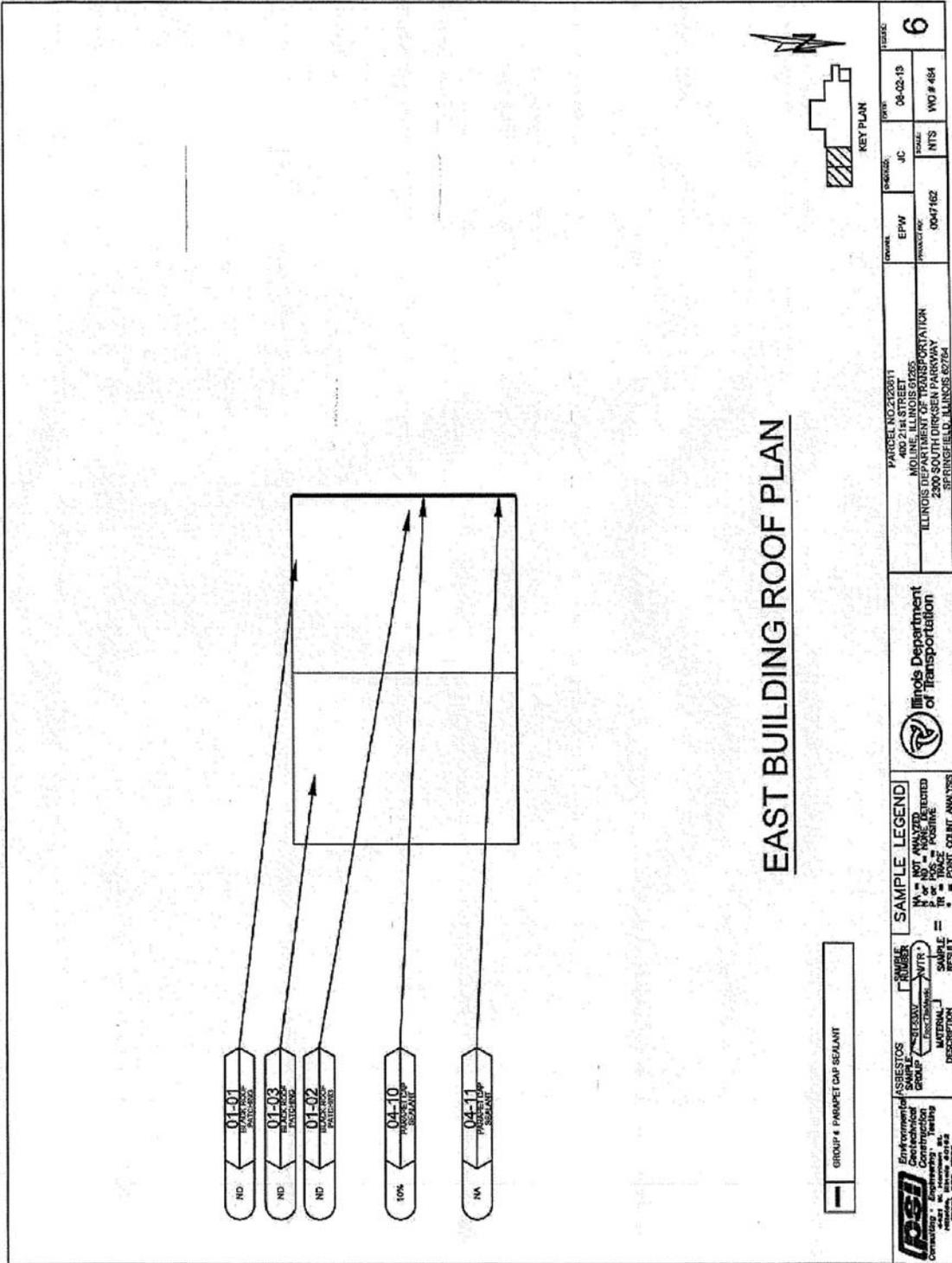
Environmental	ASBESTOS	GROUP 15 WINDOW GLAZING	GROUP 19 FLOOR TILE MATRIC	GROUP 22 FLOOR TILE MATRIC	GROUP 30 CEILING TILE MATRIC
Construction	ASBESTOS	GROUP 15 WINDOW GLAZING	GROUP 19 FLOOR TILE MATRIC	GROUP 22 FLOOR TILE MATRIC	GROUP 30 CEILING TILE MATRIC
Material	ASBESTOS	GROUP 15 WINDOW GLAZING	GROUP 19 FLOOR TILE MATRIC	GROUP 22 FLOOR TILE MATRIC	GROUP 30 CEILING TILE MATRIC
Description	ASBESTOS	GROUP 15 WINDOW GLAZING	GROUP 19 FLOOR TILE MATRIC	GROUP 22 FLOOR TILE MATRIC	GROUP 30 CEILING TILE MATRIC

PARCEL NO 212811
 400 214 STREET
 Moline, Illinois 61205
 ILLINOIS DEPARTMENT OF TRANSPORTATION
 2500 EAST MONROE STREET
 SPRINGFIELD, ILLINOIS 62764

DATE: 06-02-13
 DRAWN BY: JC
 CHECKED BY: NTS
 PROJECT NO: 0047162
 SHEET NO: 3



PSI Environmental Geotechnical Construction Consulting 14251 N. Riverside, #1 Chicago, IL 60641 (773) 231-0234	ASBESTOS SAMPLE GROUP: [] [] HEAVY [] LIGHT MATERIAL DESCRIPTION:	SAMPLE LEGEND NA = NOT ANALYZED N = NO TRACE DETECTED Tr = TRACE P = POSITIVE * = POINT COUNT ANALYSIS	Illinois Department of Transportation	PARCEL NO. 21-0811 401 21st STREET MOBILE, ILLINOIS 61345 ILLINOIS DEPARTMENT OF TRANSPORTATION 2300 SOUTH DIRKSEN PARKWAY SPRINGFIELD, ILLINOIS 62704	DRAWN: EPW PROJECT NO.: 0047162 DATE: 08-02-13 SHEET NO.: 5
	PROJECT: 0047162 DATE: 08-02-13 SHEET NO.: 5				



SECTION 1
 1.1 Survey Summary Sheet

SITE INFORMATION:

Route:	<u>FAI 74</u>	Address:	<u>2101 5th Avenue</u>
County:	<u>Rock Island</u>	Address:	
IDOT Job No:	<u>R-92-001-72</u>	City, State Zip	<u>Moline, Illinois 61265</u>
Section:	<u>81B</u>	Property Type:	<u>Commercial Property</u>
Parcel No:	<u>2XR1063</u>	Construction Date:	<u>1954</u>
IDOT Work Order No:	<u>609</u>	Building Size (sqft):	<u>10,050 SF</u>

Asbestos Containing Materials	
Survey Date	<u>November 2, 2016</u>
By Whom:	<u>PSI, Inc.</u> <u>Ciaran McGowan</u> <u>100-18958</u>
	Firm Inspector IDPH License No.
Results	
Number of Material Types Sampled:	<u>13</u>
Number of Samples Collected:	<u>39</u>
Number of Materials Testing Positive:	<u>3</u>
Was Friable ACM Found?	<u>No</u>
Were Roofing Materials Sampled?	<u>Yes</u>
Are There Unique State or Local Requirements?	<u>Yes</u>
Laboratory Utilized:	
Name:	<u>PSI, Inc.</u>
Address:	<u>850 Poplar Street</u> <u>Pittsburgh, PA 15220</u>
Building Access Limitations:	
<u>None</u>	

SECTION 1
 1.2 Survey Summary & Results

ACM SURVEY RESULTS - Parcel No. 2XRI063
Commercial Property
2101 5th Avenue
Moline, Illinois 61265

The following homogeneous building material types were sampled as part of this survey and their results are summarized in the table below:

MTL #	MATERIAL DESCRIPTION	LOCATION	F/NF ¹	COND. ²	% ACM ³	# SAMPLES	QUANTITY (ENG/MET)
01	White window glazing	Storage area and shop floor windows	NF	Poor	ND	3	850 LF 259 IM
02	1" x 1" white pitted ceiling tile	Reception, south room, breakroom and office	F	Good	ND	3	1,800 SF 167.2 IM
03	2" x 2" white rough ceiling tile	Reception, south room, breakroom and office	F	Good	ND	3	850 SF 79.0 SM
04	9" x 9" brown floor tile/mastic	Small area in the center of storage area	NF	Good	Tile 2% Mastic ND	3	80 SF 7.4 SM
05	12" x 12" blue floor tile/mastic	Safe	NF	Good	ND/ND	3	50 SF 4.6 SM
06	Gray basecove/mastic	South Office	NF	Good	ND/ND	3	40 LF 12.02 IM
07	Brown basecove/mastic	West office hallway and restroom	NF	Good	ND/ND	3	60 LF 18.3 IM
08	Drywall/joint compound	Hallway, reception, offices and breakroom	NF	Good	ND/ND	3	1,000 SF 92.9 SM
09	Yellow vinyl sheet flooring	West, restroom	NF	Good	10%	3	40 SF 3.7 SM
10	Brown carpet mastic	Reception, waiting room, breakroom and offices	NF	Good	ND	3	850 SF 79.0 SM
11	Black tar material	Roof, flashing and penetrations	NF	Good	5%	3	400 LF 121.9 IM
12	Rolled roofing	Roof, south end, and southwest corner	NF	Good	ND	3	200 SF 18.6 SM
13	Black rolled roofing	Roof	NF	Good	ND	3	10,000 SF 929.0 SM
TOTAL QUANTITY OF ACM							120 SF 400 LF
ESTIMATED ABATEMENT COST							\$3,340.00

¹ F = Friable; NF = Nonfriable Friability is further defined in section 4.
² Cond. = Condition Of Materials Either good, fair or poor.
³ ND = None Detected
 * Point Count Analysis



North Face



South Face

2101 5th Avenue
Rock Island, County
Moline, Illinois

Parcel No.	2XRI063
Work Order No.	609
PSI Project No.	00471712



East Face



West Face

2101 5th Avenue
Rock Island, County
Moline, Illinois

Parcel No.	2XRI063
Work Order No.	609
PSI Project No.	00471712



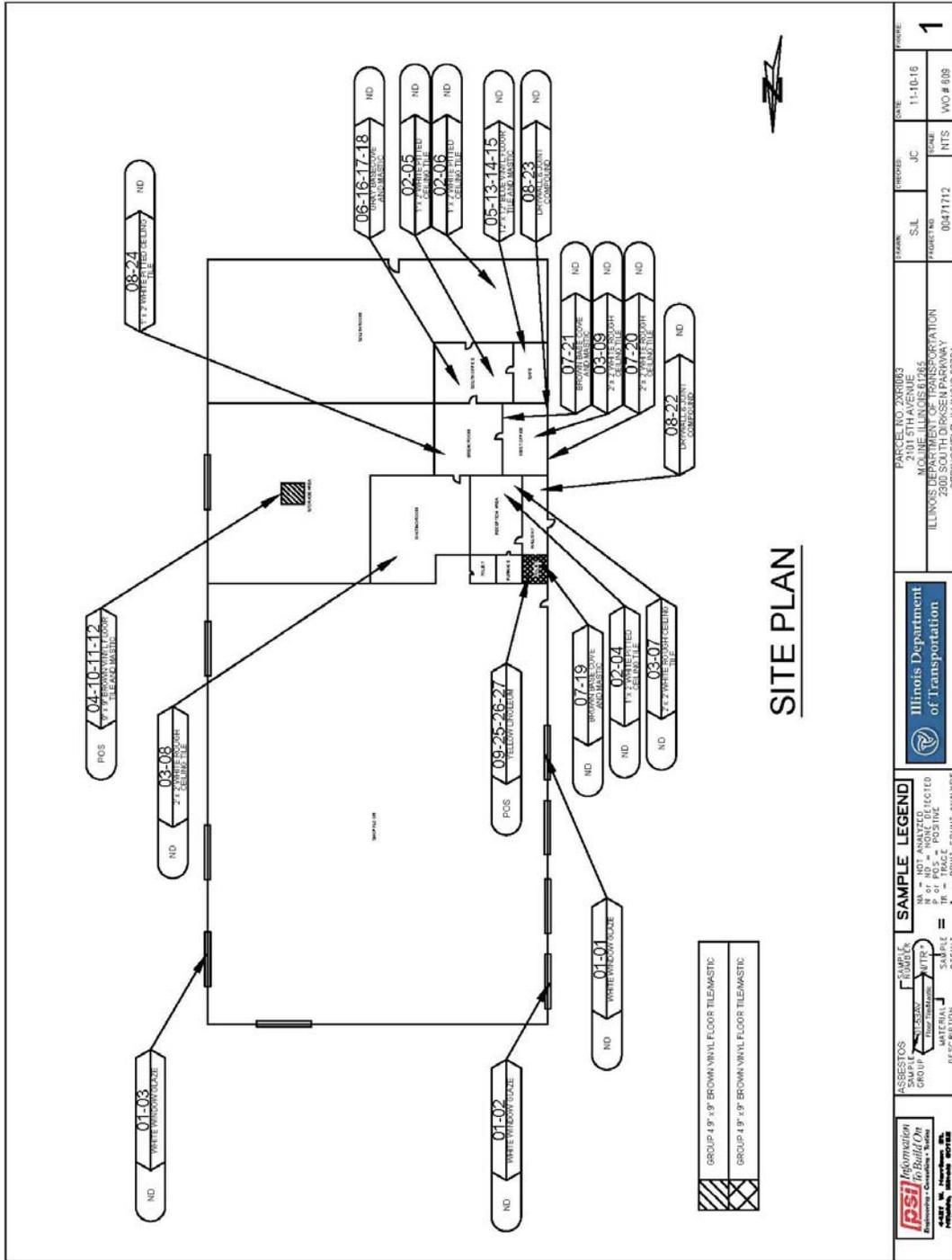
North Face

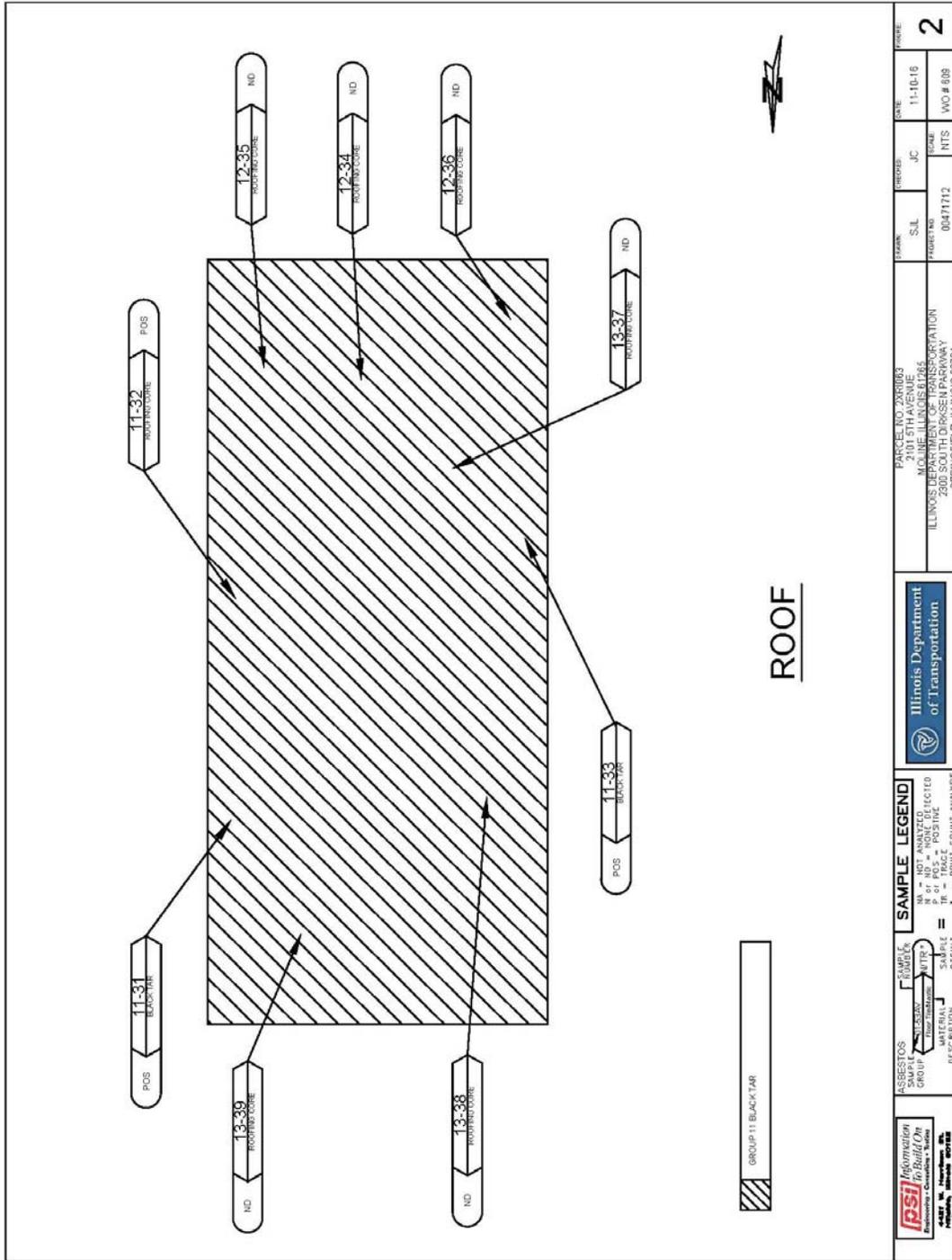


South Face

2101 5th Avenue
Rock Island, County
Moline, Illinois

Parcel No.	2XRI063
Work Order No.	609
PSI Project No.	00471712





IPSI Information In Built On Environmental • Chemical • Metals ASBESTOS • LEAD • PCBs • VOCs • SVOCs • PFAS	SAMPLE LEGEND NA = NOT ANALYZED P = POSITIVE TR = TRACE * = POINT COUNT ANALYSIS	Illinois Department of Transportation	PARCEL NO. 2401003 MOBILE ILLINOIS 61866 ILLINOIS DEPARTMENT OF TRANSPORTATION 2300 SOUTH CRISSEN PARKWAY SPRINGFIELD, ILLINOIS 62708	DRAWN: S.L. CHECKED: JC DATE: 11-10-16	PROJECT: 2 SCALE: NTS WORK NO: 608
			ASBESTOS GROUP: [] LEAD: [] PCBs: [] SVOCs: [] PFAS: []	SAMPLE # = RESULT =	

APPENDIX D

SHIPPING MANIFEST
 Generator

1. Work Site Name and Mailing Address		Owner's Name		Owner's Telephone No.	
2. Operator's Name and Address				Operator's Telephone No.	
3. Waste Disposal Site (WDS) Name Mailing Address, and Physical Site Location				WDS Telephone No.	
4. Name and Address of Responsible Agency					
5. Description of Materials					
6. Containers		No.	Type		
7. Total Quantity		M ³	(Yd ³)		
8. Special Handling Instructions and Additional Information					
9. OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and government regulations.					
Printed/Typed Name & Title		Signature		Month Day Year	
Transporter					
10. Transporter 1 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name & Title		Signature		Month Day Year	
Address and Telephone No.					
11. Transporter 2 (Acknowledgement of Receipt of Materials)					
Printed/Typed Name & Title		Signature		Month Day Year	
Address and Telephone No.					
Disposal Site					
12. Discrepancy Indication Space					
13. Waste Disposal Site Owner or Operator: Certification of Receipt of Asbestos Materials Covered By This Manifest Except As Noted in Item 12					
Printed/Typed Name & Title		Signature		Month Day Year	

APPENDIX D

INSTRUCTIONS

Waste Generator Section (Items 1-9)

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

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

APPENDIX D

INSTRUCTIONS

Transporter Section (Items 10 & 11)

10. & 11. Enter name, address, and telephone number of each transporter used, if applicable. Print or type the full name and title of person accepting responsibility and acknowledging receipt of materials as listed on this waste shipment record for transport.

NOTE: The transporter shall retain a copy of this form.

Disposal Site Section (Items 12 & 13)

12. The authorized representative of the WDS shall note in this space any discrepancy between waste described on this manifest and waste actually received as well as any improperly enclosed or contained waste. Any rejected materials should be listed and destination of those materials provided. A site that converts asbestos-containing waste material to nonasbestos material is considered a WDS.
13. The signature (by hand) of the authorized WDS agent indicates acceptance and agreement with statements on this manifest except as noted in Item 12. The date is the date of signature and receipt of shipment.

NOTE: The WDS shall retain a completed copy of this form. The WDS shall also send a completed copy to the operator listed in Item 2.

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

Effective: January 1, 2006

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

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
The BNSF Railway Company 80 – 44 th Avenue N.E. Minneapolis, Minnesota 55421	0	4 per day at 25 mph

Calvin Nutt, Manager of Public Projects – IA, IL,WI

DOT/AAR No.: 093 673T
RR Division: Chicago

RR Mile Post: 249.46
RR Sub-Division: Barstow – Rock1

For Freight/Passenger Information Contact: Brian Langloss Phone: (406)670-9935
Manager of Track Maintenance (MTM) brian.langloss@bnsf.com

For Insurance Information Contact: Rosa Martinez at Marsh USA Phone: (214)303-8519

Comments:

Railroad flaggers are required if working within 25 feet, horizontally, of the tracks or whenever working over the tracks. Contact Brian Langloss at least one week in advance to schedule a flagger.

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

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

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

RAILROAD PROTECTIVE LIABILITY INSURANCE (BDE)

Effective: December 1, 1986

Revised: January 1, 2006

Description. Railroad Protective Liability and Property Damage Liability Insurance shall be carried according to Article 107.11 of the Standard Specifications. A separate policy is required for each railroad unless otherwise noted.

NAMED INSURED & ADDRESS	NUMBER & SPEED OF PASSENGER TRAINS	NUMBER & SPEED OF FREIGHT TRAINS
Iowa Interstate Railroad, Ltd. (IAIS) 5900 Sixth Street SW Cedar Rapids, Iowa 52404	0	4 per day at 20 MPH
Greg D. Mitchell, Office Engineer		
At BNSF DOT/AAR No.: 093 673T RR Division: Chicago	At BNSF RR Mile Post: 249.46 RR Sub-Division: Barstow – Rock1	
For Freight/Passenger Information Contact: Manager of Track Maintenance (MTM)	Jeremiah Berhenke	Phone: 319-430-1346
For Insurance Information Contact:	Greg D. Mitchell	Phone: 319-298-5424 gdmitchell@iaisrr.com

Comments: The IAIS operates trains on the BNSF line in this area, therefore flagging will be handled by the BNSF and not required from the IAIS. However the IAIS does own property to the north and south of the BNSF line, therefore insurance will be required.

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

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

The Contractor will be advised when the Department has received approval of the insurance from the railroad(s). Before any work begins on railroad right-of-way, the Contractor shall submit to the Engineer evidence that the required insurance has been approved by the railroad(s). The Contractor shall also provide the Engineer with the expiration date of each required policy.

Basis of Payment. Providing Railroad Protective Liability and Property Damage Liability Insurance will be paid for at the contract unit price per Lump Sum for RAILROAD PROTECTIVE LIABILITY INSURANCE.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

This work shall be according to Article 669 of the Standard Specifications and the following:

Qualifications: The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

General: This Special Provision will likely require the Contractor to subcontract for the execution of certain activities.

All contaminated materials shall be managed as either “uncontaminated soil” or non-special waste. This work shall include monitoring and potential sampling, analytical testing, and management of a material contaminated by regulated substances. The Environmental Firm shall continuously monitor all soil excavation for worker protection and soil contamination. **Phase I Preliminary Engineering information is available through the District’s Environmental Studies Unit.** Soil samples or analysis without the approval of the Engineer will be at no additional cost to the Department. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit whichever is less.

The Contractor shall manage any excavated soils and sediment within the following areas:

Site 1314V3-1 – IDOT ROW

- Station 252+35 to Station 252+90 (existing I-74 NB), 0 to 40 feet RT and 0 to 20 feet LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: lead.
- Station 252+90 to Station 253+85 (existing I-74 NB), 0 to 20 feet RT and 0 to 20 feet LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 253+85 to Station 254+90 (existing I-74 NB), 0 to 20 feet RT and 0 to 20 feet LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(b)(1) and shall be managed in accordance with Article 669.09. COC sampling parameter: pH.
- Station 254+90 to Station 255+95 (existing I-74 NB), 0 to 30 feet RT and 0 to 20 feet LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo-(a,h)anthracene, lead, manganese.

- Station 255+95 to Station 257+20 (existing I-74 NB), 0 to 30 feet RT and 0 to 50 feet LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead, manganese.
- Station 44+05 to Station 45+45 (proposed I-74), 35 feet to 95 feet RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead, manganese.
- Station 45+45 to Station 46+90 (proposed I-74), 35 feet to 95 feet RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: lead.
- Station 46+90 to Station 47+85 (proposed I-74), 35 feet to 125 feet RT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 430+65 to Station 431+45 (Ramp 6th-D), 0 to 30 feet RT and 0 to 30 feet LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead, manganese.
- Station 44+00 to Station 45+65 (proposed I-74), 0 to 35 feet RT and 0 to 75 feet LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 45+65 to Station 47+75 (proposed I-74), 0 to 35 feet RT and 0 to 75 feet LT (ROW, PESA Site 1314V3-1, mile markers 0 to 2.5, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.

Site 1314V3-2 – Mississippi River

- Station 219+25 to Station 219+70 (Ramp RD-H), 0 to 100 feet RT (Mississippi River, PESA Site 1314V3-2, near I-74 mile marker 1, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, benzo(a)pyrene, manganese.
- Station 127+50 to Station 128+60 (Ramp RD-G), 0 to 210 feet RT and 0 to 105 feet LT (Mississippi River, PESA Site 1314V3-2, near I-74 mile marker 1, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, manganese.

Site 1314V3-4 – City of Moline Water Department

- Station 252+35 to Station 252+90 (existing I-74 SB), 0 to 60 feet LT (City of Moline Water Division, PESA Site 1314V3-4, 30 18th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead, manganese.

Site 1314V3-5 – Industrial Building

- Station 256+80 to Station 257+75 (I-74 existing NB), 45 feet to 195 feet LT (Industrial Building, PESA Site 1314V3-5, 1 Kone Court, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 257+75 to Station 258+95 (I-74 existing NB), 45 feet to 195 feet LT (Industrial Building, PESA Site 1314V3-5, 1 Kone Court, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, lead, manganese.

Site 1314V3-6 – Vacant Land

- Station 128+65 to Station 129+60 (Ramp RD-G), 40 feet to 185 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: arsenic, benzo(a)pyrene, and iron.
- Station 129+60 to Station 130+70 (Ramp RD-G), 40 feet to 155 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, manganese.
- Station 130+70 to Station 131+50 (Ramp RD-G), 70 feet to 120 feet RT (Vacant Land, PESA Site 1314V3-6 (1314-7, 1314-5, 2708-64, 1314V2-6), 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 132+30 to Station 133+10 (Ramp RD-G), 0 to 20 feet and 0 to 50 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, manganese.
- Station 133+10 to Station 134+00 (Ramp RD-G), 45 feet to 100 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 134+00 to Station 134+75 (Ramp RD-G), 25 feet to 110 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameter: benzo(a)pyrene.
- Station 133+65 to Station 134+65 (Ramp RD-G), 95 feet to 235 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, carbazole, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, manganese.
- Station 133+65 to Station 135+20 (Ramp RD-G), 235 feet to 420 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, lead, manganese.

- Station 134+00 to Station 134+65 (Ramp RD-G), 0 to 25 feet RT and 0 to 55 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, benzo(b)fluoranthene, manganese.
- Station 211+10 to Station 212+35 (Ramp RD-H), 5 feet to 95 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameter: benzo(a)pyrene.
- Station 30+60 to Station 31+35 (proposed I-74), 0 to 20 feet RT and 0 to 20 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 30+60 to Station 31+35 (proposed I-74), 20 feet to 100 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 30+60 to Station 31+15 (I-74 proposed), 30 feet to 300 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.
- Station 133+10 to Station 134+00 (Ramp RD-G), 0 to 50 feet RT and 0 to 50 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese, benzo(a)pyrene.
- Station 27+40 to Station 29+20 (proposed I-74), 0 to 20 feet RT and 0 to 95 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene and lead.
- Station 131+45 to Station 132+30 (Ramp RD-G), 0 to 95 feet RT and 0 to 5 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, benzo(a)anthracene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene.
- Station 26+00 to Station 27+40 (proposed I-74), 0 to 15 feet RT and 0 to 100 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene and lead.
- Station 130+70 to Station 131+45 (Ramp RD-G), 0 to 70 feet RT and 0 to 5 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene.
- Station 128+60 to Station 130+65 (Ramp RD-G), 0 to 40 feet RT and 0 to 35 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese and lead.

- Station 127+50 to Station 128+60 (Ramp RD-G), 0 to 115 feet RT and 0 to 35 feet LT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, dibenzo(a,h)anthracene.
- Station 134+75 to Station 135+30 (Ramp RD-G), 25 feet RT to 115 feet RT (Vacant Land, PESA Site 1314V3-6, 2020 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.
- Station 217+55 to Station 219+45 (Ramp RD-H), 85 to 120 feet LT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene.
- Station 216+35 to Station 218+55 (Ramp RD-H), 55 feet to 90 feet LT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, VOCs.
- Station 215+35 to Station 216+35 (Ramp RD-H), 55 feet to 100 feet LT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: arsenic, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene.
- Station 212+35 to Station 214+85 (Ramp RD-H), 0 to 65 feet LT (Commercial Building, PESA Site 1314V3-8, 190 22nd Street, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead.
- Station 213+30 to Station 214+15 (Ramp RD-H), 10 feet to 65 feet LT (Commercial Building, PESA Site 1314V3-8, 190 22nd Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, manganese, lead.

Site 1314V3-7 – River Stone Moline Yard

- Station 217+45 to Station 219+40 (Ramp RD-H), 0 to 25 feet RT and 0 to 85 feet LT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene.
- Station 216+35 to Station 217+45 (Ramp RD-H), 0 to 30 feet RT and 0 to 55 feet LT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, VOCs.
- Station 215+35 to Station 216+35 (Ramp RD-H), 0 to 30 feet RT and 0 to 55 feet LT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: arsenic, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene.

- Station 214+15 to Station 215+35 (Ramp RD-H), 0 to 55 feet RT and 0 to 55 feet LT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, manganese.

Site 1314V3-8 – Commercial Building

- Station 212+35 to Station 214+85 (Ramp RD-H), 0 to 55 feet RT (Commercial Building, PESA Site 1314V3-8, 190 22nd Street, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead.
- Station 213+30 to Station 214+15 (Ramp RD-H), 0 to 55 feet RT (Commercial Building, PESA Site 1314V3-8, 190 22nd Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, manganese, lead.

Site 1314V3-11 – Vacant Land

- Station 259+00 to Station 259+75 (existing I-74), 80 feet to 170 feet RT (Vacant Land, PESA Site 1314V3-11, 1900 block of River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with article 669.09. COC sampling parameters: manganese.
- Station 259+75 to Station 260+85 (existing I-74), 80 feet to 170 feet RT (Vacant Land, PESA Site 1314V3-11, 1900 block of River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene and manganese.
- Station 259+00 to Station 259+75 (existing I-74), 60 feet to 180 feet LT (Vacant Land, PESA Site 1314V3-11, 1900 block of River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene and manganese.

Site 1314V3-17 – Parking Lot

- Station 263+00 to Station 264+00 (existing I-74 SB), 35 feet to 75 feet RT (Parking Lot, PESA Site 1314V3-17, 300 block of 19th Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: arsenic, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, lead, and manganese.
- Station 264+00 to Station 264+75, (existing I-74 SB), 35 feet to 75 feet RT (Parking Lot, PESA Site 1314V3-17, 300 block of 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.

Site 1314V3-18 – Vacant Land

- Station 327+50 to Station 328+50 (Ramp 6th C), 0 to 20 feet RT and 0 to 80 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 327+00 to Station 328+00 (Ramp 6th-C), 120 feet to 310 feet RT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameter: benzo(a)pyrene.
- Station 326+50 to Station 327+50 (Ramp 6th-C), 0 to 40 feet RT and 0 to 70 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 32+00 to Station 32+90 (proposed I-74), 0 to 45 feet RT and 0 to 10 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, manganese.
- Station 429+30 to Station 430+05 (Ramp 6th-D), 0 to 25 feet RT and 0 to 120 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.
- Station 430+05 to Station 432+20 (Ramp 6th-D), 0 to 30 feet RT and 0 to 130 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, lead, manganese.
- Station 32+35 to Station 32+55 (proposed I-74), 35 feet to 70 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead and manganese.
- Station 32+55 to Station 32+90 (proposed I-74), 10 feet to 70 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: arsenic, thallium and manganese.
- Station 325+55 to Station 327+05 (Ramp 6th-C), 0 to 40 feet RT and 0 to 50 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene.
- Station 430+05 to Station 430+65 (Ramp 6th-D), 0 to 30 feet RT and 0 to 130 feet LT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead, manganese.
- Station 327+05 to Station 329+30 (Ramp 6th-C), 20 feet to 120 feet RT (Vacant Land, PESA Site 1314V3-18, 1900-2100 blocks of River Drive, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead, manganese.

Site 1314V3-21 – BNSF Railroad

- Station 35+10 to Station 36+25 (proposed I-74), 0 to 155 feet RT (BNSF Railroad, PESA Site 1314V3-21, 1900-2200 blocks of 4th Avenue, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, manganese.
- Station 35+10 to Station 36+25 (proposed I-74), 0 to 125 feet LT (BNSF Railroad, PESA Site 1314V3-21, 1900-2200 blocks of 4th Avenue, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony, benzo(a)pyrene, lead, manganese.

Site 1314V3-24 – John Deere

- Station 36+25 to Station 37+00 (proposed I-74), 60 feet to 100 feet RT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene.
- Station 37+00 to Station 37+85 (proposed I-74), 60 feet to 110 feet RT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony, arsenic, benzo(a)pyrene, lead.
- Station 37+85 to Station 38+60 (proposed I-74), 65 feet to 165 feet RT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.
- Station 38+25 to Station 39+35 (proposed I-74), 0 to 110 feet RT and 0 to 50 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo-(a,h)anthracene, lead, manganese.
- Station 39+35 to Station 40+00 (proposed I-74), 35 feet to 115 feet RT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony, benzo(a)pyrene, lead, manganese.
- Station 5000+75 to Station 5001+70 (5th Avenue), 0 to 115 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 39+35 to Station 40+00 (proposed I-74), 35 feet to 50 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.
- Station 429+80 to Station 430+75 (Ramp 6th-D), 0 to 40 feet RT and 0 to 70 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: arsenic.
- Station 5001+70 to Station 5002+85 (5th Avenue), 0 to 150 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.

- Station 330+75 to Station 332+85 (Ramp 6th-C), 0 to 35 feet RT and 0 to 40 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, lead.
- Station 332+00 to Station 332+85 (Ramp 6th-C), 40 feet to 95 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead, manganese.
- Station 332+85 to Station 333+00 (Ramp 6th-C), 50 feet to 85 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony, benzo(a)pyrene, lead, manganese.
- Station 330+75 to Station 332+85 (Ramp 6th-C), 20 feet to 65 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony and lead.
- Station 332+85 to Station 333+00 (Ramp 6th-C), 0 to 50 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony and lead.

Site 1314V3-25 – Sivyer Steel Corporation

- Station 409+90 to Station 410+75 (4th Avenue), 0 to 85 feet RT (Sivyer Steel Corp., PESA Site 1314V3-25, 400 21st Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno-(1,2,3-cd)pyrene, lead, manganese.
- Station 410+75 to Station 412+25 (4th Avenue), 0 to 85 feet RT (Sivyer Steel Corp., PESA Site 1314V3-25, 400 21st Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.
- Station 426+15 to Station 426+80 (Ramp 6th-D), 0 to 35 feet RT and 0 to 90 feet LT (Sivyer Steel Corp., PESA Site 1314V3-25, 400 21st Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead, manganese.
- Station 426+80 to Station 427+65 (Ramp 6th-D), 0 to 35 feet RT and 0 to 20 feet LT (Sivyer Steel Corp., PESA Site 1314V3-25, 400 21st Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameter: manganese.
- Station 36+20 to Station 39+35 (proposed I-74), 0 to 20 feet RT and 0 to 65 feet LT (Sivyer Steel Corp., PESA Site 1314V3-25, 400 21st Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony, benzo(a)pyrene, lead, manganese.

- Station 36+15 to Station 36+40 (proposed I-74), 20 feet to 85 feet RT (Sivyer Steel Corp., PESA Site 1314V3-25, 400 21st Street, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: antimony, arsenic, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo-(a,h)anthracene, indeno(1,2,3-cd)pyrene, lead.
- Station 408+90 to Station 409+90 (4th Avenue), 0 feet to 85 feet RT (Sivyer Steel Corp., PESA Site 1314V3-25, 400 21st Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Site 1314V3-32 – Commercial Buildings

- Station 1904+70 to Station 1905+00 (proposed 19th Street), 40 feet to 90 feet LT (Commercial Buildings, PESA Site 1314V3-32, 1900 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 1905+00 to Station 1905+25 (proposed 19th Street), 45 feet to 95 feet LT (Commercial Buildings, PESA Site 1314V3-32, 1900 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 1905+25 to Station 1905+60 (proposed 19th Street), 0 to 95 feet LT (Commercial Buildings, PESA Site 1314V3-32, 1900 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 1905+00 to Station 1905+25 (proposed 19th Street), 0 to 45 feet LT (Commercial Buildings, PESA Site 1314V3-32, 1900 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 1904+70 to Station 1905+00 (proposed 19th Street), 0 to 40 feet LT (Commercial Buildings, PESA Site 1314V3-32, 1900 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene.
- Station 31+75 to Station 32+65 (19th Street) 0 to 50 feet LT (Commercial Buildings, PESA Site 1314V3-32, 1900 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene and manganese.

Site 1314V3-33 – Parking Lot

- Station 5000+15 to Station 5001+15 (5th Avenue), 0 to 75 feet RT (Parking Lot PESA Site 1314V3-33, 1900 block of 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene and manganese.
- Station 5001+15 to Station 5001+70 (5th Avenue), 0 to 100 feet RT and Station 269+30 to Station 270+25 (existing I-74), 60 feet to 120 RT (Parking Lot PESA Site 1314V3-33, 1900 block of 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene and manganese.

- Station 5000+85 to Station 5001+15 (5th Avenue), 30 feet to 60 feet RT (Parking Lot PESA Site 1314V3-33, 1900 block of 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, carbazole, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene.
- Station 5000+55 to Station 5001+15 (5th Avenue), 60 feet to 90 feet RT (Parking Lot PESA Site 1314V3-33, 1900 block of 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead, manganese, VOCs.
- Station 5000+15 to Station 5000+55 (5th Avenue), 30 feet to 60 feet RT (Parking Lot PESA Site 1314V3-33, 1900 block of 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 4999+25 to Station 5000+15 (5th Avenue), 0 to 60 feet RT (Parking Lot PESA Site 1314V3-33, 1900 block of 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 270+25 to Station 271+25 (existing I-74), 65 feet to 145 feet RT (Parking Lot PESA Site 1314V3-33, 1900 block of 5th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: lead and manganese.

Site 1314V3-56 – Commercial Building

- Station 303+10 to Station 304+10 (6th Avenue), 0 to 45 feet RT (Commercial Building, PESA Site 1314V3-56, 604-610 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 34+70 to Station 35+70 (19th Street), 0 to 55 feet LT (Commercial Building, PESA Site 1314V3-56, 604-610 19th Street, Moline): This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH and manganese.
- Station 35+70 to Station 36+55 (19th Street), 0 to 55 feet LT (Commercial Building, PESA Site 1314V3-56, 604-610 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Site 1314V3-57 – Old Chamber Building

- Station 36+55 to Station 37+50 (19th Street), 0 to 55 feet LT (Old Chamber Building, PESA Site 1314V3-57, 622 19th Street, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene.
- Station 209+65 to Station 211+50, (7th Avenue), 0 to 85 feet LT (Old Chamber Building, PESA Site 1314V3-57, 622 19th Street, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene, lead and manganese.

- Station 211+50 to Station 212+60 (7th Avenue), 0 to 85 feet LT (Old Chamber Building, PESA Site 1314V3-57, 622 19th Street, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Site 1314V3-59 – Residence

- Station 305+00 to Station 306+20 (6th Avenue), 0 to 45 feet RT (Residence, PESA Site 1314V3-59, 1924 6th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.

Site 1314V3-60 – Vacant Lot

- Station 644+95 to Station 645+80 (Ramp 7th-A), 0 to 115 feet RT and 0 to 30 feet LT (Vacant Lot, PESA Site 1314V3-60, 2000 block of 6th Avenue, Moline): This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)pyrene and lead.
- Station 216+70 to Station 217+75 (7th Avenue), 0 to 100 feet LT (Vacant Lot, PESA Site 1314V3-60, 2000 block of 6th Avenue, Moline): This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance with Article 669.09. COC sampling parameters: manganese.
- Station 309+85 to Station 310+70 (6th Avenue), 0 to 150 feet RT (Vacant Lot, PESA Site 1314V3-60, 2000 block of 6th Avenue, Moline): This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance with Article 669.09. COC sampling parameters: pH, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene.

The contractor shall manage any evacuated groundwater within the following areas:

Site 1314V3-7 – River Stone Moline Yard

Station 214+15 to Station 219+40 (Ramp RD-H), 0 to 55 feet RT, 0 to 85 feet RT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): This material meets the criteria of Article 669.09(d) and shall be managed in accordance with Article 669.09. COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, iron, lead and manganese.

Backfill plugs shall be placed within the following areas:

Site 1314V3-7 – River Stone Moline Yard

Station 214+15 to Station 219+40 (Ramp RD-H), 0 to 55 feet RT, 0 to 85 feet RT (River Stone Moline Yard, PESA Site 1314V3-7, 75 23rd Street and 301 River Drive, Moline): COC sampling parameters: benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, indeno(1,2,3-cd)pyrene, iron, lead and manganese.

During the PSI, an underground storage tank (UST) was determined to be present, or potentially present, at Station 332+00 to Station 333+00 (Ramp 6th-C), 0 to 85 feet LT (John Deere, PESA Site 1314V3-24, 400 19th Street, Moline)

DRAINAGE SYSTEM

Effective: June 10, 1994

Revised: June 24, 2015

Description. This work shall consist of furnishing and installing a bridge drainage system as shown on the plans, including all piping, fittings, support brackets, inserts, bolts, and splash blocks when specified.

Material. The pipe and fittings shall be reinforced fiberglass according to ASTM D 2996 RTRP with a 30,000 psi (207 MPa) minimum short-time rupture strength hoop tensile stress. The reinforced fiberglass shall also have an apparent stiffness factor at 5 percent deflection exceeding 200 cu in.-lbf/sq. in. (22.6 cu mm-kPa) and a minimum wall thickness of 0.10 in. (2.54 mm). The adhesive for joining pipe and fittings shall be as recommended by the manufacturer. All pipe supports and associated hardware shall be hot dip galvanized according to AASHTO M 232 (M 232M). The fiberglass pipe and fittings furnished shall be pigmented through out, or have a resin-rich pigmented exterior coat, specifically designed for overcoating fiberglass, as recommended by the manufacturer. The color shall be as specified by the Engineer. The resin in either case shall have an ultraviolet absorber designed to prevent ultraviolet degradation. The ultraviolet protection shall be designed to withstand a minimum of 2,500 hours of accelerated weathering when tested in conformance with the requirements in ASTM Designation: G 154. Lamps shall be UV-8 (313 nm wavelength). The resting cycle shall be 4 hours of ultraviolet exposure at 140°F (60°C), and then 4 hours of condensate exposure at 120°F (49°C). After testing, the surface of the pipe shall exhibit no fiber exposure, crazing, or checking, and only a slight chalking or color change. The supplier shall certify the material supplied meets or exceeds these requirements.

Design. The drainage system shall be designed as an open system with allowances for the differential expansion and contraction expected between the superstructure and the substructure to which the drainage system is attached.

Installation. All connections of pipes and fittings shown on the plans to facilitate future removal for maintenance cleanout or flushing shall be made with a threaded, gasketed coupler or a bolted gasketed flange system. Adhesive bonded joints will be permitted for runs of pipe between such connections. The end run connection shall feature a minimum nominal 6 in. (150 mm) female threaded fiberglass outlet. Straight runs may utilize a 45 degree reducing saddle bonded to the pipe. The female outlet shall be filled with a male threaded PVC plug.

Runs of pipe shall be supported at spacings not exceeding those recommended by the manufacturer of the pipe. Supports that have point contact or narrow supporting areas shall be avoided. Standard slings, clamps, clevis hangers and shoe supports designed for use with steel pipe may be used. A minimum strap width for hangers shall be 1 1/2 in. (40 mm) for all pipe under 12 in. (300 mm) in diameter and 2 in. (50 mm) for diameters 12 in. (300 mm) or greater. Straps shall have 120 degrees of contact with the pipe. Pipes supported on less than 120 degrees of contact shall have a split fiberglass pipe protective sleeve bonded in place with adhesive.

All reinforced fiberglass pipe, fittings, and expansion joints shall be handled and installed according to guidelines and procedures recommended by the manufacturer or supplier of the material.

Basis of Payment. This work will be paid for at the contract lump sum price for DRAINAGE SYSTEM.

HIGH LOAD MULTI-ROTATIONAL BEARINGS

Effective: October 13, 1988

Revised: April 1, 2016

Description. This work shall consist of furnishing and installing High Load Multi-Rotational type bearing assemblies at the locations shown on the plans.

High Load Multi-Rotational (HLMR) bearings shall be one of the following at the Contractors option unless otherwise noted on the plans:

- a) Pot Bearings. These bearings shall be manufactured so that the rotational capability is provided by an assembly having a rubber disc of proper thickness, confined in a manner so it behaves like a fluid. The disc shall be installed, with a snug fit, into a steel cylinder and confined by a tight fitting piston. The outside diameter of the piston shall be no more than 0.03 in. (750 microns) less than the inside diameter of the cylinder at the interface level of the piston and rubber disc. The sides of the piston shall be beveled. PTFE sheets, or silicone grease shall be utilized to facilitate rotation of the rubber disc. Suitable brass sealing rings shall be provided to prevent any extrusion between piston and cylinder.
- b) Shear Inhibited Disc Type Bearing. The Structural Element shall be restricted from shear by the pin and ring design and need not be completely confined as with the Pot Bearing design. The disc shall be a molded monolithic Polyether Urethane compound.

These bearings shall be further subdivided into one or more of the following types:

- 1) Fixed. These allow rotation in any direction but are fixed against translation.
- 2) Guided Expansion. These allow rotation in any direction but translation only in limited directions.
- 3) Non-Guided Expansion. These allow rotation and translation in any direction.

The HLMR bearings shall be of the type specified and designed for the loads shown on the plans. The design of the top and bottom bearing plates are based on detail assumptions which are not applicable to all suppliers and may require modifications depending on the supplier chosen by the Contractor. The overall depth dimension for the HLMR bearings shall be as specified on the plans. The horizontal dimensions shall be limited to the available bearing seat area. Any modifications required to accommodate the bearings chosen shall be submitted to the Engineer for approval prior to ordering materials. Modifications required shall be made at no additional cost to the State. Inverted pot bearing configurations will not be permitted.

The Contractor shall comply with all manufacturer's material, fabrication and installation requirements specified.

All bearings shall be supplied by prequalified manufacturers. The Department will maintain a list of prequalified manufacturers.

Submittals. Shop drawings shall be submitted to the Engineer for approval according to Article 105.04 of the Standard Specifications. In addition the Contractor shall furnish certified copies of the bearing manufacturer's test reports on the physical properties of the component materials for the bearings to be furnished and a certification by the bearing manufacturer stating the bearing assemblies furnished conform to all the requirements shown on the plans and as herein specified. Submittals with insufficient test data and supporting certifications will be rejected.

Materials. The materials for the HLMR bearing assemblies shall be according to the following:

- (a) Elastomeric Materials. The rubber disc for Pot bearings shall be according to Article 1083.02(a) of the Standard Specifications.
- (b) Polytetrafluoroethylene (PTFE) Material. The PTFE material shall be according to Article 1083.02(b) of the Standard Specifications.
- (c) Stainless Steel Sheets: The stainless steel sheets shall be of the thickness specified and shall be according to Article 1083.02(c).
- (d) Structural Steel. All structural steel used in the bearing assemblies shall be according to AASHTO M 270, Grade 50 (M 270M Grade 345), unless otherwise specified.
- (e) Threaded studs. The threaded stud, when required, shall conform to the requirements of Article 1083.02(d)(4) of the Standard Specifications.

- (f) Polyether Urethane for Disc bearings shall be according to all of the following requirements:

PHYSICAL PROPERTY	ASTM TEST METHOD	REQUIREMENTS	
Hardness, Type D durometer	D 2240	45 Min	65 Max
Tensile Stress, psi (kPa) At 100% elongation, min	D 412	1500 psi (10,350 kPa)	2300 psi (15,900 kPa)
Tensile Stress, psi (kPa) At 200% elongation, min	D 412	2800 psi (19,300 kPa)	4000 psi (27,600 kPa)
Tensile Strength, psi (kPa), min	D 412	4000 psi (27,600 kPa)	6000 psi (41,400 kPa)
Ultimate Elongation, %, min	D 412	350	220
Compression Set 22 hr. at 158 °F (70 °C), Method B %, max	D 395	40	40

The physical properties for a durometer hardness between the minimum and maximum values shown above shall be determined by straight line interpolation.

Design. The fabricator shall design the HLMR bearings according to the appropriate AASHTO Design Specifications noted on the bridge plans.

Fabrication. The bearings shall be complete factory-produced assemblies. They shall provide for rotation in all directions and for sliding, when specified, in directions as indicated on the plans. All bearings shall be furnished as a complete unit from one manufacturing source. All material used in the manufacture shall be new and unused with no reclaimed material incorporated into the finished assembly.

The translation capability for both guided and non-guided expansion bearings shall be provided by means of a polished stainless steel sliding plate that bears on a PTFE sheet bonded and recessed to the top surface of the piston or disc. The sliding element of expansion bearings shall be restrained against movement in the fixed direction by exterior guide bars capable of resisting the horizontal forces or 20 percent of the vertical design load on the bearing applied in any direction, whichever is greater. The sliding surfaces of the guide bar shall be of PTFE sheet and stainless steel. Guiding off of the fixed base, or any extension of the base, will not be permitted.

Structural steel bearing plates shall be fabricated according to Article 505.04(l) of the Standard Specifications. Prior to shipment the exposed edges and other exposed portions of the structural steel bearing plates shall be cleaned and given a corrosion protection coating as specified on the plans and according to the applicable Special Provisions and Articles 506.03 and 506.04 of the Standard Specifications. During cleaning and coating the stainless steel, PTFE sheet and neoprene shall be protected from abrasion and coating material.

PTFE sheets shall be bonded to steel under factory controlled conditions using heat and pressure for the time required to set the epoxy adhesive used. The PTFE sheet shall be free from bubbles and the sliding surface shall be burnished to an absolutely smooth surface.

The steel piston and the steel cylinder for pot bearings shall each be machined from a solid piece of steel. The steel base cylinder shall be either integrally machined, recessed into with a snug fit, or continuously welded to its bottom steel bearing plate.

Packaging. Each HLMR bearing assembly shall be fully assembled at the manufacturing plant and delivered to the construction site as complete units. The assemblies shall be packaged, crated or wrapped so the assemblies will not be damaged during handling, transporting and shipping. The bearings shall be held together with removable restraints so sliding surfaces are not damaged.

Centerlines shall be marked on both top and base plates for alignment in the field. The bearings shall be shipped in moisture-proof and dust-proof covers.

Performance Testing. The following performance tests are required. All tests shall be performed by the manufacturer prior to shipment. Where lot testing is permitted, a lot size shall be the number of bearings per type on the project but not to exceed 25 bearings per type.

Dimension Check. Each bearing shall be checked dimensionally to verify all bearing components are within tolerances. Failure to satisfy any dimensional tolerance shall be grounds for rejecting the bearing component or the entire bearing assembly.

Clearance Test. This test shall be performed on one bearing per lot. The bearing selected for this test shall be the one with the least amount of clearance based on the dimension check. The bearing assembly shall be loaded to its service limit state rated capacity at its full design rotation but not less than 0.02 radians to verify the required clearances exist. This test shall be performed twice for each bearing with the rotation oriented longitudinally with the bridge once in each direction. Any visual signs of rubbing or binding shall be grounds for rejection of the lot.

Proof Load Test. This test shall be performed on one bearing per lot. The bearing assembly shall be load tested to 150 percent of the service limit state rated capacity at a rotation of 0.02 radians. The load shall be maintained for 5 minutes, removed then reapplied for 5 minutes. If the load drops below the required value during either application, the test shall be restarted from the beginning. This test shall be performed twice for each bearing with the rotation oriented longitudinally with the bridge once in each direction.

The bearing shall be visually examined both during the test and upon disassembly after the test. Any resultant visual defects include, but are not limited to:

1. Extruded or deformed elastomer, polyether urethane, or PTFE.
2. Insufficient clearances such as evidence of metal to metal contact between the pot wall and the top plate.
3. Damaged components such as cracked steel, damaged seal rings, or damaged limiting rings.
4. Bond failure.

If any of the above items are found it shall be grounds for rejection of the lot.

Sliding Friction Test. For expansion bearings, this test shall be performed on one bearing per lot. The sliding surfaces shall be thoroughly cleaned with a degreasing solvent. No lubrication other than that specified for the bearing shall be used. The bearing shall be loaded to its service limit state rated capacity for 1 hour prior to and throughout the duration of the sliding test. At least 12 cycles of plus and minus sliding with an amplitude equaling the smaller of the design displacement and 1 inch (25 mm) shall then be applied. The average sliding speed shall be between 0.1 inch and 1.0 inches (2.5 mm and 25 mm) per minute. The sliding friction coefficient shall be computed for each direction of each cycle and its mean and standard deviation shall be computed for the sixth through twelfth cycles.

The friction coefficient for the first movement and the mean plus two standard deviations for the sixth through twelfth cycles shall not exceed the design value used. In addition, the mean value for the sixth through twelfth cycles shall not exceed 2/3 of the design value used. Failure of either of these shall result in rejection of the lot.

The bearing shall also be visually examined both during and after the testing, any resultant defects, such as bond failure, physical destruction, or cold flow of the PTFE shall also be cause for rejection of the lot.

The Contractor shall furnish to the Department a notarized certification from the bearing manufacturer stating the HLMR bearings have been performance tested as specified. The Contractor shall also furnish to the Engineer of Tests at the Bureau of Materials and Physical Research (126 East Ash Springfield, IL 62704) a purchase order prior to fabrication. The purchase order shall contain, as a minimum, the quantity and size of each type of bearing furnished. The Department reserves the right to perform any of the specified tests on one or more of the furnished bearings. If the tested bearing shows failure it shall be replaced and the remaining bearings shall be similarly tested for acceptance at the Contractor's expense.

When directed by the Engineer, the manufacturer shall furnish an additional bearing assembly and/or random samples of component materials used in the bearings, for testing by the Department, according to Article 1083.04 of the Standard Specifications.

Installation. The HLMR bearings shall be erected according to Article 521.05 of the Standard Specifications.

Exposed edges and other exposed portions of the structural steel plates shall be field painted as specified for Structural Steel.

Basis of Payment. This work will be paid for at the contract unit price each for HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED; HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION; or HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION of the load rating specified.

When the fabrication and erection of HLMR bearings is accomplished under separate contracts, the applicable requirements of Article 505.09 shall apply.

Fabricated HLMR bearings and other materials complying with the requirements of this item, furnished and accepted, will be paid for at the contract unit price each for FURNISHING HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED, FURNISHING HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION or FURNISHING HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION of the load rating specified.

Storage and care of fabricated HLMR bearings and other materials complying with the requirements of this item by the Fabrication Contractor beyond the specified storage period, will be paid for at the contract unit price per calendar day for STORAGE OF HIGH LOAD MULTI-ROTATIONAL BEARINGS if a pay item is provided for in the contract, or will be paid for according to Article 109.04 if a pay item is not provided in the contract.

HLMR bearings and other materials fabricated under this item erected according to the requirements of the specifications, and accepted, will be paid for at the contract unit price each for ERECTING HIGH LOAD MULTI-ROTATIONAL BEARINGS, FIXED, ERECTING HIGH LOAD MULTI-ROTATIONAL BEARINGS, GUIDED EXPANSION or ERECTING HIGH LOAD MULTI-ROTATIONAL BEARINGS, NON-GUIDED EXPANSION of the load rating specified.

MODULAR EXPANSION JOINT

Effective: May 19, 1994

Revised: December 29, 2014

Description. This work shall consist of furnishing and installing a modular expansion joint(s) as shown on the plans, and according to applicable portions of Section 520 of the Standard Specifications.

General. The expansion joint device shall be capable of handling the specified longitudinal movement. In addition, when specified, the joint shall also be capable of handling the differential non-parallel longitudinal movement. The expansion joint device shall effectively seal the joint opening in the deck surface and barrier curbs against the entrance of water and foreign materials. There shall be no appreciable change in the deck surface plane with the expansion and contraction movements of the bridge.

The device shall consist of a shop-fabricated modular assembly of transverse neoprene seals, edge and separation beams, bearing on support bars spanning the joint opening. The assembly shall maintain equal distances between intermediate support rails, at any cross section, for the entire length of the joint. The assembly shall be stable under all conditions of expansion and contraction, using a system of longitudinal control springs and upper and lower support beam bearings and springs.

At sidewalks, concrete median barriers and concrete parapet joints, a sliding steel plate shall be fabricated and installed according to the plans. Painting or galvanizing of sliding steel plates shall be as specified on the plans.

Suppliers: The Department maintains a pre-qualified list of proprietary structural systems allowed for modular expansion joints. This list can be found on the Departments web site under Prequalified Structural Systems. The Contractor's options are limited to those systems pre-qualified by the Department. These systems have been reviewed for structural feasibility and adequacy only. Presence on this list shall in no case relieve the Contractor of the site specific design or QC/QA requirements stated herein.

The manufacturer shall provide evidence of current certification by AISC according to Article 106.08(d) of the Standard Specifications.

Submittals: Shop drawings and a copy of the calculations and support documents shall be submitted to the Engineer for approval according to Article 105.04 of the Standard Specifications. Submittals will be required for each modular expansion joint device specified. In addition the Contractor shall provide the Department with a certification of compliance by the manufacturer listing all materials in the system. The certification shall attest that the system conforms to the design and material requirements and be supported by a copy of the successful results of the fatigue tests performed on the system as herein specified. Submittals with insufficient test data and supporting certifications will be rejected.

The shop drawings shall include tables showing the total anticipated movements for each joint and the required setting width of the joint assemblies at various temperatures.

Design Requirements: The maximum vertical, transverse and horizontal rotations and displacements shall be defined and included in the design.

The expansion joint device(s) shall be designed, detailed and successfully tested, according to Section 14 of the AASHTO LRFD Bridge Design Specifications.

Top, bottom and sides of support bars shall be restrained to prevent uplift, transmit bearing loads, and maintain the lateral position of the bars.

The total movement of each individual sealing element shall not exceed 3 in. (75 mm).

Materials:

- (a) Metals. Structural Steel. All structural steel shall be according to AASHTO M 270, Grade 50 (M 270M Grade 345), unless otherwise specified.

Stainless steel sheets for the sliding surfaces of the support bars shall conform to the requirements of ASTM A240 (A240M) type 302 or 304.

The use of aluminum components in the modular joint will not be allowed.

- (b) Preformed Elastomeric Seals. The elastomeric sealing element shall be according to ASTM D5973.

Lubricant/Adhesive for installing the preformed elastomeric elements in place shall be a one-part, moisture-curing, polyurethane and hydrocarbon solvent mixture as recommended by the manufacturer and containing not less than 65 percent solids.

- (c) Support Bar Bearings. Support bar bearings shall be fabricated from elastomeric pads with polytetrafluorethylene (PTFE) surfacing or from polyurethane compound with PTFE sliding surfaces. The elastomeric and PTFE materials shall meet the requirements of Section 1083 of the Standard Specifications.

- (d) Control Springs. Suitable elastomeric type springs which work longitudinally shall be used to maintain the equidistant spacing between transverse edge and separation beams when measured at any given cross section through the joint.

- (e) Support Bars. Support bars shall incorporate stainless steel sliding surfaces to permit joint movement.

Construction Requirements

General. Installation of expansion devices shall be according to the plans and shop drawings.

The fabricator of the modular joint assembly shall be AISC certified according to Article 106.08 for Bridge and Highway Metal Component Manufacturers. In lieu of AISC certification, the Contractor may have all welding on main members (support bars and separation beams) observed and inspected by independent (third party) personnel at the Contractor's expense. Welding shall then be observed by a Certified Welding Inspector (CWI) in addition to the manufacturer's own welding inspection. Third party Non Destructive Examination (NDE) shall be performed by inspector(s), certified as level II in applicable methods, and all complete penetration beam-to-bar welds and butt joints in beams shall be UT inspected and 10 percent of fillets and partial pen welds shall be MT inspected.

The manufacturer of the expansion device shall provide a qualified technical service representative to supervise installation. Modular expansion joint devices shall be factory prefabricated assemblies, preset by the manufacturer prior to shipment with provisions for field adjustment for the ambient temperature at the time of installation.

Unless otherwise shown on the plans, the neoprene seals shall be continuous without any field splices. Installation of the joint seals shall be performed by a trained representative of the Manufacturer.

All steel surfaces of the prefabricated assembly shall be shop painted with the primer specified for structural steel, except areas in direct contact with the seals, galvanized items and stainless steel surfaces.

The metal surfaces in direct contact with the neoprene seals shall be blast cleaned to permit a high strength bond of the lubricant/adhesive between the neoprene seal and mating metal surfaces.

The Contractor shall anticipate and make all necessary adjustments to existing or plan-specified reinforcement bars, subject to the approval of the Engineer, in order to prevent interferences with placement of the selected joint in the structure. Any adjustments to reinforcement bars interfering with the joint installation shall be the responsibility of the Contractor and preapproved by the Engineer prior to installation of the joint. Cutting of reinforcement shall be minimized, and any bars that are cut shall be replaced in-kind at no additional cost.

The prefabricated joint assembly shall be properly positioned and attached to the structure according to the manufacturer's approved shop drawings. The attachment shall be sufficiently rigid to prevent non-thermal rotation, distortion, or misalignment of the joint system relative to the deck prior to casting the concrete. The joints shall be adjusted to the proper opening based on the ambient temperature at the time of installation and then all restraints preventing thermal movement shall be immediately released and/or removed. The joint assembly units shall be straight, parallel and in proper vertical alignment or reworked until proper adjustment is obtained prior to casting of the concrete around the joint.

After the joint system is installed, the joint area shall be flooded with water and inspected, from below for leakage. If leakage is observed, the joint system shall be repaired, at the expense of the Contractor, as recommended by the manufacturer and approved by the Engineer.

Method of Measurement. This work will be measured for payment in place, in feet (meters), along the centerline of the joint from face to face of the parapets or curbs. All sliding plate assemblies at the sidewalks, parapets and median barriers will not be measured for payment. The size will be defined as the specified longitudinal movement rounded up to the nearest 3 inch (75 mm) increment.

Basis of Payment: When only a longitudinal movement is specified, this work will be paid for at the contract unit price per foot (meter) for the MODULAR EXPANSION JOINT, of the size specified. When a differential non parallel movement is also specified, this work will be paid for at the contract unit price per foot (meter) for the MODULAR EXPANSION JOINT-SWIVEL, of the size specified.

All materials, equipment and labor required to fabricate, paint and install the sliding plate assemblies at the sidewalks, parapets and median barriers will not be paid for separately but shall be included in the price for the expansion joint specified.

When the fabrication and erection of modular expansion joint is accomplished under separate contracts, the applicable requirements of Article 505.09 shall apply, except the furnishing pay items shall include storage and protection of fabricated materials up to 75 days after the completion dates.

Fabricated modular expansion joints and other materials complying with the requirements of this item, furnished and accepted, will be paid for at the contract unit price per foot (meter) for FURNISHING MODULAR EXPANSION JOINT or FURNISHING MODULAR EXPANSION JOINT – SWIVEL of the size specified.

Storage and care of fabricated joints and other materials complying with the requirements of this item by the Fabrication Contractor beyond the specified storage period, will be paid for at the contract unit price per calendar day for STORAGE OF MODULAR EXPANSION JOINTS if a pay item is provided for in the contract, or will be paid for according to Article 109.04 if a pay item is not provided in the contract.

Modular expansion joints and other materials erected according to the requirements of the specifications, and accepted, will be paid for at the contract unit price per foot (meter) for ERECTING MODULAR EXPANSION JOINT or ERECTING MODULAR EXPANSION JOINT - SWIVEL of the size specified.

PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000

Revised: January 22, 2010

Description. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

Construction Requirements. All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

Method of Measurement. Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the pipe underdrains for structures.

ERECTION OF CURVED STEEL STRUCTURES

Effective: June 1, 2007

Description: In addition to the requirements of Article 505.08(e), the following shall apply.

The Contractor or sub-Contractor performing the erection of the structural steel is herein referred to as the Erection Contractor.

Erection Plan: The Erection Contractor shall retain the services of an Illinois Licensed Structural Engineer, experienced in the analysis and preparation of curved steel girder erection plans, for the completion of a project-specific erection plan. The structural engineer, herein referred to as the Erection Engineer, shall sign and seal the erection plan, drawings, and calculations for the proposed erection of the structural steel.

The erection plan shall be complete in detail for all phases, stages, and conditions anticipated during erection. The erection plan shall include structural calculations and supporting documentation necessary to completely describe and document the means, methods, temporary support positions, and loads necessary to safely erect the structural steel in conformance with the contract documents and as outlined herein. The erection plans shall address and account for all items pertinent to the steel erection including such items as sequencing, falsework, temporary shoring and/or bracing, girder stability, crane positioning and movement, means of access, pick points, girder shape, permissible deformations and roll, interim/final plumbness, cross frame/diaphragm placement and connections, bolting and anchor bolt installation sequences and procedures, and blocking and anchoring of bearings. The Erection Contractor shall be responsible for the stability of the partially erected steel structure during all phases of the steel erection.

The erection plans and procedures shall be submitted to the Engineer for review and acceptance prior to starting the work. Review, acceptance and/or comments by the Department shall not be construed to guarantee the safety or final acceptability of the work or compliance with all applicable specifications, codes, or contract requirements, and shall neither relieve the Contractor of the responsibility and liability to comply with these requirements, nor create liability for the Department. Significant changes to the erection plan in the field must be approved by the Erection Engineer and accepted by the Engineer for the Department.

Basis of Payment: This work shall not be paid for separately but shall be included in the applicable pay items according to Article 505.13 of the Standard Specifications.

AGGREGATE COLUMN GROUND IMPROVEMENT

Effective: January 15, 2009

Revised: October 15, 2011

Description. This work shall consist of furnishing design calculations, shop drawings, materials, and labor necessary to construct aggregate column ground improvements, over the approximate horizontal limits below the footing, wall, or embankment as specified on the contract plans, or as modified by the Contractor's approved design.

Submittals. No later than thirty (30) days prior to beginning work, the Contractor shall submit to the Engineer for approval the following information:

- (a) Evidence of the selected subcontractor's successful installation of their aggregate column system on five projects under similar site conditions using the same installation technique. The documentation to be submitted shall include a description of the project, aggregate column installation technique, soil conditions and name and phone number of contracting authority.
- (b) Evidence that the proposed project superintendent for the ground improvement installation has a minimum of three years of method specific experience.
- (c) Shop Drawings sealed by an Illinois Licensed Professional Engineer showing aggregate column horizontal limits, locations, pattern, spacing, diameters, top and bottom elevations, and identification numbers. If an aggregate drainage layer is specified on the plans or a working platform proposed by the Contractor, the thickness, aggregate gradation, and plan dimensions shall be shown in addition to any other details needed to describe the work.
- (d) A description of the equipment, installation technique and construction procedures to be used, including a plan to address any water or spoils.
- (e) The source and gradation of the aggregate proposed for the aggregate columns.
- (f) Design computations, sealed by an Illinois Licensed Professional Engineer, demonstrating the proposed ground improvement plan satisfies the minimum global stability, settlement, and bearing capacity performance requirements stated in the Contract Plans and those contained in this Special Provision.
- (g) The proposed verification program methods to monitor and verify the aggregate column installation is satisfying the design and performance requirements. Also required is a sample of the daily report form to be used by the Contractor to documents the adequacy of that day's work.

Materials. The aggregate used in the columns shall be Class A quality crushed stone or crushed concrete satisfying the requirements of Section 1004 of the standard specifications. The aggregate for any drainage layer specified in the plans shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 15, according to Sections 1003 and 1004 of the Standard Specifications. Any fine or coarse aggregate requested by the Contractor to be used as either a drainage layer or working platform shall be approved by the Engineer.

Design Criteria. The subcontractor selected shall provide an aggregate column ground improvement plan with shop drawings, and design computations, using an Allowable Stress Design that meets the performance requirements shown on the Contract Plans. These requirements normally include the global stability factor of safety, tolerable settlement amounts at various times and in the case of walls or structure footings, the equivalent uniform service bearing pressure applied at various locations and the factor of safety required. In the absence of performance requirements shown on the plans, the following Allowable Stress minimum performance requirements shall be used:

- (a) A factor of safety of 1.5 against global slope stability failure.
- (b) A factor of safety of 2.5 against equivalent uniform service bearing pressure failure.
- (c) Total settlement not to exceed 4 inches (100 mm) and settlement after completing wall or pavement construction not to exceed 1 inch (25 mm).

The design shall use short term strength parameters for the soil, obtained from the soil boring logs and any geotechnical laboratory testing data provided in the Contract Plans and specifications for stability and bearing capacity analyses. Settlement shall be assessed using appropriate soil parameters. Any additional subsurface information needed to design the aggregate columns shall be the responsibility of the Contractor.

The aggregate column ground improvement design need not consider seismic loadings unless otherwise required as part of the performance requirements shown on the plans.

Construction. The construction procedures shall be determined by the aggregate column installer and submitted for approval with the shop drawings. The following are the minimum requirements that the Contactor will be expected to follow unless otherwise approved in the shop drawings submittal.

- (a) The site shall be graded as needed for proper installation of the aggregate column system. Any grading and excavation below the improvement limits shown on the plans shall be incidental to aggregate column installation.
- (b) Any granular base drainage layer or working platform shall be considered incidental to the improvement. Contractor requested drainage layers or working platforms will only be allowed if approved as part of the shop drawings.
- (c) The aggregate column material shall be placed in a manner that allows measurement of the tonnage or quantity of aggregate placed down the hole.
- (d) Columns shall be installed in a sequence that will minimize ground heave. Any heaving shall be re-compacted or excavated as directed by the Engineer prior to wall or embankment construction and be considered incidental to aggregate column improvement.
- (e) The Contractor shall provide a full-time qualified representative to verify all installation procedures and provide the verification program.
- (f) Disposal of any spoils generated shall be according to Article 202.03.

(g) If an obstruction is encountered that cannot be penetrated with reasonable effort, the Contractor shall construct the element from the depth of obstruction to its design top elevation. Depending on the depth of the completed column, column location, and design requirements, the Engineer may require the construction of a replacement aggregate column at an adjacent location. Construction of additional columns will be considered extra work and paid for according to Article 109.04.

(a) Specific Requirements for Vibrator Compacted Aggregate Columns:

- i. Vibrator compacted aggregate columns shall be constructed with a down-hole vibrator, probe and follower tubes of sufficient size to install the columns to the diameter and bottom elevation(s) shown on the approved shop drawings. Pre-boring is permitted if approved as part of the shop drawing submittal.
- ii. The probe and follower tubes shall have visible markings at regular increments to enable measurement of penetration and re-penetration depths.
- iii. Provide methods for supplying to the tip of the probe a sufficient quantity of air or water to widen the probe hole to allow adequate space for aggregate placement around the probe.
- iv. The vibrator shall be withdrawn in 12 to 36 inch (300 to 900 mm) increments, to allow placement of the aggregate.
- v. Lift thickness shall not exceed 4 ft (1.2 m). After penetration to the treatment depth, slowly retrieve the vibrator in 12 to 18 inch (300 to 450 mm) increments to allow aggregate placement.
- vi. Compact the aggregate in each lift by re-penetrating it as needed with the vibrating probe to densify and force the aggregate radially into the surrounding soil. Re-penetrate the aggregate in each increment a sufficient number of times to construct the columns as specified in the approved shop drawings and to meet the verification program requirements.

(b) Specific Requirements for Tamper Compacted (Rammed) Aggregate Columns:

- i. Tamper compacted (rammed) aggregate columns shall be installed by either drilling or displacement methods, capable of constructing columns to the diameters and bottom elevation(s) shown on the approved shop drawings.
- ii. If temporary casing is needed to limit the sloughing of subsurface soils, the casing should be inserted to at least 2 ft (600 mm) beyond any sloughing strata. Upon extraction, the bottom of the casing shall be maintained at not more than 2 feet (600 mm) above the level of aggregate.
- iii. Aggregate placement shall closely follow the excavation of each column. The aggregate shall be placed in 1 to 2 ft (300 to 600 mm) thick lifts. Each lift should be rammed with a high-energy impact tamper as specified in the approved shop drawings and to meet the verification program requirements.

Construction Tolerances. The aggregate columns shall be constructed to the following tolerances:

- (a) The horizontal limits and center of each constructed aggregate column shall be within 8 inches (190 mm) of the location specified on the approved the shop drawings.
- (b) The axis of the constructed aggregate columns shall not be inclined more than 1.67 percent from vertical.
- (c) The installed diameter of any aggregate column shall not be more than 10 percent below the effective diameter indicated on the approved shop drawings.
- (d) The average effective diameter of any group of 50 consecutively installed aggregate columns shall not be less than the effective diameter indicated on approved shop drawings.
- (e) The top of the aggregate column ground improvement shall be located within 8 inches (200 mm) of the top elevation shown on the approved shop drawings. When supporting MSE walls, the top elevation may need to be adjusted to the base of the MSE reinforced mass elevation as shown on the approved MSE shop drawings.
- (f) Except where obstructions, hard or very dense soils are encountered, the aggregate column shall be advanced to at least the treatment depth elevation shown on the approved in the Shop Drawings.

Any aggregate column installation not meeting the above stated tolerances, or otherwise deemed unsatisfactory by the Engineer, may require installation of a replacement aggregate column(s) at the discretion of the Engineer and at the Contractor's expense. The Contractor shall submit to the Engineer revised plans and procedures to bring installations in those areas into tolerance.

Verification Program. The Contractor shall develop and maintain a monitoring and documentation procedure during the installation of all aggregate columns to verify they satisfy the design and performance requirements. The Contractor shall provide qualified personnel to continuously observe and record the required data. The program shall include, as a minimum, the following:

- (a) Quality control procedures to allow verification that each aggregate column is being installed according to the designer's specifications and the requirements in this Special Provision. This will typically include observations of items such as electrical current or hydraulic pressure, number of high-energy impact tamps, aggregate quantity, etc. that must be obtained to achieve the performance requirements.
- (b) Monitoring methods to evaluate the performance of the global aggregate column improvement system after construction of the overlying embankment or wall. This will typically include installation of settlement plates and may also include monitoring points, inclinometers, piezometers or other instrumentation.
- (c) Proposed means and methods for verification that the installed aggregate columns meet the strength and/or stiffness criteria required by the design. This may include modulus or load tests on individual elements and/or groups, soil borings, and other methods.

- (d) A daily report form shall be completed by the Contactor and provided to the Engineer to document the work performed each day and the adequacy of each aggregate column. The form shall be signed by the Contractor's qualified personnel and include as a minimum the following:
- i. Aggregate columns installed (identified by location number).
 - ii. Date constructed.
 - iii. Elevation of top and bottom of each aggregate column.
 - iv. Average lift thickness.
 - v. Results of quality control testing such as average power consumption or tamping energy obtained during aggregate column installation.
 - vi. Jetting pressure (air or water) if applicable.
 - vii. Description of soil and groundwater conditions.
 - viii. Details of obstructions, delays and any unusual issues.
 - ix. Amount of water used per aggregate column if applicable.
 - x. Estimated weight or volume of aggregate backfill placed in each column.
 - xi. Average installed diameter of each column.

Basis of Payment. This work will be paid at the contract Lump Sum price for AGGREGATE COLUMN GROUND IMPROVEMENT. Any temporary casing, excavation, disposal of water or spoils, drainage layers or working platforms will not be paid for separately, but shall be considered to be included with this work.

ADJUSTING FRAMES AND GRATES (BDE)

Effective: April 1, 2017

Add the following to Article 602.02 of the Standard Specifications:

- “(s) High Density Expanded Polystyrene Adjusting Rings
with Polyurea Coating (Note 4) 1043.04
(t) Expanded Polypropylene (EPP) Adjusting Rings (Note 5) 1043.05

Note 4. High density expanded polystyrene adjusting rings with polyurea coating shall meet the design load requirements of AASHTO HS20/25. The rings may be used to adjust the frames and grates of drainage and utility structures up to a maximum of 6 in. (150 mm). They shall be installed and sealed underneath the frames according to the manufacturer's specifications.

Note 5. Riser rings fabricated from EPP may be used to adjust the frames and grates of drainage and utility structures up to a maximum of 6 in. (150 mm). An adhesive meeting ASTM C 920, Type S, Grade N5, Class 25 shall be used with EPP adjustment rings. The top ring of the adjustment stack shall be a finish ring with grooves on the lower surface and flat upper surface. The joints between all manhole adjustment rings and the frame and cover shall be sealed using the approved adhesive. In lieu of the use of an adhesive, an internal or external mechanical frame-chimney seal may be used for watertight installation. EPP adjustment rings shall not be used with heat shrinkable infiltration barriers.”

Add the following to Section 1043 of the Standard Specifications:

“1043.04 High Density Expanded Polystyrene Adjusting Rings with Polyurea Coating.

High density expanded polystyrene adjustment rings with polyurea coating shall be designed and tested to meet or exceed an HS25 wheel load according to the AASHTO Standard Specifications for Highway Bridges (AASHTO M306 HS-25). The raw material suppliers shall provide certifications of quality or testing using the following ASTM standards, and upon request, certify that only virgin material was used in the manufacturing of the expanded polystyrene rings.

Physical Property	Test Standard	Value	
		3.0 lb/cu ft	4.5 lb/cu ft
Compression Resistance at 10% deformation at 5% deformation at 2% deformation	ASTM D 1621	50 - 70	70 - 90
		45 - 60	60 - 80
		15 - 20	20 - 40
Flexural Strength	ASTM D 790	90 - 120	130 - 200
Water Absorption	ASTM D 570	2.0%	1.7%
Coefficient of Linear Expansion	ASTM D 696	2.70E-06 in./in./°F	2.80E-06 in./in./°F
Sheer Strength	ASTM D 732	55	80
Tensile Strength	ASTM D 1623	70 - 90	130 - 140
Water Vapor Transmission	ASTM C 355	0.82 – 0.86 perm – in.	

High density expanded polystyrene adjustment rings with polyurea coating shall have no void areas, cracks, or tears. The actual diameter or length shall not vary more than 0.125 in. (3 mm) from the specified diameter or length. Variations in height are limited to ± 0.063 in. (± 1.6 mm). Variations shall not exceed 0.25 in. (6 mm) from flat (dish, bow, or convoluting edge) or 0.125 in. (3 mm) for bulges or dips in the surface.

1043.05 Expanded Polypropylene (EPP) Adjusting Rings. The EPP adjusting rings shall be manufactured using a high compression molding process to produce a minimum finished density of 7.5 lb/cu ft (120 g/l). The EPP rings shall be made of materials meeting ASTM D 3575 and ASTM D 4819-13. The grade adjustments shall be designed and tested according to the AASHTO Standard Specifications for Highway Bridges (AASHTO M 306 HS-25).

Grade rings shall contain upper and lower keyways (tongue and groove) for proper vertical alignment and sealing. The top ring, for use directly beneath the cast iron frame, shall have keyways (grooves) on the lower surface with a flat upper surface.

Adhesive or sealant used for watertight installation of the manhole grade adjustment rings shall meet ASTM C 920, Type S, Grade NS, Class 25, Uses NT, T, M, G, A, and O.

EPP adjustment rings shall have no void areas, cracks, or tears. The actual diameter or length shall not vary more than 0.125 in. (3 mm) from the specified diameter or length. Variations in height are limited to ± 0.063 in. (± 1.6 mm). Variations shall not exceed 0.25 in. (6 mm) from flat (dish, bow, or convoluting edge) or 0.125 in. (3 mm) for bulges or dips in the surface.”

AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 2012

Revised: April 1, 2016

Add the following Section to the Standard Specifications:

“SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT

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

303.02 Materials. Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2, and 3)	1031

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01, CS 02, and RR 01 but shall not exceed 40 percent of the total product. The top size of the RAP shall be less than 4 in. (100 mm) and well graded.

Note 2. RAP having 100 percent passing the 1 1/2 in. (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradations CS 01, CS 02, or RR 01 are used in lower lifts.

Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, “Reclaimed Asphalt Pavement (RAP) for Aggregate Applications”.

303.03 Equipment. The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer.

303.04 Soil Preparation. The stability of the soil shall be according to the Department’s Subgrade Stability Manual for the aggregate thickness specified.

303.05 Placing Aggregate. The maximum nominal lift thickness of aggregate gradations CA 02, CA 06, or CA 10 shall be 12 in. (300 mm). The maximum nominal lift thickness of aggregate gradations CS 01, CS 02, and RR 01 shall be 24 in. (600 mm).

303.06 Capping Aggregate. The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When the contract specifies that a granular subbase is to be placed on the aggregate subgrade improvement, the 3 in. (75 mm) of capping aggregate shall be the same gradation and may be placed with the underlying aggregate subgrade improvement material.

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

303.08 Finishing and Maintenance of Aggregate Subgrade Improvement. The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

303.09 Method of Measurement. This work will be measured for payment according to Article 311.08.

303.10 Basis of Payment. This work will be paid for at the contract unit price per cubic yard (cubic meter) or ton (metric ton) for AGGREGATE SUBGRADE IMPROVEMENT or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT, of the thickness specified.”

Add the following to Section 1004 of the Standard Specifications:

“**1004.07 Coarse Aggregate for Aggregate Subgrade Improvement.** The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. In applications where greater than 24 in. (600 mm) of subgrade material is required, gravel may be used below the first 12 in (300 mm) of subgrade.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
- (c) Gradation.
 - (1) The coarse aggregate gradation for total subgrade thickness less than or equal to 12 in. (300 mm) shall be CA 2, CA 6, CA 10, or CS 01.

The coarse aggregate gradation for total subgrade thickness more than 12 in. (300 mm) shall be CS 01 or CS 02 as shown below or RR 01 according to Article 1005.01(c).

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

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

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

BUTT JOINTS (BDE)

Effective: July 1, 2016

Add the following to Article 406.08 of the Standard Specifications.

“(c) Temporary Plastic Ramps. Temporary plastic ramps shall be made of high density polyethylene meeting the properties listed below. Temporary plastic ramps shall only be used on roadways with permanent posted speeds of 55 mph or less. The ramps shall have a minimum taper rate of 1:30 (V:H). The leading edge of the plastic ramp shall have a maximum thickness of 1/4 in. (6 mm) and the trailing edge shall match the height of the adjacent pavement ± 1/4 in. (± 6 mm).

The ramp will be accepted by certification. The Contractor shall furnish a certification from the manufacturer stating the temporary plastic ramp meets the following requirements.

Physical Property	Test Method	Requirement
Melt Index	ASTM D 1238	8.2 g/10 minutes
Density	ASTM D 1505	0.965 g/cc
Tensile Strength @ Break	ASTM D 638	2223 psi (15 MPa)
Tensile Strength @ Yield	ASTM D 638	4110 psi (28 MPa)
Elongation @ Yield ^{1/} , percent	ASTM D 638	7.3 min.
Durometer Hardness, Shore D	ASTM D 2240	65
Heat Deflection Temperature, 66 psi	ASTM D 648	176 °F (80 °C)
Low Temperature Brittleness, F ₅₀	ASTM D 746	<-105 °F (<-76 °C)

1/ Crosshead speed -2 in./minute

The temporary plastic ramps shall be installed according to the manufacturer’s specifications and fastened with anchors meeting the manufacturer’s recommendations. Temporary plastic ramps that fail to stay in place or create a traffic hazard shall be replaced immediately with temporary HMA ramps at the Contractor’s expense.”

CONCRETE MIX DESIGN – DEPARTMENT PROVIDED (BDE)

Effective: January 1, 2012

Revised: April 1, 2016

For the concrete mix design requirements in Article 1020.05(a) of the Standard Specifications, the Contractor has the option to request the Engineer determine mix design material proportions for Class PV, PP, RR, BS, DS, SC, and SI concrete. A single mix design for each class of concrete will be provided. Acceptance by the Contractor to use the mix design developed by the Engineer shall not relieve the Contractor from meeting specification requirements.

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)

Effective: September 1, 2000

Revised: July 2, 2016

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

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

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

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

- (a) Withholding progress payments;
- (b) Assessing sanctions;
- (c) Liquidated damages; and/or
- (d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform **13.00%** of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

- (a) The bidder documents that enough DBE participation has been obtained to meet the goal or,
- (b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at:
<http://www.idot.illinois.gov/doing-business/certifications/disadvantaged-business-enterprise-certification/il-ucp-directory/index>.

BIDDING PROCEDURES. Compliance with this Special Provision is required prior to the award of the contract and the failure of the low bidder to comply will render the bid not responsive.

In order to assure the timely award of the contract, the low bidder shall submit:

- (a) The bidder shall submit a DBE Utilization Plan on completed Department forms SBE 2025 and 2026.
 - (1) The final Utilization Plan must be submitted within five calendar days after the date of the letting in accordance with subsection (a)(2) of Bidding Procedures herein.
 - (2) To meet the five day requirement, the bidder may send the Utilization Plan electronically by scanning and sending to **DOT.DBE.UP@illinois.gov** or faxing to (217) 785-1524. The subject line must include the bid Item Number and the Letting date. The Utilization Plan should be sent as one .pdf file, rather than multiple files and emails for the same Item Number. It is the responsibility of the bidder to obtain confirmation of email or fax delivery.

Alternatively, the Utilization Plan may be sent by certified mail or delivery service within the five calendar day period. If a question arises concerning the mailing date of a Utilization Plan, the mailing date will be established by the U.S. Postal Service postmark on the certified mail receipt from the U.S. Postal Service or the receipt issued by a delivery service when the Utilization Plan is received by the Department. It is the responsibility of the bidder to ensure the postmark or receipt date is affixed within the five days if the bidder intends to rely upon mailing or delivery to satisfy the submission day requirement. The Utilization Plan is to be submitted to:

Illinois Department of Transportation
Bureau of Small Business Enterprises
Contract Compliance Section
2300 South Dirksen Parkway, Room 319
Springfield, Illinois 62764

The Department will not accept a Utilization Plan if it does not meet the five day submittal requirement and the bid will be declared not responsive. In the event the bid is declared not responsive due to a failure to submit a Utilization Plan or failure to comply with the bidding procedures set forth herein, the Department may elect to cause the forfeiture of the penal sum of the bidder's proposal guaranty, and may deny authorization to bid the project if re-advertised for bids. The Department reserves the right to invite any other bidder to submit a Utilization Plan at any time for award consideration.

- (b) The Utilization Plan shall indicate that the bidder either has obtained sufficient DBE participation commitments to meet the contract goal or has not obtained enough DBE participation commitments in spite of a good faith effort to meet the goal. The Utilization Plan shall further provide the name, telephone number, and telefax number of a responsible official of the bidder designated for purposes of notification of Utilization Plan approval or disapproval under the procedures of this Special Provision.
- (c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and scanned or faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:
 - (1) The names and addresses of DBE firms that will participate in the contract;
 - (2) A description, including pay item numbers, of the work each DBE will perform;
 - (3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;
 - (4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;
 - (5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the Utilization Plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,
 - (6) If the contract goal is not met, evidence of good faith efforts; the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.
 - (1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.
 - (2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.
 - (3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.
 - b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with subsection (c)(6) of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.
- (5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
 - (6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
 - (7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.
 - (8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

- (b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination. If the Utilization Plan is not approved because it is deficient as a technical matter, unless waived by the Department, the bidder will be notified and will be allowed no more than a five calendar day period in order to cure the deficiency.
- (c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

- (a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

- (b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.
- (c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.
- (d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:
 - (1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.
 - (2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.
- (e) DBE as a material supplier:
 - (1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.
 - (2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.
 - (3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a DBE regular dealer or DBE manufacturer.

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

- (a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.
- (b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A or AER 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, then a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.
- (c) SUBCONTRACT. The Contractor must provide DBE subcontracts to IDOT upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.

- (d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:
- (1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or
 - (2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or
 - (3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.
- (e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a) of this part. Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

- (1) The listed DBE subcontractor fails or refuses to execute a written contract;
- (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;
- (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law.
- (6) You have determined that the listed DBE subcontractor is not a responsible contractor;
- (7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;
- (8) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (9) A DBE owner dies or becomes disabled with the result that the listed DBE subcontractor is unable to complete its work on the contract;
- (10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

- (f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Resident Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.
- (g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (h) RECONSIDERATION. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department. The result of the reconsideration process is not administratively appealable to the U.S. Department of Transportation.

DOWEL BAR INSERTER (BDE)

Effective: January 1, 2017

Add the following to Article 420.03 of the Standard Specifications.

“(l) Mechanical Dowel Bar Inserter 1103.20”

Revise Article 420.05(c) of the Standard Specifications to read:

“(c) Transverse Contraction Joints. Transverse contraction joints shall consist of planes of weakness created by sawing grooves in the surface of the pavement and shall include load transfer devices consisting of dowel bars. Transverse contraction joints shall be according to the following.”

Revise Article 420.05(c)(2) of the Standard Specifications to read:

“(2) Dowel Bars. Dowel Bars shall be installed parallel to the centerline of the pavement and parallel to the proposed pavement surface. Installation shall be according to one of the following methods.

- a. Dowel Bar Assemblies. The assembly shall act as a rigid unit with each component securely held in position relative to the other members of the assembly. The entire assembly shall be held securely in place by means of nails which shall penetrate the stabilized subbase. At least ten nails shall be used for each 10, 11, or 12 ft (3, 3.3, or 3.6 m) section of assembly.

Metal stakes shall be used instead of nails, with soil or granular subbase. The stakes shall loop over or attach to the top parallel spacer bar of the assembly and penetrate the subgrade or subbase at least 12 in. (300 mm).

At the location of each dowel bar assembly, the subgrade or subbase shall be reshaped and re-tamped when necessary.

Prior to placing concrete, any deviation of the dowel bars from the correct horizontal or vertical alignment (horizontal skew or vertical tilt) greater than 3/8 in. in 12 in (9 mm in 300 mm) shall be corrected and a light coating of oil shall be uniformly applied to all dowel bars.

Care shall be exercised in depositing the concrete at the dowel bar assemblies so the horizontal and vertical alignment will be retained.

- b. Dowel Bar Insertion. The dowel bars may be placed in the pavement slab with a mechanical dowel bar inserter (DBI) attached to a formless paver for pavements ≥ 7.0 in. (175 mm) in thickness. A light coating of oil shall be uniformly applied to all dowel bars.

The DBI shall insert the dowel bars with vibration into the plastic concrete after the concrete has been struck off and consolidated without deformation of the slab. After the bars have been inserted, the concrete shall be refinished and no voids shall exist around the dowel bars. The forward movement of the paver shall not be interrupted by the inserting of the dowel bars.

The location of each row of dowel bars shall be marked in a manner to facilitate where to insert the bars, and where to saw the transverse joint.

1. Placement Tolerances for Dowel Bars. The DBI shall place the dowel bars in the concrete pavement within the following tolerances.

- (a.) Longitudinal Translation (Mislocation). Longitudinal translation (mislocation) shall be defined as the position of the center of the dowel bar along the longitudinal axis, in relation to the sawed joint.

The quality control tolerance for longitudinal translation shall not exceed 2.0 in (50 mm). If this tolerance is exceeded, adjustments shall be made to the paving operation.

Any joint having two or more dowel bars with an embedment length less than 4.0 in. (100 mm) within 12 in. (300 mm) of the same wheelpath will be considered unacceptable. Any joint having an average dowel bar embedment length less than 5.25 in. (130 mm) will also be considered unacceptable. Embedment length shall be defined as the length of dowel bar embedded on the short side of the sawed joint. An unacceptable joint shall be replaced with a minimum of 6 ft (1.8 m) of pavement centered over the joint according to Section 442 for Class B patches.

- (b.) Horizontal Translation (Mislocation). Horizontal translation (mislocation) shall be defined as the difference in the actual dowel bar location parallel to the longitudinal or edge joint from its theoretical position as shown on the plans.

The quality control tolerance for horizontal translation shall not exceed 2.0 in. (50 mm). If this tolerance is exceeded, adjustments shall be made to the paving operation.

Any joint having a dowel bar with a translation greater than 4.0 in. (100 mm) will be considered unacceptable, but may remain in place unless the Engineer determines the joint will not function. If the joint is unable to remain in place, the joint shall be replaced with a minimum of 6 ft (1.8 m) of pavement centered over the joint according to Section 442 for Class B patches.

(c.) Vertical Translation (Mislocation). Vertical translation (mislocation) shall be defined as the difference in the vertical position of the dowel bar relative to the theoretical midpoint of the slab.

The quality control tolerance for vertical translation shall be as shown in the following table. If these tolerances are exceeded, adjustments shall be made to the paving operation.

Pavement Thickness	Dowel Bar Diameter	Vertical Translation Tolerance Above Midpoint	Vertical Translation Tolerance Below Midpoint
≥7 in. to <8 in. (≥175 mm to <200 mm)	1.25 in. (31 mm)	0.25 in. (6 mm)	0.5 in. (13 mm)
≥8 in. to <9 in. (≥200 mm to <225 mm)	1.50 in. (38 mm)	0.25 in. (6 mm)	0.5 in. (13 mm)
≥9 in. to <10 in. (≥225 mm to <250 mm)	1.50 in. (38 mm)	0.75 in. (19 mm)	0.75 in. (19 mm)
≥10 in. (≥250 mm)	1.50 in. (38 mm)	0.75 in. (19 mm)	1.0 in. (25 mm)

Any joint having a dowel bar with top concrete cover less than T/3, where T is slab thickness, will be considered unacceptable. Any joint having 2 or more dowel bars with bottom concrete cover less than 2.0 in. (50 mm) will also be considered unacceptable. An unacceptable joint shall be replaced with a minimum of 6 ft (1.8 m) of pavement according to Section 442 for Class B patches.

(d.) Vertical Tilt or Horizontal Skew (Misalignment). Vertical tilt or horizontal skew (misalignment) shall be defined as the difference in position of the dowel bar ends with respect to each other. Vertical tilt is measured in the vertical axis whereas horizontal skew is measured in the horizontal axis. Misalignment shall be measured in terms of a joint score. The joint score shall be defined as the degree of misalignment evaluated for a single transverse joint for each lane of pavement. The joint score shall be determined as follows:

$$\text{Joint Score} = \left(1 + \left(\frac{x}{x-n} \right) \sum_{i=1}^n W_i \right)$$

where:

W_i = weighting factor (Table 1) for dowel i

x = number of dowels in a single joint

n = number of dowels excluded from the joint score calculation due to measurement interference

Single Dowel Misalignment – The degree of misalignment applicable to a single dowel bar, calculated as:

$$\text{Single Dowel Misalignment} = \sqrt{(\text{Horizontal Skew})^2 + (\text{Vertical Tilt})^2}$$

Table 1. Weighting Factors in Joint Score Determination	
Single Dowel Bar Misalignment (SDM)	W, Weighting Factor
SDM ≤ 0.6 in. (15 mm)	0
0.6 in. (15 mm) < SDM ≤ 0.8 in. (20 mm)	2
0.8 in. (20 mm) < SDM ≤ 1 in. (25 mm)	4
1 in. (25 mm) < SDM ≤ 1.5 in. (38 mm)	5
1.5 in. (38 mm) < SDM	10

The quality control tolerance for vertical tilt or horizontal skew shall not exceed 0.6 in. (15 mm). If the tolerance is exceeded for either one, adjustments shall be made to the paving operation.

Any joint having a dowel bar with a vertical tilt or horizontal skew greater than 1.5 in. (38 mm) shall be cut. If more than one dowel bar is required to be cut in the joint, the joint will be considered unacceptable and shall be replaced with a minimum of 6 ft (1.8 m) of pavement centered over the joint according to Section 442 for Class B patches.

Single dowel bar misalignment shall be controlled to provide the joint scores shown in the following table.

Number of Dowel Bars in the Joint	Maximum Joint Score
< 5	4
≥ 5 but ≤ 9	8
> 9	12

A joint score greater than the specified maximum will be considered locked. Three consecutive joints with a score greater than the specified maximum total score will all be considered unacceptable.

Three consecutive locked joints shall be corrected by selecting one joint and cutting a dowel bar. Preference shall be given to cutting a dowel bar within the middle 2.5 ft (0.8 m) of the pavement lane to avoid the wheelpaths. If none of the three locked joints will have a joint score less than or equal to the specified maximum after selecting one dowel bar to cut, one of the joints shall be replaced with a minimum of 6 ft (1.8 m) of pavement centered over the joint according to Section 442 for Class B patches.

(e.) For unacceptable work, the Contractor may propose alternative repairs for consideration by the Engineer.

2. Testing of Dowel Bar Placement. The placement of the dowel bars shall be tested within 24 hours of paving with a calibrated MIT Scan-2 device according to "Use of Magnetic Tomography Technology to Evaluate Dowel Placement" (Publication No. FHWA-IF-06-006) by the Federal Highway Administration.

A trained operator shall perform the testing, and all testing shall be performed in the presence of the Engineer. The device shall be calibrated to the type and size dowel bar used in the work according to the manufacturer's instructions. Calibration documentation shall be provided to the Engineer prior to construction. The device shall be recalibrated and/or validate readings as required by the Engineer. The device may be utilized as a process control and make necessary adjustments to ensure the dowel bars are placed in the correct location.

(a.) Test Section. Prior to start of production paving, a test section consisting of 30 transverse joints shall be constructed. The test section may be performed on the actual pavement, but production paving shall not begin until an acceptable test section has been constructed. The test section will be considered acceptable when all of the following are met:

- (1.) 90 percent of the dowel bars meet the quality control tolerance for longitudinal, horizontal, or vertical translation (mislocation);
- (2.) 90 percent of the dowel bars meet the quality control tolerance for vertical tilt or horizontal skew deviation (misalignment); and
- (3.) none of the joints are considered unacceptable prior to a corrective measure for mislocation or misalignment.

If the test section fails, another test section consisting of 30 joints shall be constructed.

The test section requirement may be waived by the Engineer if the Contractor has constructed an acceptable test section and successfully used the DBI on a Department contract within the same calendar year.

(b.) Production Paving. After the test section is approved, production paving may begin. The mislocation and misalignment of each dowel bar for the first ten joints constructed, and every tenth joint thereafter, shall be tested.

If two consecutive days of paving result in 5 percent or more of the joints on each day being unacceptable prior to a corrective measure, production paving shall be discontinued and a new test section shall be constructed.

If any joint is found to be unacceptable prior to a corrective measure, testing of additional joints on each side of the unacceptable joint shall be performed until acceptable joints are found.

(c.) Test Report. Test reports shall be provided to the Engineer within two working days of completing each day's testing. The test report shall include the following.

- (1.) Contract number, placement date, county-route-section, direction of traffic, scan date, Contractor, and name of individual performing the tests.
- (2.) Provide the standard report generated from the on-board printer of the imaging technology used for every dowel and joint measured.

- (3.) For every dowel measured, provide the joint identification number, lane number and station, dowel bar number or x-location, direction of testing and reference joint location/edge location, longitudinal translation, horizontal translation, vertical translation, vertical tilt, and horizontal skew.
 - (4.) Identify each dowel bar with a maximum longitudinal, horizontal, or vertical translation that has been exceeded. Identify each dowel bar with a maximum vertical tilt or horizontal skew deviation that has been exceeded.
 - (5.) Joint Score Details: Provide the joint identification number, lane number, station, and calculated joint score for each joint.
 - (6.) Locked Joint Identification: Identify each joint with a joint score > 12.
- (d.) Exclusions. Exclude the following from dowel bar mislocation and misalignment measurements.
- (1.) Transverse construction joints (headers).
 - (2.) Dowel bars within 24 in. (610 mm) of metallic manholes, inlets, metallic castings, or other nearby or underlying steel reinforced objects.
 - (3.) The outside dowel bar when tie bars are installed with mechanical equipment in fresh concrete. For tie bar installations involving preformed or drilled holes, installation shall be performed after testing with the MIT Scan-2 device.
 - (4.) Joints located directly under high voltage power lines.
 - (5.) Subject to the approval of the Engineer, any other contributors to magnetic interference.
- (e.) Deficiency Deduction. When the Contractor has cut 25 dowel bars to correct unacceptable joints, the Contractor shall be liable and shall pay to the Department a deficiency deduction of \$500.00 for the cost of the bars. Thereafter, an additional deficiency deduction of \$20.00 for each additional bar cut will be assessed.”

Add the following to Section 1103 of the Standard Specifications.

“1103.20 Mechanical Dowel Bar Inserter. The mechanical dowel bar inserter (DBI) shall be self-contained and supported on the formless paver with the ability to move separately from the paver. The DBI shall be equipped with insertion forks along with any other devices necessary for finishing the concrete the full width of the pavement. The insertion forks shall have the ability to vibrate at a minimum frequency of 3000 VPM.”

GROOVING FOR RECESSED PAVEMENT MARKINGS (BDE)

Effective: November 1, 2012

Revised: August 1, 2014

Description. This work shall consist of grooving the pavement surface in preparation for the application of recessed pavement markings.

Equipment. Equipment shall be according to the following.

- (a) Pavement Marking Tape Installations: The grooving equipment shall have a free-floating saw blade cutting head equipped with gang-stacked diamond saw blades. The diamond saw blades shall be of uniform wear and shall produce a smooth textured surface. Any ridges in the groove shall have a maximum height of 15 mils (0.38 mm).
- (b) Liquid and Thermoplastic Pavement Marking Installations: The grooving equipment shall be equipped with either a free-floating saw blade cutting head or a free-floating grinder cutting head configuration with diamond or carbide tipped cutters and shall produce an irregular textured surface.

CONSTRUCTION REQUIREMENTS

General. The Contractor shall supply the Engineer with a copy of the pavement marking material manufacturer's recommendations for constructing a groove.

Pavement Grooving Methods. The grooves for recessed pavement markings shall be constructed using the following methods.

- (a) Wet Cutting Head Operation. When water is required or used to cool the cutting head, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.
- (b) Dry Cutting Head Operation. When used on HMA pavements, the groove shall be vacuumed or cleaned by blasting with high-pressure air to remove loose aggregate, debris, and dust generated during the cutting operation. When used on PCC pavements, the groove shall be flushed with high pressure water or shot blasted to remove any PCC particles that may have become destabilized during the grooving process. If high pressure water is used, the pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

Pavement Grooving. Grooving shall not cause ravels, aggregate fractures, spalling or disturbance of the joints to the underlying surface of the pavement. Grooves shall be cut into the pavement prior to the application of the pavement marking material. Grooves shall be cut such that the width is 1 in. (25 mm) greater than the width of the pavement marking line as specified on the plans. Grooves for letters and symbols shall be cut in a square or rectangular shape so that the entire marking will fit within the limits of the grooved area. The position of the edge of the grooves shall be a minimum of 4 in. (100 mm) from the edge of all longitudinal joints. The depth of the groove shall not be less than the manufacturer's recommendations for the pavement marking material specified, but shall be installed to a minimum depth of 110 mils (2.79 mm) and a maximum depth of 200 mils (5.08 mm) for pavement marking tapes thermoplastic markings and a minimum depth of 40 mils (1.02 mm) and a maximum depth of 80 mils (2.03 mm) for liquid markings. The cutting head shall be operated at the appropriate speed in order to prevent undulation of the cutting head and grooving at an inconsistent depth.

At the start of grooving operations, a 50 ft (16.7 m) test section shall be installed and depth measurements shall be made at 10 ft (3.3 m) intervals within the test section. The individual depth measurements shall be within the allowable ranges according to this Article. If it is determined the test section has not been grooved at the appropriate depth or texture, adjustments shall be made to the cutting head and another 50 ft (16.7 m) test section shall be installed and checked. This process shall continue until the test section meets the requirements of this Article.

For new HMA pavements, grooves shall not be installed within 14 days of the placement of the final course of pavement.

Final Cleaning. Immediately prior to the application of the pavement marking material or primer sealer, the groove shall be cleaned with high-pressure air blast.

Method of Measurement. This work will be measured for payment in place, in feet (meter) for the groove width specified.

Grooving for letter, numbers and symbols will be measured in square feet (square meters).

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified, and per square foot (square meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS.

The following shall only apply when preformed plastic pavement markings are to be recessed:

Add the following paragraph after the first paragraph of Article 780.07 of the Standard Specifications.

“The markings shall be capable of being applied in a grooved slot on new and existing portland cement concrete and HMA surfaces, by means of a pressure-sensitive, precoated adhesive, or liquid contact cement which shall be applied at the time of installation. A primer sealer shall be applied with a roller and shall cover and seal the entire bottom of the groove. The primer sealer shall be recommended by the manufacturer of the pavement marking material and shall be compatible with the material being used. The Contractor shall install the markings in the groove as soon as possible after the primer sealer cures according to the manufacturer’s recommendations. The markings placed in the groove shall be rolled and tamped into the groove with a roller or tamper cart cut to fit the groove and loaded with or weighing at least 200 lb (90kg). Vehicle tires shall not be used for tamping. The Contractor shall roll and tamp the material with a minimum of 6 passes to prevent easy removal or peeling.”

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)

Effective: January 1, 2010

Revised: April 1, 2016

Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

“Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.

b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location.”

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4% ^{1/}	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%"

HOT-MIX ASPHALT – TACK COAT (BDE)

Effective: November 1, 2016

Revise Article 1032.06(a) of the Standard Specifications to read:

“(a) Anionic Emulsified Asphalt. Anionic emulsified asphalts shall be according to AASHTO M 140. SS-1h emulsions used as a tack coat shall have the cement mixing test waived.”

LIGHT POLES (BDE)

Effective: July 1, 2016

Revise the second paragraph of Article 1069.01 of the Standard Specifications to read:

“The detailed design and fabrication of the pole shaft, arms, tenons, and attachments shall be according to AASHTO “LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals” current at the time the project is advertised. Light poles shall be designed for ADT > 10,000 and Risk Category Typical. If Fatigue design is required, light poles shall be designed for Importance Category I.”

Revise the fifth paragraph of Article 1069.01(a) of the Standard Specifications to read:

“Deflection of the pole top as caused by the combined effect of deadload referenced above and wind speed prescribed by AASHTO shall be as required by AASHTO. Pole deflection and loading compliance, certified by the manufacturer, shall be noted on the pole submittal.”

MAST ARM ASSEMBLY AND POLE (BDE)

Effective: July 1, 2016

Revise Article 1077.03(a)(1) of the Standard Specifications to read:

“(1) Loading. The mast arm assembly and pole, and combination mast arm assembly and pole shall be designed for the loading shown on the Highway Standards or elsewhere on the plans, whichever is greater. The design shall be according to AASHTO “LRFD Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals” 2015 Edition. However, the arm-to-pole connection for tapered signal and luminaire arms shall be according to the “fillet welded, ring stiffened box connection” detail as shown in Figure C5.6.7-2. The mast arm and pole shall be designed assuming the ADT > 10,000, Risk Category Typical, and Fatigue Category I Natural Wind Gust only.”

PAVEMENT MARKING REMOVAL (BDE)

Effective: July 1, 2016

Revise Article 783.02 of the Standard Specifications to read:

“**783.02 Equipment.** Equipment shall be according to the following.

Item	Article/Section
(a) Grinders (Note 1)	
(b) Water Blaster with Vacuum Recovery	1101.12

Note 1. Grinding equipment shall be approved by the Engineer.”

Revise the first paragraph of Article 783.03 of the Standard Specifications to read:

“**783.03 Removal of Conflicting Markings.** Existing pavement markings that conflict with revised traffic patterns shall be removed. If darkness or inclement weather prohibits the removal operations, such operations shall be resumed the next morning or when weather permits. In the event of removal equipment failure, such equipment shall be repaired, replaced, or leased so removal operations can be resumed within 24 hours.”

Revise the first and second sentences of the first paragraph of Article 783.03(a) of the Standard Specifications to read:

“The existing pavement markings shall be removed by the method specified and in a manner that does not materially damage the surface or texture of the pavement or surfacing. Small particles of tightly adhering existing markings may remain in place, if in the opinion of the Engineer, complete removal of the small particles will result in pavement surface damage.”

Revise the first paragraph of Article 783.04 of the Standard Specifications to read:

“783.04 Cleaning. The roadway surface shall be cleaned of debris or any other deleterious material by the use of compressed air or water blast.”

Revise the first paragraph of Article 783.06 of the Standard Specifications to read:

“783.06 Basis of Payment. This work will be paid for at the contract unit price per each for RAISED REFLECTIVE PAVEMENT MARKER REMOVAL, or at the contract unit price per square foot (square meter) for PAVEMENT MARKING REMOVAL – GRINDING and/or PAVEMENT MARKING REMOVAL – WATER BLASTING.”

Delete Article 1101.13 from the Standard Specifications.

PORTABLE CHANGEABLE MESSAGE SIGNS (BDE)

Effective: November 1, 2016

Revised: April 1, 2017

Revise the second paragraph of Article 701.20(h) of the Standard Specifications to read:

“For all other portable changeable message signs, this work will be paid for at the contract unit price per calendar day for each sign as CHANGEABLE MESSAGE SIGN.”

Revise this second sentence of the first paragraph of Article 1106.02(i) of the Standard Specifications to read:

“The message panel shall be a minimum of 7 ft (2.1 m) above the edge of pavement in urban areas and a minimum of 5 ft (1.5 m) above the edge of pavement in rural areas, present a level appearance, and be capable of displaying up to eight characters in each of three lines at a time.”

PORTLAND CEMENT CONCRETE BRIDGE DECK CURING (BDE)

Effective: April 1, 2015

Revised: January 1, 2017

Revise the following two entries in the table in Article 1020.13 of the Standard Specifications to read:

"INDEX TABLE OF CURING AND PROTECTION OF CONCRETE CONSTRUCTION			
TYPE OF CONSTRUCTION	CURING METHODS	CURING PERIOD DAYS	LOW AIR TEMPERATURE PROTECTION METHODS
Superstructure (Approach Slab)	1020.13(a)(5)(6) ^{19/}	3	1020.13(d)(1)(2) ^{17/}
Deck	1020.13(a)(5)(6) ^{19/}	7	1020.13(d)(1)(2) ^{17/}

Add the following footnote to the end of the Index Table of Curing and Protection of Concrete Construction in Article 1020.13 of the Standard Specifications:

"19/ The cellulose polyethylene or synthetic fiber with polymer polyethylene blanket method shall not be used on latex modified concrete."

Revise Article 1020.13(a)(5) of the Standard Specifications to read:

"(5) Wetted Cotton Mat Method. After the surface of concrete has been textured or finished, it shall be covered immediately with dry or damp cotton mats. Cotton mats in poor condition will not be allowed. The cotton mats shall be placed in a manner which will not create indentations greater than 1/4 in. (6 mm) in the concrete surface. Minor marring of the surface is tolerable and is secondary to the importance of timely curing. The cotton mats shall then be wetted immediately and thoroughly soaked with a gentle spray of water. Thereafter, the cotton mats shall be covered with white polyethylene sheeting or burlap-polyethylene blankets. The cotton mats shall be kept saturated with water.

- a. Bridge Decks. For bridge decks, a foot bridge shall be used to place and wet the cotton mats. The cotton mats shall be maintained in a wetted condition until the concrete has hardened sufficiently to place soaker hoses without indentations to the concrete surface. The soaker hoses shall be placed on top of the cotton mats at a maximum 4 ft (1.2 m) spacing. The cotton mats shall be kept wet with a continuous supply of water for the remainder of the curing period. Other continuous wetting systems may be used if approved by the Engineer.

For areas inaccessible to the cotton mats, curing shall be according to Article 1020.13(a)(3)."

Add the following to Article 1020.13(a) of the Standard Specifications.

“(6) Cellulose Polyethylene Blanket Method and Synthetic Fiber with Polymer Polyethylene Blanket Method. After the surface of concrete has been textured or finished, it shall be covered immediately with a cellulose polyethylene or synthetic fiber with polymer polyethylene blanket. Damaged blankets will not be allowed. The blankets shall be installed with the white perforated polyethylene side facing up. Adjoining blankets shall overlap a minimum of 8 in. (200 mm). Any air bubbles trapped during placement shall be removed. The blankets shall then be wetted immediately and thoroughly soaked with a gentle spray of water. Thereafter, the blankets shall be kept saturated with water. For bridge decks, the blankets shall be placed and kept wet according to Article 1020.13(a)(5)a.”

Revise the first paragraph of Article 1022.03 of the Standard Specifications to read:

“1022.03 Waterproof Paper Blankets, White Polyethylene Sheeting, Burlap-Polyethylene Blankets, Cellulose Polyethylene Blankets, and Synthetic Fiber with Polymer Polyethylene Blankets. These materials shall be white and according to ASTM C 171, except moisture loss test specimens shall be made according to Illinois Modified AASHTO T 155.

The cellulose polyethylene blanket shall consist of a white polyethylene sheeting with cellulose fiber backing and shall be limited to single use only. The cellulose polyethylene blankets shall be delivered to the jobsite unused and in the manufacturer's unopened packaging until ready for installation. Each roll shall be clearly labeled with product name, manufacturer, and manufacturer's certification of compliance with ASTM C 171.

The synthetic fiber with polymer polyethylene blanket shall consist of a white polyethylene sheeting with absorbent synthetic fibers and super absorbent polymer backing, and shall be limited to single use only. The synthetic fiber with polymer polyethylene blankets shall be delivered to the jobsite unused and in the manufacturer's unopened packaging until ready for installation. Each roll shall be clearly labeled on the product with product name, manufacturer, and manufacturer's certification of compliance with ASTM C 171.”

PROGRESS PAYMENTS (BDE)

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

- “(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics’ Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department’s Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department’s obligation to pay the Contractor, the Contractor’s obligation to pay the subcontractor, and the Contractor’s or subcontractor’s total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved.”

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012

Revise: April 1, 2016

Revise Section 1031 of the Standard Specifications to read:

“SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum, “Reclaimed Asphalt Shingle (RAS) Sources”, by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
 - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
 - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

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

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. “Homogeneous Surface”).

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

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

Mixture FRAP will be used in:	Sieve Size that 100 % of FRAP Shall Pass
IL-19.0	1 1/2 in. (40 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered “homogeneous” with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as “Non-Quality”.

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

- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be accounted for in the mix design and during HMA production.

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

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

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

(1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

(2) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

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

- (b) RAS Testing. RAS or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

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

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

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

- (a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation, and when applicable G_{mm} . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous/ Conglomerate
1 in. (25 mm)	
1/2 in. (12.5 mm)	$\pm 8 \%$
No. 4 (4.75 mm)	$\pm 6 \%$
No. 8 (2.36 mm)	$\pm 5 \%$
No. 16 (1.18 mm)	
No. 30 (600 μm)	$\pm 5 \%$
No. 200 (75 μm)	$\pm 2.0 \%$
Asphalt Binder	$\pm 0.4 \%$ ^{1/}
G_{mm}	± 0.03

1/ The tolerance for FRAP shall be $\pm 0.3 \%$.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

- (b) Evaluation of RAS and RAS Blended with Manufactured Sand Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	± 4 %
No. 200 (75 µm)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

1031.05 Quality Designation of Aggregate in RAP/FRAP.

- (a) RAP. The aggregate quality of the RAP for homogeneous and conglomerate stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
- (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
 - (2) RAP from Class I binder, Superpave/HMA (High ESAL) binder, or (Low ESAL) IL-19.0L binder mixtures are designated as containing Class C quality coarse aggregate.

- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 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 laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Bureau of Materials and Physical Research Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

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

- (a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.

- (1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
- (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous RAP and FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, or conglomerate.
- (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given Ndesign.

- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.
 - (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures <small>1/, 2/</small>	RAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).

- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given Ndesign.

FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures <i>1/, 2/</i>	FRAP/RAS Maximum ABR %		
	Ndesign	Binder/Leveling Binder	Surface
30	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28). If warm mix asphalt (WMA) technology is utilized and production temperatures do not exceed 275 °F (135 °C), the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG 64-22 to be reduced to a PG 58-28).
- 3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.
- 4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 percent.

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

- (a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP and/or RAS 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 and/or RAS stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP and/or RAS stockpiles may be used in the original mix design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

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

- (a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

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

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

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

- (c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- d. Accumulated dry weight of RAP/FRAP/RAS in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.

- g. Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
 - h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
- (2) Batch Plants.
- a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - e. RAP/FRAP/RAS weight to the nearest pound (kilogram).
 - f. Virgin asphalt binder weight to the nearest pound (kilogram).
 - g. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B.

The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders, Type B shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

SPEED DISPLAY TRAILER (BDE)

Effective: April 2, 2014

Revised: January 1, 2017

Revise the third paragraph of Article 701.11 of the Standard Specifications to read:

“When not being utilized to inform and direct traffic, sign trailers, speed display trailers, arrow boards, and portable changeable message boards shall be treated as nonoperating equipment.”

Add the following to Article 701.15 of the Standard Specifications:

“(m) Speed Display Trailer. A speed display trailer is used to enhance safety of the traveling public and workers in work zones by alerting drivers of their speed, thus deterring them from driving above the posted work zone speed limit.”

Add the following to Article 701.20 of the Standard Specifications:

“(k) When speed display trailers are shown on the Standard, this work will not be paid for separately but shall be considered as included in the cost of the Standard.

For all other speed display trailers, this work will be paid for at the contract unit price per calendar month or fraction thereof for each trailer as SPEED DISPLAY TRAILER.”

Add the following to Article 1106.02 of the Standard Specifications:

“(o) Speed Display Trailer. The speed display trailer shall consist of a LED speed indicator display with self-contained, one-direction radar mounted on an orange see-through trailer. The height of the display and radar shall be such that it will function and be visible when located behind concrete barrier.

The speed measurement shall be by radar and provide a minimum detection distance of 1000 ft (300 m). The radar shall have an accuracy of ± 1 mile per hour.

The speed indicator display shall face approaching traffic and shall have a sign legend of “YOUR SPEED” immediately above or below the speed display. The sign letters shall be between 5 and 8 in. (125 and 200 mm) in height. The digital speed display shall show two digits (00 to 99) in mph. The color of the changeable message legend shall be a yellow legend on a black background. The minimum height of the numerals shall be 18 in. (450 mm), and the nominal legibility distance shall be at least 750 ft (250 m).

The speed indicator display shall be equipped with a violation alert that flashes the displayed detected speed when the work zone posted speed limit is exceeded. The speed indicator shall have a maximum speed cutoff. On roadway facilities with a normal posted speed limit greater than or equal to 45 mph, the detected speeds of vehicles traveling more than 25 mph over the work zone speed limit shall not be displayed. On facilities with normal posted speed limit of less than 45 mph, the detected speeds of vehicles traveling more than 15 mph over the work zone speeds limit shall not be displayed. On any roadway facility if detected speeds are less than 25 mph, they shall not be displayed. The display shall include automatic dimming for nighttime operation.

The speed indicator measurement and display functions shall be equipped with the power supply capable of providing 24 hours of uninterrupted service.”

STEEL PLATE BEAM GUARDRAIL (BDE)

Effective: January 1, 2017

Revise Article 630.02 of the Standard Specifications to read:

“**630.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Steel Plate Beam Guardrail	1006.25
(b) Wood Posts and Wood Block	1007.01, 1007.02, 1007.06
(c) Steel Posts, Blockouts, Restraints and Wire Rope for Guardrail	1006.23
(d) Preservative Treatment	1007.12
(e) Reinforcement Bars	1006.10
(f) Plastic Blockouts (Note 1)	
(g) Chemical Adhesive Resin System	1027.01
(h) Controlled Low-Strength Material (CLSM)	1019

Note 1. Plastic blockouts may be used in lieu of wood blockouts for steel plate beam guardrail. The plastic blockouts shall be the minimum dimensions shown on the plans and shall be on the Department’s qualified product list.”

Revise Article 630.05 of the Standard Specifications to read:

“**630.05 Posts.** Posts shall be as follows.

- (a) Wood Posts. Wood posts and blocks shall be treated. The posts and blocks shall be cut to the proper dimensions before treatment. No cutting of the posts or blocks will be permitted after treatment. Posts shall be erected according to Article 634.05.
- (b) Steel Posts. Steel posts may be driven by hand or mechanical methods provided they are protected by a suitable driving cap and the earth around the posts compacted, if necessary, after driving. When steel posts are driven to incorrect alignment or grade, they shall be removed and set according to Article 634.05.

When it is necessary to shorten the posts in the field, the lower portion shall be cut off in a manner to provide a smooth cut with minimum damage to the galvanizing. Cut areas shall be repaired according to the requirements of AASHTO M 36.”

Revise Article 630.06 of the Standard Specifications to read:

“630.06 Shoulder Stabilization at Guardrail. Shoulder stabilization shall be constructed at the locations of steel plate beam guardrail installation according to the details shown on the plans. On new construction projects, the material used in the shoulder stabilization shall be the same as that used in the adjacent paved shoulder. On shoulder resurfacing projects, the material used in the shoulder stabilization shall be the same as that used for the shoulder resurfacing.

When portland cement concrete is used, shoulder stabilization shall be constructed according to the applicable portions of Section 483. The shoulder stabilization shall be constructed simultaneously with the adjacent portland cement concrete shoulder. Guardrail posts shall be driven through leaveouts or holes cored in the completed shoulder stabilization. The void around each post shall be backfilled with earth or aggregate and capped with hot-mix asphalt (HMA) or CLSM.

When HMA is used, shoulder stabilization shall be constructed according to the applicable portions of Section 482. On new construction, the shoulder stabilization shall be constructed simultaneously with the HMA shoulder. On shoulder resurfacing projects, the portion of the shoulder stabilization below the surface of the existing paved shoulder shall be placed and compacted separately. The guardrail posts shall be driven through holes cored in the completed shoulder stabilization. The void around each post shall be backfilled with earth or aggregate and capped with HMA or CLSM.

When driving guardrail posts through existing shoulders, shoulder stabilization, or other paved areas, the posts shall be driven through cored holes. The void around each post shall be backfilled with earth or aggregate and capped with HMA or CLSM.”

Revise Article 630.08 of the Standard Specifications to read:

“630.08 Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for NON-BLOCKED STEEL PLATE BEAM GUARDRAIL; STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT (1.83 M) POSTS; STEEL PLATE BEAM GUARDRAIL, TYPE A, 9 FOOT (2.74 M) POSTS; STEEL PLATE BEAM GUARDRAIL, TYPE B, 6 FOOT (1.83 M) POSTS; STEEL PLATE BEAM GUARDRAIL, TYPE B, 9 FOOT (2.74 M) POSTS; or STEEL PLATE BEAM GUARDRAIL, TYPE D, 6 FOOT (1.83 M) POSTS.

When end sections are specified, they will not be paid for as a separate item, but shall be considered as included in the unit price for steel plate beam guardrail.

Steel plate beam guardrail mounted on existing culverts will be paid for at the contract unit price per foot (meter) for STRONG POST GUARDRAIL ATTACHED TO CULVERT or WEAK POST GUARDRAIL ATTACHED TO CULVERT, of the case specified.

Portland cement concrete shoulder stabilization at guardrail will be paid for according to Article 483.10.

HMA shoulder stabilization at guardrail will be paid for according to Article 482.08.

Excavation in rock will be paid for according to Article 502.13.

Steel plate beam guardrail incorporating long-span spacing will be paid for at the contract unit price per foot (meter) for LONG-SPAN GUARDRAIL OVER CULVERT, 12 FT 6 IN (3.8 M) SPAN; LONG-SPAN GUARDRAIL OVER CULVERT, 18 FT 9 IN (5.7 M) SPAN; or LONG-SPAN GUARDRAIL OVER CULVERT, 25 FT (7.6 M) SPAN.

Steel plate beam guardrail incorporating treated timber at the back side of the post will be paid for at the contract unit price per foot (meter) for BACK SIDE PROTECTION OF GUARDRAIL.”

TRAINING SPECIAL PROVISIONS (BDE)

Effective: October 15, 1975

This Training Special Provision supersedes Section 7b of the Special Provision entitled “Specific Equal Employment Opportunity Responsibilities,” and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor’s equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be **10**. In the event the Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor’s needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

Method of Measurement. The unit of measurement is in hours.

Basis of Payment. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION

Effective: August 1, 2012

Revised: February 2, 2017

In addition to the Contractor's equal employment opportunity (EEO) affirmative action efforts undertaken as required by this Contract, the Contractor is encouraged to participate in the incentive program described below to provide additional on-the-job training to certified graduates of the IDOT pre-apprenticeship training program, as outlined in this Special Provision.

IDOT funds, and various Illinois community colleges operate, pre-apprenticeship training programs throughout the State to provide training and skill-improvement opportunities to promote the increased employment of minority groups, disadvantaged persons and women in all aspects of the highway construction industry. The intent of this IDOT Pre-Apprenticeship Training Program Graduate (TPG) special provision (Special Provision) is to place these certified program graduates on the project site for this Contract in order to provide the graduates with meaningful on-the-job training. Pursuant to this Special Provision, the Contractor must make every reasonable effort to recruit and employ certified TPG trainees to the extent such individuals are available within a practicable distance of the project site.

Specifically, participation of the Contractor or its subcontractor in the Program entitles the participant to reimbursement for graduates' hourly wages at \$15.00 per hour per utilized TPG trainee, subject to the terms of this Special Provision. Reimbursement payment will be made even though the Contractor or subcontractor may also receive additional training program funds from other non-IDOT sources for other non-TPG trainees on the Contract, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving reimbursement from another entity through another program, such as IDOT through the TPG program. With regard to any IDOT funded construction training program other than TPG, however, additional reimbursement for other IDOT programs will not be made beyond the TPG Program described in this Special Provision when the TPG Program is utilized.

No payment will be made to the Contractor if the Contractor or subcontractor fails to provide the required on-site training to TPG trainees, as solely determined by IDOT. A TPG trainee must begin training on the project as soon as the start of work that utilizes the relevant trade skill and the TPG trainee must remain on the project site through completion of the Contract, so long as training opportunities continue to exist in the relevant work classification. Should a TPG trainee's employment end in advance of the completion of the Contract, the Contractor must promptly notify the IDOT District EEO Officer for the Contract that the TPG's involvement in the Contract has ended. The Contractor must supply a written report for the reason the TPG trainee involvement terminated, the hours completed by the TPG trainee on the Contract, and the number of hours for which the incentive payment provided under this Special Provision will be, or has been claimed for the separated TPG trainee.

Finally, the Contractor must maintain all records it creates as a result of participation in the Program on the Contract, and furnish periodic written reports to the IDOT District EEO Officer that document its contractual performance under and compliance with this Special Provision. Finally, through participation in the Program and reimbursement of wages, the Contractor is not relieved of, and IDOT has not waived, the requirements of any federal or state labor or employment law applicable to TPG workers, including compliance with the Illinois Prevailing Wage Act.

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of \$15.00 per hour for each utilized certified TPG Program trainee (TRAINEES TRAINING PROGRAM GRADUATE). The estimated total number of hours, unit price, and total price must be included in the schedule of prices for the Contract submitted by Contractor prior to beginning work. The initial number of TPG trainees for which the incentive is available for this contract is 10.

The Department has contracted with several educational institutions to provide screening, tutoring and pre-training to individuals interested in working as a TPG trainee in various areas of common construction trade work. Only individuals who have successfully completed a Pre-Apprenticeship Training Program at these IDOT approved institutions are eligible to be TPG trainees. To obtain a list of institutions that can connect the Contractor with eligible TPG trainees, the Contractor may contact: HCCTP TPG Program Coordinator, Office of Business and Workforce Diversity (IDOT OBWD), Room 319, Illinois Department of Transportation, 2300 S. Dirksen Parkway, Springfield, Illinois 62764. Prior to commencing construction with the utilization of a TPG trainee, the Contractor must submit documentation to the IDOT District EEO Officer for the Contract that provides the names and contact information of the TPG trainee(s) to be trained in each selected work classification, proof that that the TPG trainee(s) has successfully completed a Pre-Apprenticeship Training Program, proof that the TPG is in an Apprenticeship Training Program approved by the U.S. Department of Labor Bureau of Apprenticeship Training, and the start date for training in each of the applicable work classifications.

To receive payment, the Contractor must provide training opportunities aimed at developing a full journeyworker in the type of trade or job classification involved. During the course of performance of the Contract, the Contractor may seek approval from the IDOT District EEO Officer to employ additional eligible TPG trainees. In the event the Contractor subcontracts a portion of the contracted work, it must determine how many, if any, of the TPGs will be trained by the subcontractor. Though a subcontractor may conduct training, the Contractor retains the responsibility for meeting all requirements imposed by this Special Provision. The Contractor must also include this Special Provision in any subcontract where payment for contracted work performed by a TPG trainee will be passed on to a subcontractor.

Training through the Program is intended to move TPGs toward journeyman status, which is the primary objective of this Special Provision. Accordingly, the Contractor must make every effort to enroll TPG trainees by recruitment through the Program participant educational institutions to the extent eligible TPGs are available within a reasonable geographic area of the project. The Contractor is responsible for demonstrating, through documentation, the recruitment efforts it has undertaken prior to the determination by IDOT whether the Contractor is in compliance with this Special Provision, and therefore, entitled to the Training Program Graduate reimbursement of \$15.00 per hour.

Notwithstanding the on-the-job training requirement of this TPG Special Provision, some minimal off-site training is permissible as long as the offsite training is an integral part of the work of the contract, and does not compromise or conflict with the required on-site training that is central to the purpose of the Program. No individual may be employed as a TPG trainee in any work classification in which he/she has previously successfully completed a training program leading to journeyman status in any trade, or in which he/she has worked at a journeyman level or higher.

TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (BDE)

Effective: January 1, 2017

Revise Article 631.04 of the Standard Specifications to read:

“631.04 Traffic Barrier Terminal, Type 1 Special (Tangent) and Traffic Barrier Terminal, Type 1 Special (Flared). These terminals shall meet the testing criteria contained in either NCHRP Report 350 or MASH. In addition to meeting the criteria in one or both of these references, the terminals shall be on the Department’s qualified product list.

The terminal shall be installed according to the manufacturer’s specifications. The beginning length of need point of the terminal shall be placed within 12 ft 6 in (3.8 m) of the length of need point shown on the plans.

The terminal shall be delineated with a terminal marker direct applied. No other guardrail delineation shall be attached to the terminal section.”

TUBULAR MARKERS (BDE)

Effective: January 1, 2017

Revise Article 701.03(j) of the Standard Specifications to read:

“(j) Tubular Markers 1106.02”

Revise Article 701.15(g) of the Standard Specifications to read:

“(g) Tubular Markers. Tubular markers are used to channelize traffic. They shall only be used when specified.”

Revise the second paragraph of Article 701.18(f) of the Standard Specifications to read:

“Devices no greater than 24 in. (600 mm) wide, may be used in place of tubular markers when the two-way operation is to be in place four days or less.”

Revise the second sentence of the second paragraph of Article 1106.02 of the Standard Specifications to read:

“These include cones, tubular markers, and plastic drums with no attachments.”

Revise the third sentence of the seventh paragraph of Article 1106.02 of the Standard Specifications to read:

“Sheeting used on cones, drums, and tubular markers shall be reboundable as tested according to ASTM D 4956.”

Revise Article 1106.02(f) of the Standard Specifications to read:

“(f) Tubular Markers. Tubular Markers shall be designed to bend under repeated impacts and return to an upright position without damage to the impacting vehicle or the markers. The markers shall be readily removable from the bases to permit field replacement.

The markers shall be orange in color having two white and two fluorescent orange bands.”

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012

Revised: April 1, 2016

Description. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

“1102.01 Hot-Mix Asphalt Plant. The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, “Approval of Hot-Mix Asphalt Plants and Equipment”. Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements.”

Add the following to Article 1102.01(a) of the Standard Specifications.

“(11) Equipment for Warm Mix Technologies.

- a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.
- b. Additives. Additives shall be introduced into the plant according to the supplier’s recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes.”

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

“(e) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification.”

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

“The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C).
WMA shall be delivered at a minimum temperature of 215 °F (102 °C).”

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

WEEKLY DBE TRUCKING REPORTS (BDE)

Effective: June 2, 2012

Revised: April 2, 2015

The Contractor shall submit a weekly report of Disadvantaged Business Enterprise (DBE) trucks hired by the Contractor or subcontractors (i.e. not owned by the Contractor or subcontractors) that are used for DBE goal credit.

The report shall be submitted to the Engineer on Department form "SBE 723" within ten business days following the reporting period. The reporting period shall be Monday through Sunday for each week reportable trucking activities occur.

Any costs associated with providing weekly DBE trucking reports shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed.

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

Effective: November 2, 2006

Revised: July 1, 2015

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

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

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

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

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

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

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

Where: A = Area of the HMA mixture, sq yd (sq m).
D = Depth of the HMA mixture, in. (mm).
 G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.
V = Volume of the bituminous material, gal (L).
SG = Specific Gravity of bituminous material as shown on the bill of lading.

Basis of Payment. Bituminous materials cost adjustments may be positive or negative but will only be made when there is a difference between the BPI_L and BPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(BPI_L - BPI_P) \div BPI_L\} \times 100$$

Bituminous materials cost adjustments will be calculated for each calendar month in which applicable bituminous material is placed; and will be paid or deducted when all other contract requirements for the work placed during the month are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
BITUMINOUS MATERIALS COST ADJUSTMENTS**

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

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract?

Yes No

Signature: _____ **Date:** _____

FUEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 1, 2009

Revised: July 1, 2015

Description. Fuel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in fuel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name and sign and date the form shall make this contract exempt of fuel cost adjustments for all categories of work. Failure to indicate "Yes" for any category of work will make that category of work exempt from fuel cost adjustment.

General. The fuel cost adjustment shall apply to contract pay items as grouped by category. The adjustment shall only apply to those categories of work checked "Yes", and only when the cumulative plan quantities for a category exceed the required threshold. Adjustments to work items in a category, either up or down, and extra work paid for by agreed unit price will be subject to fuel cost adjustment only when the category representing the added work was subject to the fuel cost adjustment. Extra work paid for at a lump sum price or by force account will not be subject to fuel cost adjustment. Category descriptions and thresholds for application and the fuel usage factors which are applicable to each are as follows:

(a) Categories of Work.

- (1) Category A: Earthwork. Contract pay items performed under Sections 202, 204, and 206 including any modified standard or nonstandard items where the character of the work to be performed is considered earthwork. The cumulative total of all applicable item plan quantities shall exceed 25,000 cu yd (20,000 cu m). Included in the fuel usage factor is a weighted average 0.10 gal/cu yd (0.50 liters/cu m) factor for trucking.
- (2) Category B: Subbases and Aggregate Base Courses. Contract pay items constructed under Sections 311, 312 and 351 including any modified standard or nonstandard items where the character of the work to be performed is considered construction of a subbase or aggregate, stabilized or modified base course. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is a 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.
- (3) Category C: Hot-Mix Asphalt (HMA) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 355, 406, 407 and 482 including any modified standard or nonstandard items where the character of the work to be performed is considered HMA bases, pavements and shoulders. The cumulative total of all applicable item plan quantities shall exceed 5000 tons (4500 metric tons). Included in the fuel usage factor is 0.60 gal/ton (2.50 liters/metric ton) factor for trucking.

- (4) Category D: Portland Cement Concrete (PCC) Bases, Pavements and Shoulders. Contract pay items constructed under Sections 353, 420, 421 and 483 including any modified standard or nonstandard items where the character of the work to be performed is considered PCC base, pavement or shoulder. The cumulative total of all applicable item plan quantities shall exceed 7500 sq yd (6000 sq m). Included in the fuel usage factor is 1.20 gal/cu yd (5.94 liters/cu m) factor for trucking.
- (5) Category E: Structures. Structure items having a cumulative bid price that exceeds \$250,000 for pay items constructed under Sections 502, 503, 504, 505, 512, 516 and 540 including any modified standard or nonstandard items where the character of the work to be performed is considered structure work when similar to that performed under these sections and not included in categories A through D.

(b) Fuel Usage Factors.

English Units		
Category	Factor	Units
A - Earthwork	0.34	gal / cu yd
B – Subbase and Aggregate Base courses	0.62	gal / ton
C – HMA Bases, Pavements and Shoulders	1.05	gal / ton
D – PCC Bases, Pavements and Shoulders	2.53	gal / cu yd
E – Structures	8.00	gal / \$1000

Metric Units		
Category	Factor	Units
A - Earthwork	1.68	liters / cu m
B – Subbase and Aggregate Base courses	2.58	liters / metric ton
C – HMA Bases, Pavements and Shoulders	4.37	liters / metric ton
D – PCC Bases, Pavements and Shoulders	12.52	liters / cu m
E – Structures	30.28	liters / \$1000

(c) Quantity Conversion Factors.

Category	Conversion	Factor
B	sq yd to ton	0.057 ton / sq yd / in depth
	sq m to metric ton	0.00243 metric ton / sq m / mm depth
C	sq yd to ton	0.056 ton / sq yd / in depth
	sq m to metric ton	0.00239 m ton / sq m / mm depth
D	sq yd to cu yd	0.028 cu yd / sq yd / in depth
	sq m to cu m	0.001 cu m / sq m / mm depth

Method of Adjustment. Fuel cost adjustments will be computed as follows.

$$CA = (FPI_P - FPI_L) \times FUF \times Q$$

Where: CA = Cost Adjustment, \$
FPI_P = Fuel Price Index, as published by the Department for the month the work is performed, \$/gal (\$/liter)
FPI_L = Fuel Price Index, as published by the Department for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price, \$/gal (\$/liter)
FUF = Fuel Usage Factor in the pay item(s) being adjusted
Q = Authorized construction Quantity, tons (metric tons) or cu yd (cu m)

The entire FUF indicated in paragraph (b) will be used regardless of use of trucking to perform the work.

Basis of Payment. Fuel cost adjustments may be positive or negative but will only be made when there is a difference between the FPI_L and FPI_P in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(FPI_L - FPI_P) \div FPI_L\} \times 100$$

Fuel cost adjustments will be calculated for each calendar month in which applicable work is performed; and will be paid or deducted when all other contract requirements for the items of work are satisfied. The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
FUEL COST ADJUSTMENT**

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of fuel cost adjustments in all categories. Failure to indicate "Yes" for any category of work at the time of bid will make that category of work exempt from fuel cost adjustment. After award, this form, when submitted shall become part of the contract.

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract plans for the following categories of work?

- | | | |
|--|-----|--------------------------|
| Category A Earthwork. | Yes | <input type="checkbox"/> |
| Category B Subbases and Aggregate Base Courses | Yes | <input type="checkbox"/> |
| Category C HMA Bases, Pavements and Shoulders | Yes | <input type="checkbox"/> |
| Category D PCC Bases, Pavements and Shoulders | Yes | <input type="checkbox"/> |
| Category E Structures | Yes | <input type="checkbox"/> |

Signature: _____ **Date:** _____

STEEL COST ADJUSTMENT (BDE) (RETURN FORM WITH BID)

Effective: April 2, 2004

Revised: July 1, 2015

Description. Steel cost adjustments will be made to provide additional compensation to the Contractor, or a credit to the Department, for fluctuations in steel prices when optioned by the Contractor. The bidder shall indicate on the attached form whether or not this special provision will be part of the contract and submit the completed form with his/her bid. Failure to submit the form or failure to indicate contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment.

Types of Steel Products. An adjustment will be made for fluctuations in the cost of steel used in the manufacture of the following items:

Metal Piling (excluding temporary sheet piling)
Structural Steel
Reinforcing Steel

Other steel materials such as dowel bars, tie bars, mesh reinforcement, guardrail, steel traffic signal and light poles, towers and mast arms, metal railings (excluding wire fence), and frames and grates will be subject to a steel cost adjustment when the pay items they are used in have a contract value of \$10,000 or greater.

The adjustments shall apply to the above items when they are part of the original proposed construction, or added as extra work and paid for by agreed unit prices. The adjustments shall not apply when the item is added as extra work and paid for at a lump sum price or by force account.

Documentation. Sufficient documentation shall be furnished to the Engineer to verify the following:

- (a) The dates and quantity of steel, in lb (kg), shipped from the mill to the fabricator.
- (b) The quantity of steel, in lb (kg), incorporated into the various items of work covered by this special provision. The Department reserves the right to verify submitted quantities.

Method of Adjustment. Steel cost adjustments will be computed as follows:

$$SCA = Q \times D$$

Where: SCA = steel cost adjustment, in dollars
Q = quantity of steel incorporated into the work, in lb (kg)
D = price factor, in dollars per lb (kg)

$$D = MPI_M - MPI_L$$

Where: MPI_M = The Materials Cost Index for steel as published by the Engineering News-Record for the month the steel is shipped from the mill. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

MPI_L = The Materials Cost Index for steel as published by the Engineering News-Record for the month prior to the letting for work paid for at the contract price; or for the month the agreed unit price letter is submitted by the Contractor for extra work paid for by agreed unit price,. The indices will be converted from dollars per 100 lb to dollars per lb (kg).

The unit weights (masses) of steel that will be used to calculate the steel cost adjustment for the various items are shown in the attached table.

No steel cost adjustment will be made for any products manufactured from steel having a mill shipping date prior to the letting date.

If the Contractor fails to provide the required documentation, the method of adjustment will be calculated as described above; however, the MPI_M will be based on the date the steel arrives at the job site. In this case, an adjustment will only be made when there is a decrease in steel costs.

Basis of Payment. Steel cost adjustments may be positive or negative but will only be made when there is a difference between the MPI_L and MPI_M in excess of five percent, as calculated by:

$$\text{Percent Difference} = \{(MPI_L - MPI_M) \div MPI_L\} \times 100$$

Steel cost adjustments will be calculated by the Engineer and will be paid or deducted when all other contract requirements for the items of work are satisfied. Adjustments will only be made for fluctuations in the cost of the steel as described herein. No adjustment will be made for changes in the cost of manufacturing, fabrication, shipping, storage, etc.

The adjustments shall not apply during contract time subject to liquidated damages for completion of the entire contract.

Attachment

Item	Unit Mass (Weight)
Metal Piling (excluding temporary sheet piling)	
Furnishing Metal Pile Shells 12 in. (305 mm), 0.179 in. (3.80 mm) wall thickness)	23 lb/ft (34 kg/m)
Furnishing Metal Pile Shells 12 in. (305 mm), 0.250 in. (6.35 mm) wall thickness)	32 lb/ft (48 kg/m)
Furnishing Metal Pile Shells 14 in. (356 mm), 0.250 in. (6.35 mm) wall thickness)	37 lb/ft (55 kg/m)
Other piling	See plans
Structural Steel	See plans for weights (masses)
Reinforcing Steel	See plans for weights (masses)
Dowel Bars and Tie Bars	6 lb (3 kg) each
Mesh Reinforcement	63 lb/100 sq ft (310 kg/sq m)
Guardrail	
Steel Plate Beam Guardrail, Type A w/steel posts	20 lb/ft (30 kg/m)
Steel Plate Beam Guardrail, Type B w/steel posts	30 lb/ft (45 kg/m)
Steel Plate Beam Guardrail, Types A and B w/wood posts	8 lb/ft (12 kg/m)
Steel Plate Beam Guardrail, Type 2	305 lb (140 kg) each
Steel Plate Beam Guardrail, Type 6	1260 lb (570 kg) each
Traffic Barrier Terminal, Type 1 Special (Tangent)	730 lb (330 kg) each
Traffic Barrier Terminal, Type 1 Special (Flared)	410 lb (185 kg) each
Steel Traffic Signal and Light Poles, Towers and Mast Arms	
Traffic Signal Post	11 lb/ft (16 kg/m)
Light Pole, Tenon Mount and Twin Mount, 30 - 40 ft (9 - 12 m)	14 lb/ft (21 kg/m)
Light Pole, Tenon Mount and Twin Mount, 45 - 55 ft (13.5 - 16.5 m)	21 lb/ft (31 kg/m)
Light Pole w/Mast Arm, 30 - 50 ft (9 - 15.2 m)	13 lb/ft (19 kg/m)
Light Pole w/Mast Arm, 55 - 60 ft (16.5 - 18 m)	19 lb/ft (28 kg/m)
Light Tower w/Luminaire Mount, 80 - 110 ft (24 - 33.5 m)	31 lb/ft (46 kg/m)
Light Tower w/Luminaire Mount, 120 - 140 ft (36.5 - 42.5 m)	65 lb/ft (97 kg/m)
Light Tower w/Luminaire Mount, 150 - 160 ft (45.5 - 48.5 m)	80 lb/ft (119 kg/m)
Metal Railings (excluding wire fence)	
Steel Railing, Type SM	64 lb/ft (95 kg/m)
Steel Railing, Type S-1	39 lb/ft (58 kg/m)
Steel Railing, Type T-1	53 lb/ft (79 kg/m)
Steel Bridge Rail	52 lb/ft (77 kg/m)
Frames and Grates	
Frame	250 lb (115 kg)
Lids and Grates	150 lb (70 kg)

Return With Bid

**ILLINOIS DEPARTMENT
OF TRANSPORTATION**

**OPTION FOR
STEEL COST ADJUSTMENT**

The bidder shall submit this completed form with his/her bid. Failure to submit the form or properly complete contract number, company name, and sign and date the form shall make this contract exempt of steel cost adjustments for all items of steel. Failure to indicate "Yes" for any item of work will make that item of steel exempt from steel cost adjustment. After award, this form, when submitted shall become part of the contract.

Contract No.: _____

Company Name: _____

Contractor's Option:

Is your company opting to include this special provision as part of the contract plans for the following items of work?

- | | | |
|--|-----|--------------------------|
| Metal Piling | Yes | <input type="checkbox"/> |
| Structural Steel | Yes | <input type="checkbox"/> |
| Reinforcing Steel | Yes | <input type="checkbox"/> |
| Dowel Bars, Tie Bars and Mesh Reinforcement | Yes | <input type="checkbox"/> |
| Guardrail | Yes | <input type="checkbox"/> |
| Steel Traffic Signal and Light Poles, Towers and Mast Arms | Yes | <input type="checkbox"/> |
| Metal Railings (excluding wire fence) | Yes | <input type="checkbox"/> |
| Frames and Grates | Yes | <input type="checkbox"/> |

Signature: _____ **Date:** _____

STORM WATER POLLUTION PREVENTION PLAN



Storm Water Pollution Prevention Plan

Route	<u>FAI Route 74</u>	Marked Rte.	<u>I - 74</u>
Section	<u>(81-1)R & 81-1HVBR</u>	Project No.	<u>P-92-032-01</u>
County	<u>Rock Island</u>	Contract No.	<u>64C08</u>

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Kevin Marchek
 Print Name
Deputy Director of Highways, Region 2 Engineer
 Title
Illinois Department of Transportation
 Agency

Kevin Marchek
 Signature
2-1-2017
 Date

I. Site Description:

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

This project will improve a section of Interstate 74 (FAI Route 74) located in Moline Township and Rock Island County. Interstate 74 will be realigned with a new structure over the Mississippi River and improved from a 4-lane Expressway section to a 6-lane Expressway section. The project will also include improvements to streets and highways that cross Interstate 74 and existing interchanges.

The specific section of the Interstate 74 project addressed in this Storm Water Pollution Prevention Plan (SWPPP) is Contract 64C08 from the Mississippi River (41°30'46.68"N, 90°30'46.20"W) to just south of 7th Avenue (41°30'24"N, 90°30'31"W). The work included in Contract 64C08 will include the following activities:

- Construction of EB/WB I-74, Ramps RD-G, RD-H, 6th-C, and 6th-D,
- The reconstruction of 21st Street,
- Permanent closure of 5th Avenue,
- Milling and resurfacing of 4th Avenue (IL-92 WB),
- Reconstruction of a portion of the median on River Drive
- Reconstruction of 6th Avenue (IL-92 EB) and 7th Avenue between 19th Street and 21st Street

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

Construction activities include earthwork, drainage, permanent pavement and the construction of proposed bridge structures and retaining walls. The activities also include the construction and removal of temporary pavement, earthwork, and drainage facilities required to maintain traffic and drainage during construction.

C. Provide the estimated duration of this project:

Approximately 47 months

- D. The total area of the construction site is estimated to be 38 acres.
The total area of the site estimated to be disturbed by excavation, grading or other activities is 38 acres.
- E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:
C= 0.88
- F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:
Orthents, loamy, undulating (802B) - Orthents consist of disturbed materials such as fills. This soil is generally well drained, moderately-slowly permeable, has a moderate shrink-swell potential, is moderately susceptible to frost action, and moderately corrosive to steel and concrete.
- G. Provide an aerial extent of wetland acreage at the site:
Based upon a previously-completed EIS, there are no wetlands located within or adjoining the project boundaries.
- H. Provide a description of potentially erosive areas associated with this project:
Since soil properties are fairly similar throughout the project, the most critical areas would be the areas with the steepest slopes.
- I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of slopes, etc):
The soil disturbing activities on the project initially involves earthwork and the removal of existing structures. The activities will then include the construction of temporary and permanent pavement, structures and retaining walls. There are no activities outside the project limits that will involve land disturbances

The predominant soil types on the project are silty clays and clayey silts. These soils are sensitive to changes in moisture content, and can become very soft with the combined action of wet conditions, freeze/thaw action, and construction traffic. Immediately after the spring thaw and during periods of high precipitation, these soils will exhibit high water contents and correspondingly low strengths.
- J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.
- K. Identify who owns the drainage system (municipality or agency) this project will drain into:
City of Moline and the US Army Corps of Engineers.
- L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located.
City of Moline and the Illinois Department of Transportation
- M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:
The project will drain into the City of Moline stormwater system and the Mississippi River. The Mississippi River is the closest receiving water for the City of Moline stormwater system.
- N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.
There are no specific areas that are anticipated to be protected or remain undisturbed

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

- Floodplain
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation
- Applicable Federal, Tribal, State or Local Programs
- Other

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

- a. The name(s) of the listed water body, and identification of all pollutants causing impairment:
- b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:
- c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:
- d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

2. TMDL (fill out this section if checked above)

- a. The name(s) of the listed water body:
- b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:
- c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet that allocation:

P. The following pollutants of concern will be associated with this construction project:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Soil Sediment | <input checked="" type="checkbox"/> Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) |
| <input checked="" type="checkbox"/> Concrete | <input checked="" type="checkbox"/> Antifreeze / Coolants |
| <input checked="" type="checkbox"/> Concrete Truck Waste | <input checked="" type="checkbox"/> Waste water from cleaning construction equipment |
| <input checked="" type="checkbox"/> Concrete Curing Compounds | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Solid Waste Debris | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paints | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Solvents | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Fertilizers / Pesticides | <input type="checkbox"/> Other (specify) |

II. Controls:

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

A. Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed and maintained to:

1. Minimize the amount of soil exposed during construction activity;
2. Minimize the disturbance of steep slopes;
3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
4. Minimize soil compaction and, unless infeasible, preserve topsoil.

B. Stabilization Practices: Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- | | |
|---|--|
| <input type="checkbox"/> Preservation of Mature Vegetation | <input checked="" type="checkbox"/> Erosion Control Blanket / Mulching |
| <input type="checkbox"/> Vegetated Buffer Strips | <input checked="" type="checkbox"/> Sodding |
| <input type="checkbox"/> Protection of Trees | <input type="checkbox"/> Geotextiles |
| <input checked="" type="checkbox"/> Temporary Erosion Control Seeding | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Temporary Turf (Seeding, Class 7) | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Temporary Mulching | <input type="checkbox"/> Other (specify) |
| <input checked="" type="checkbox"/> Permanent Seeding | <input type="checkbox"/> Other (specify) |

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

The Contractor shall seed all disturbed areas within the project limits. Seeding Class 4 or 2A shall be used, except in front of properties where the grass will be mowed, then use seeding, Class 1. Class 2A shall be used on front slopes and ditch bottoms. Class 4 shall be used behind Type A gutter, on all backslopes and areas behind the backslope, and beyond the toe of front slope on fill sections without ditches. Seeding Class 7 shall be used for temporary seeding. All temporary and permanent seeding will be installed per IDOT specifications.

Erosion control blanket will be installed over fill slopes and in high velocity areas where it has been brought to final grade and seeded.

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

All necessary stabilization practices listed above will be used as needed until all disturbed areas have been stabilized after the construction activities are completed.

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

The following structural practices will be used for this project:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Perimeter Erosion Barrier | <input type="checkbox"/> Rock Outlet Protection |
| <input checked="" type="checkbox"/> Temporary Ditch Check | <input checked="" type="checkbox"/> Riprap |
| <input checked="" type="checkbox"/> Storm Drain Inlet Protection | <input type="checkbox"/> Gabions |
| <input type="checkbox"/> Sediment Trap | <input type="checkbox"/> Slope Mattress |
| <input type="checkbox"/> Temporary Pipe Slope Drain | <input type="checkbox"/> Retaining Walls |
| <input type="checkbox"/> Temporary Sediment Basin | <input type="checkbox"/> Slope Walls |
| <input type="checkbox"/> Temporary Stream Crossing | <input type="checkbox"/> Concrete Revetment Mats |
| <input type="checkbox"/> Stabilized Construction Exits | <input type="checkbox"/> Level Spreaders |
| <input checked="" type="checkbox"/> Turf Reinforcement Mats | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Check Dams | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Permanent Sediment Basin | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Aggregate Ditch | <input type="checkbox"/> Other (specify) |
| <input type="checkbox"/> Paved Ditch | <input type="checkbox"/> Other (specify) |

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

A perimeter erosion barrier (silt fence) will be used in all areas where runoff from disturbed areas has the potential to travel offsite or into swales, ditches or other natural water bodies. Inlet and pipe protection and inlet filters shall be used where needed as soon as the pipes have been permanently placed. Riprap will be placed at storm sewer outlets requiring stabilization. See Erosion Control Plan Sheets

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

All temporary structural practices will be removed after the site is stabilized and construction activities have been completed.

D. **Treatment Chemicals**

Will polymer flocculants or treatment chemicals be utilized on this project: Yes No

If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.

- E. **Permanent Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

- Such practices may include but are not limited to: flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual.

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

Description of permanent storm water management controls:

There are no anticipated measures to be installed to control pollutants in storm water discharges that occur after construction operations have been completed.

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

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

All management practices, controls and other provisions provided in the plan are in accordance with IDOT Standard Specifications and the Illinois Urban Manual.

- G. **Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
 - Approximate duration of the project, including each stage of the project
 - Rainy season, dry season, and winter shutdown dates
 - Temporary stabilization measures to be employed by contract phases
 - Mobilization timeframe
 - Mass clearing and grubbing/roadside clearing dates
 - Deployment of Erosion Control Practices
 - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
 - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
 - Paving, saw-cutting, and any other pavement related operations
 - Major planned stockpiling operations
 - Timeframe for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
 - Permanent stabilization activities for each area of the project
 2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Vehicle Entrances and Exits – Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material Delivery, Storage and Use – Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
- Stockpile Management – Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal – Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control – Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.)
- Concrete Residuals and Washout Wastes – Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management – Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Fueling – Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Vehicle and Equipment Cleaning and Maintenance – Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities – Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals – Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
- Additional measures indicated in the plan.

III. Maintenance:

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

The contractor shall clean up and grade the work area to eliminate concentration of runoff, cover the opens of pipes in trenches and open inlets at the close of each day. Maintain and replace erosion and sediment control items as needed. The contractor shall remove and dispose of silt retained by temporary erosion barriers when they meet specified heights in erosion and sediment control plans. Areas of erosion control blanket which fail will be repaired immediately. All maintenance of erosion control systems will be the responsibility of the contractor.

IV. Inspections:

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

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

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

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

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

Additional Inspections Required:

n/a

V. Failure to Comply:

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



Contractor Certification Statement

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

Route	<u>FAI Route 74</u>	Marked Rte.	<u>I-74</u>
Section	<u>81B</u>	Project No.	<u>P-92-032-01</u>
County	<u>Rock Island</u>	Contract No.	<u>64C08</u>

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR 10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

- Contractor
- Sub-Contractor

_____	_____
Print Name	Signature
_____	_____
Title	Date
_____	_____
Name of Firm	Telephone
_____	_____
Street Address	City/State/ZIP

Items which this Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP:

See list in Section II G 1 and 2

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If

the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color,

religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such

action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such

contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with

commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

Contract Provision - Cargo Preference Requirements

In accordance with Title 46 CFR § 381.7 (b), the contractor agrees—

“(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract.”

Provisions (1) and (2) apply to materials or equipment that are acquired solely for the project. The two provisions do not apply to goods or materials that come into inventories independent of the project, such as shipments of Portland cement, asphalt cement, or aggregates, when industry suppliers and contractors use these materials to replenish existing inventories.

**MINIMUM WAGES FOR FEDERAL AND FEDERALLY
ASSISTED CONSTRUCTION CONTRACTS**

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.