BID PROPOSAL INSTRUCTIONS

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

PREQUALIFICATION

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

WHO CAN BID ?

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

REQUESTS FOR AUTHORIZATION TO BID

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

WHAT CONSTITUTES WRITTEN AUTHORIZATION TO BID?

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

ABOUT AUTHORIZATION TO BID

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

ADDENDA AND REVISIONS

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

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

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

IDOT IS NOT RESPONSIBLE FOR ANY E-MAIL FAILURES.

Addenda questions may be directed to the Contracts Office at (217)782-7806 or DOT.D&Econtracts@illlinois.gov

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

STANDARD GUIDELINES FOR SUBMITTING BIDS

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

BID SUBMITTAL CHECKLIST

☐ **Cover page** (the sheet that has the item number on it) **–** This should be the first page of your bid proposal, **followed by your bid (the Schedule of Prices/Pay Items).** If you are using special software or CBID to generate your schedule of prices, do not include the blank pages of the schedule of prices that came with the proposal package.

☐ **Page 4 (Item 9)** – Check "YES" if you will use a subcontractor(s) with an annual value over $50,000. Include the subcontractor(s) name, address, general type of work to be performed and the dollar amount. If you will use subcontractor(s) but are uncertain who or the dollar amount; check "YES" but leave the lines blank.

☐ **After page 4 –** Insert the following documents: Cost Adjustments for Steel, Bituminous and Fuel (if applicable) and the Contractor Letter of Assent (if applicable). The general rule should be, if you don't know where it goes, put it after page 4.

☐ **Page 10 (Paragraph J)** – Check "YES" or "NO" whether your company has any business in Iran.

☐ **Page 10 (Paragraph K)** – (Not applicable to federally funded projects) List the name of the apprenticeship and training program sponsor holding the certificate of registration from the US Department of Labor. If no applicable program exists, please indicate the work/job category. Do not include certificates with your bid. Keep the certificates in your office in case they are requested by IDOT.

☐ **Page 11 (Paragraph L)** – A copy of your State Board of Elections certificate of registration is no longer required with your bid.

☐ **Page 11 (Paragraph M)** – Indicate if your company has hired a lobbyist in connection with the job for which you are submitting the bid proposal.

☐ **Page 12 (Paragraph C)** – This is a work sheet to determine if a completed Form A is required. It is not part of the form and you do not need to make copies for each completed Form A.

☐ **Pages 14-17 (Form A)** – One Form A (4 pages) is required for each applicable person in your company. Copies of the forms can be used and only need to be changed when the information changes. The certification signature and date must be original for each letting. **Do not staple the forms together**. If you answered "NO" to all of the questions in Paragraph C (page 12), complete the first section (page 14) with your company information and then sign and date the Not Applicable statement on page 17.

☐ **Page 18 (Form B)** - If you check "YES" to having other current or pending contracts it is acceptable to use the phrase, "See Affidavit of Availability on file". **Ownership Certification** (at the bottom of the page) - Check N/A if the Form A(s) you submitted accounts for 100 percent of the company ownership. Check YES if any percentage of ownership falls outside of the parameters that require reporting on the Form A. Checking NO indicates that the Form A(s) you submitted is not correct and you will be required to submit a revised Form A.

☐ **Page 20 (Workforce Projection)** – Be sure to include the Duration of the Project. It is acceptable to use the phrase "Per Contract Specifications".

☐ **Proposal Bid Bond –** (Insert after the proposal signature page) Submit your proposal Proposal Bid Bond (if applicable) using the current Proposal Bid Bond form provided in the proposal package. The Power of Attorney page should be stapled to the Proposal Bid Bond. If you are using an electronic bond, include your bid bond number on the Proposal Bid Bond and attach the Proof of Insurance printed from the Surety's Web Site.

☐ **Disadvantaged Business Utilization Plan and/or Good Faith Effort –** The last items in your bid should be the DBE Utilization Plan (SBE 2026), followed by the DBE Participation Statement (SBE 2025) and supporting paperwork. If you have documentation of a Good Faith Effort, it is to follow the SBE Forms.

The Bid Letting is now available in streaming Audio/Video from the IDOT Web Site. A link to the stream will be placed on the main page of the current letting on the day of the Letting. The stream will not begin until 10 AM. The actual reading of the bids does not begin until approximately 10:30 AM.

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

QUESTIONS: pre-letting up to execution of the contract

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

QUESTIONS: following contract execution

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

RETURN WITH BID

Proposal Submitted By
Name
Address
City

22

REVISED

Letting September 18, 2015

NOTICE TO PROSPECTIVE BIDDERS
This proposal can be used for bidding purposes by only those companies that request and receive written AUTHORIZATION TO BID from IDOT's Central Bureau of Construction.
BIDDERS NEED NOT RETURN THE ENTIRE PROPOSAL

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

Illinois Department of Transportation

Springfield, Illinois 62764

Contract No. 64C21
WINNEBAGO County
Section 78R-2
Route FAP 734
Project ACF-0734(046)
District 2 Construction Funds

PLEASE MARK THE APPROPRIATE BOX BELOW:

☐ A Bid Bond is included.

☐ A Cashier's Check or a Certified Check is included

☐ An Annual Bid Bond is included or is on file with IDOT.

Prepared by

Checked by F

(Printed by authority of the State of Illinois)

Page intentionally left blank

RETURN WITH BID

Illinois Department of Transportation

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. 64C21
   WINNEBAGO County
   Section 78R-2
   Project ACF-0734(046)
   Route FAP 734
   District 2 Construction Funds

Reconstruction of IL 2 (N. Main St.) from Riverside Blvd. to Auburn St. in Rockford.

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

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

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

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

Amount of Bid			Proposal Guaranty	Amount of Bid			Proposal Guaranty
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.

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 - 64C21

State Job # - C-92-003-13

Project Number ACF-0734/046/

Route FAP 734

County Name - WINNEBAGO- -
Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
A2000224	T-ACERX FREM MM 3	EACH	6.000				
A2002562	T-CARP CAROL SF 4'	EACH	3.000				
A2002824	T-CATALPA SPEC 3	EACH	4.000				
A2005020	T-GYMNOCLA DIO 2-1/2	EACH	4.000				
A2005424	T-LIRIODEN TUL 3	EACH	8.000				
A2005824	T-PLATANUS OCC 3	EACH	8.000				
A2006520	T-QUERCUS BICOL 2-1/2	EACH	4.000				
A2006618	T-QUERCUS IMBR 2-1/2	EACH	2.000				
A2006726	T-QUERCUS MACR 3	EACH	9.000				
A2006820	T-QUERCUS MEUH 2-1/2	EACH	7.000				
A2007116	T-QUERCUS RUBRA 2	EACH	12.000				
A2007230	T-ROB PSEUD BEN 2-1/2	EACH	5.000				
A2007824	T-TILIA AMER 3	EACH	6.000				
A2008519	T-ULMUS MRTN G TE 2.5	EACH	9.000				
B2000770	T-AMEL X GF AB TF 2	EACH	7.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

County Name - WINNEBAGO- -
Code - 201 - -
District - 2 - -
Section Number - 78R-2

Project Number ACF-0734/046/

Route FAP 734

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
B2001116	T-CERCIS CAN TF 2	EACH	7.000				
B2001266	T-CORNUS ALT CL 6'	EACH	5.000				
B2002268	T-CRAT VIR WK CL 7'	EACH	7.000				
B2004166	T-MALUS PF CL 6'	EACH	13.000				
B2005014	T-MALUS SND TF 1-3/4	EACH	15.000				
B2007066	T-MALUS PURP PR TF 2	EACH	7.000				
K0012990	P PL ORNAMENT T GAL P	UNIT	134.000				
K0013020	P PL PRAIRIE TY GAL P	UNIT	72.000				
K1001985	IRRIGATION SLEEVES	FOOT	28.000				
K1001988	IRRIGATION SYSTEM SPL	L SUM	1.000				
X0322464	ABAN FILL EX SAN MAN	EACH	6.000				
X0322791	FILL EXIST SAN SEWER	CU YD	46.000				
X0323003	TEMP ELECT SERV INST	EACH	3.000				
X0323760	SAN SEW SER 6 PVC CMP	EACH	31.000				
X0327549	SAN SEW ML REPAIR 10	FOOT	70.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X0327550	SAN SEW ML REPAIR 12	FOOT	6.000				
X0327551	SAN SEW ML REPAIR 15	FOOT	25.000				
X0327553	TEMP WATER MAIN CAP	EACH	2.000				
X1200036	SAN SERVICE CLEANOUT	EACH	10.000				
X1200037	SAN SEW ML REPAIR 8	FOOT	9.000				
X1200038	WAT SER ABAN 2 DIA LS	EACH	18.000				
X1200039	WAT SER ABAN OV 2 DIA	EACH	5.000				
X1700012	COMB CC&G TB6.18 TEMP	FOOT	3,487.000				
X1700013	COLORED SURFACE	SQ FT	10,797.000				
X4021000	TEMP ACCESS- PRIV ENT	EACH	22.000				
X4022000	TEMP ACCESS- COM ENT	EACH	87.000				
X4023000	TEMP ACCESS- ROAD	EACH	4.000				
X4400110	TEMP PAVT REMOVAL	SQ YD	12,696.000				
X4401198	HMA SURF REM VAR DP	SQ YD	1,413.000				
X4402805	ISLAND REMOVAL	SQ FT	1,053.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

County Name - WINNEBAGO- -
Code - 201 - -
District - 2 - -
Section Number - 78R-2

Project Number
ACF-0734/046/

Route
FAP 734

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X5011100	FOUNDATION REM	EACH	51.000				
X5091765	PIPE HANDRAIL SPL	FOOT	913.000				
X550A562	TEMP SS CL A 2 12	FOOT	619.000				
X5610651	ABAN EX WM FILL CLSM	FOOT	4,970.000				
X5610680	WATER MAIN PROTECTION	FOOT	300.000				
X5610706	WATER MAIN REMOV 6	FOOT	100.000				
X5610708	WATER MAIN REMOV 8	FOOT	100.000				
X5610712	WATER MAIN REMOV 12	FOOT	10.000				
X5610746	WM LINE STOP 6	EACH	5.000				
X5610748	WM LINE STOP 8	EACH	3.000				
X5610752	WM LINE STOP 12	EACH	1.000				
X5611106	DI WM CL52 POLY EN 6	FOOT	91.000				
X5611108	DI WM CL52 POLY EN 8	FOOT	2,030.000				
X5611112	DI WM CL52 POLY EN 12	FOOT	3,330.000				
X5620054	WAT SER REC 2 DIA LS	EACH	15.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X5620056	WAT SER REC 4 DIA GR	EACH	2.000				
X5630006	CUT & CAP EX 6 WM	EACH	9.000				
X5630008	CUT & CAP EX 8 WM	EACH	2.000				
X5630012	CUT & CAP EX 12 WM	EACH	1.000				
X5630706	CONN TO EX W MAIN 6	EACH	7.000				
X5630708	CONN TO EX W MAIN 8	EACH	5.000				
X5630712	CONN TO EX W MAIN 12	EACH	2.000				
X5640175	FIRE HYDRANT COMPLETE	EACH	23.000				
X6020074	INLETS TA T3V F&G	EACH	4.000				
X6020298	MAN TA 8D T1F CL R-P	EACH	6.000				
X6024240	INLETS SPL	EACH	7.000				
X6024246	INLETS SPL N3	EACH	2.000				
X6024250	INLETS SPL N5	EACH	172.000				
X6024254	INLETS SPL N7	EACH	7.000				
X6024256	INLETS SPL N8	EACH	1.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X6024855	MEDIAN INLET SPL	EACH	5.000				
X6024875	TEMPORARY INLET	EACH	13.000				
X6026050	SANITARY MANHOLE ADJ	EACH	5.000				
X6026051	SAN MAN RECONST	EACH	15.000				
X6026054	SAN MAN REMOVED	EACH	21.000				
X6026055	SAN MANHOLE SPL	EACH	20.000				
X6026622	VV REMOVED	EACH	12.000				
X6026623	VALVE BOX	EACH	1.000				
X6028050	TEMPORARY MANHOLE	EACH	39.000				
X6060501	CORRUGATED MED SPL	SQ FT	2,000.000				
X6060714	CONC MEDIAN SPL	SQ FT	3,172.000				
X6061310	CONC MEDIAN SURF 4 SP	SQ FT	7,711.000				
X6061815	COMB CC&G TM SPL	FOOT	240.000				
X6061902	CONC MED TSM SPL	SQ FT	12,973.000				
X7830060	GRV RCSD PM LTR & SYM	SQ FT	268.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

Project Number ACF-0734/046/

Route FAP 734

County Name - WINNEBAGO- -
Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X7830070	GRV RCSD PVT MRKG 5	FOOT	45,304.000				
X7830074	GRV RCSD PVT MRKG 7	FOOT	5,740.000				
X7830076	GRV RCSD PVT MRKG 9	FOOT	5,538.000				
X7830078	GRV RCSD PVT MRKG 13	FOOT	489.000				
X7830090	GRV RCSD PVT MRKG 25	FOOT	148.000				
X8210675	LUM METAL HAL HM 400W	EACH	115.000				
X8210677	LUM MH HM 400W SPL	EACH	24.000				
X8510200	PAINT TRAF SIG EQUIP	L SUM	1.000				
X8710030	FIB OPT CBL 48F SM	FOOT	7,369.000				
X8870300	EVP SYSTEM	EACH	6.000				
X8900100	TEMP TR SIG INSTAL SP	EACH	3.000				
X8950105	REM EX TR CONT & CAB	EACH	6.000				
X8950305	REMOV EX SIG HEAD	EACH	79.000				
X8950307	REM EX PED SIG HEAD	EACH	6.000				
Z0007430	TEMP SIDEWALK	SQ FT	12,677.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
Z0007510	ENGINEERED BARRIER	SQ YD	200.000				
Z0012450	CONCRETE STEPS	CU YD	0.600				
Z0012455	CONC STEP REMOV	EACH	1.000				
Z0013302	SEGMENT CONC BLK WALL	SQ FT	3,051.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				
Z0020900	EST-REF LAND SEC MKRS	EACH	4.000				
Z0022800	FENCE REMOVAL	FOOT	298.000				
Z0024476	FLEX DELINEATOR MAINT	EACH	850.000				
Z0025505	PROPERTY MARKERS	EACH	63.000				
Z0028415	GEOTECHNICAL REINF	SQ YD	20,459.000				
Z0033072	VIDEO VEH DET SYS	EACH	6.000				
Z0045002	PRESS CONNECT 12X8	EACH	1.000				
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0056608	STORM SEW WM REQ 12	FOOT	6,192.000				
Z0056610	STORM SEW WM REQ 15	FOOT	7.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

County Name - WINNEBAGO- -
Code - 201 - -
District - 2 - -
Section Number - 78R-2

Project Number
ACF-0734/046/

Route
FAP 734

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
Z0056616	STORM SEW WM REQ 24	FOOT	41.000				
Z0056624	STORM SEW WM REQ 42	FOOT	60.000				
Z0056900	SAN SEW 8	FOOT	188.000				
Z0057000	SAN SEW 10	FOOT	149.000				
Z0062456	TEMP PAVEMENT	SQ YD	14,662.000				
Z0076600	TRAINEES	HOUR	2,000.000		0.800		1,600.000
Z0076604	TRAINEES TPG	HOUR	2,000.000		15.000		30,000.000
20100110	TREE REMOV 6-15	UNIT	975.000				
20100210	TREE REMOV OVER 15	UNIT	1,396.000				
20101000	TEMPORARY FENCE	FOOT	3,133.000				
20200100	EARTH EXCAVATION	CU YD	72,376.000				
20200200	ROCK EXCAVATION	CU YD	355.000				
20800150	TRENCH BACKFILL	CU YD	21,598.000				
21001000	GEOTECH FAB F/GR STAB	SQ YD	99,887.000				
21101615	TOPSOIL F & P 4	SQ YD	28,458.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
21101665	TOPSOIL F & P 18	SQ YD	66.000				
25000110	SEEDING CL 1A	ACRE	1.000				
25000400	NITROGEN FERT NUTR	POUND	388.000				
25000500	PHOSPHORUS FERT NUTR	POUND	388.000				
25000600	POTASSIUM FERT NUTR	POUND	388.000				
25000750	MOWING	ACRE	1.000				
25100630	EROSION CONTR BLANKET	SQ YD	4,840.000				
25200110	SODDING SALT TOLERANT	SQ YD	23,020.000				
25200200	SUPPLE WATERING	UNIT	208.000				
28000250	TEMP EROS CONTR SEED	POUND	2,329.000				
28000400	PERIMETER EROS BAR	FOOT	11,654.000				
28000500	INLET & PIPE PROTECT	EACH	4.000				
28000510	INLET FILTERS	EACH	189.000				
30300106	AGG SUBGRADE IMPR 6	SQ YD	9,836.000				
30300112	AGG SUBGRADE IMPR 12	SQ YD	11,730.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

County Name - WINNEBAGO- -
Code - 201 - -
District - 2 - -
Section Number - 78R-2

Project Number
ACF-0734/046/

Route
FAP 734

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
30300118	AGG SUBGRADE IMPR 18	SQ YD	53,486.000				
30300124	AGG SUBGRADE IMPR 24	SQ YD	42,983.000				
30300127	AGG SUBGRADE IMPR 27	SQ YD	3,468.000				
35102000	AGG BASE CSE B 8	SQ YD	10,351.000				
35400400	PCC BASE CSE W 9	SQ YD	38.000				
40600275	BIT MATLS PR CT	POUND	26,545.000				
40600285	P BIT MATLS PR CT	POUND	10,359.000				
40600735	P LEV BIND HM N70	TON	60.000				
40600839	P LB MM IL-9.5FG N70	TON	82.000				
40600990	TEMPORARY RAMP	SQ YD	306.000				
40603080	HMA BC IL-19.0 N50	TON	636.000				
40603230	P HMA BC IL19.0 N50	TON	636.000				
40603310	HMA SC "C" N50	TON	611.000				
40603315	HMA SC "C" N70	TON	1,540.000				
40603387	HMA SC IL-9.5FG N50	TON	35.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
40603510	P HMA SC "C" N50	TON	424.000				
40603590	P HMA SC "F" N70	TON	122.000				
40800050	INCIDENTAL HMA SURF	TON	1,285.000				
42000401	PCC PVT 9 JOINTED	SQ YD	90,667.000				
42000501	PCC PVT 10 JOINTED	SQ YD	571.000				
42001200	PAVEMENT FABRIC	SQ YD	571.000				
42001300	PROTECTIVE COAT	SQ YD	35,000.000				
42300300	PCC DRIVEWAY PAVT 7	SQ YD	7,070.000				
42400200	PC CONC SIDEWALK 5	SQ FT	156,646.000				
42400800	DETECTABLE WARNINGS	SQ FT	1,977.000				
44000100	PAVEMENT REM	SQ YD	86,810.000				
44000200	DRIVE PAVEMENT REM	SQ YD	22,556.000				
44000500	COMB CURB GUTTER REM	FOOT	37,762.000				
44000600	SIDEWALK REM	SQ FT	96,692.000				
44003100	MEDIAN REMOVAL	SQ FT	14,108.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
44201359	CL C PATCH T4 10	SQ YD	49.000				
50600200	PAINT STEEL RAILING	FOOT	913.000				
50800105	REINFORCEMENT BARS	POUND	18.000				
50901760	PIPE HANDRAIL	FOOT	14.000				
54210182	PIPE ELBOW 12	EACH	3.000				
550A0050	STORM SEW CL A 1 12	FOOT	321.000				
550A0120	STORM SEW CL A 1 24	FOOT	183.000				
550A0160	STORM SEW CL A 1 36	FOOT	102.000				
550A0340	STORM SEW CL A 2 12	FOOT	1,452.000				
550A0360	STORM SEW CL A 2 15	FOOT	358.000				
550A0380	STORM SEW CL A 2 18	FOOT	1,928.000				
550A0410	STORM SEW CL A 2 24	FOOT	2,595.000				
550A0430	STORM SEW CL A 2 30	FOOT	868.000				
550A0450	STORM SEW CL A 2 36	FOOT	2,338.000				
550A0480	STORM SEW CL A 2 48	FOOT	1,641.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
550A0780	STORM SEW CL A 3 48	FOOT	441.000				
55100200	STORM SEWER REM 6	FOOT	583.000				
55100300	STORM SEWER REM 8	FOOT	29.000				
55100400	STORM SEWER REM 10	FOOT	723.000				
55100500	STORM SEWER REM 12	FOOT	4,275.000				
55100700	STORM SEWER REM 15	FOOT	2,430.000				
55100900	STORM SEWER REM 18	FOOT	2,792.000				
55101100	STORM SEWER REM 21	FOOT	206.000				
55101200	STORM SEWER REM 24	FOOT	282.000				
55101300	STORM SEWER REM 27	FOOT	456.000				
55101400	STORM SEWER REM 30	FOOT	1,385.000				
55101600	STORM SEWER REM 36	FOOT	203.000				
56105000	WATER VALVES 8	EACH	12.000				
56105750	BUTTERFLY VALVES 12	EACH	11.000				
56400400	FIRE HYDNTS RELOCATED	EACH	1.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
56400500	FIRE HYDNTS TO BE REM	EACH	14.000				
56400700	FIRE HYDRANTS SPL	EACH	6.000				
56500600	DOM WAT SER BOX ADJ	EACH	35.000				
60107600	PIPE UNDERDRAINS 4	FOOT	5,544.000				
60200305	CB TA 4 DIA T3F&G	EACH	1.000				
60218300	MAN TA 4 DIA T1F OL	EACH	1.000				
60218400	MAN TA 4 DIA T1F CL	EACH	15.000				
60219100	MAN TA 4 DIA T9F&G	EACH	3.000				
60219570	MAN TA 4 DIA T3V F&G	EACH	10.000				
60221100	MAN TA 5 DIA T1F CL	EACH	29.000				
60221800	MAN TA 5 DIA T9F&G	EACH	1.000				
60223800	MAN TA 6 DIA T1F CL	EACH	28.000				
60224010	MAN TA 6 DIA T9F&G	EACH	1.000				
60224446	MAN TA 7 DIA T1F CL	EACH	16.000				
60224459	MAN TA 8 DIA T1F CL	EACH	2.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60224469	MAN TA 9 DIA T1F CL	EACH	4.000				
60234200	INLETS TA T1F OL	EACH	2.000				
60235700	INLETS TA T3F&G	EACH	2.000				
60255500	MAN ADJUST	EACH	1.000				
60255800	MAN ADJ NEW T1F CL	EACH	1.000				
60258100	MAN RECON NEW T1F OL	EACH	1.000				
60260100	INLETS ADJUST	EACH	1.000				
60265700	VV ADJUST	EACH	16.000				
60265900	VV ADJ NEW T1F CL	EACH	6.000				
60266100	VV RECONST	EACH	17.000				
60266600	VALVE BOX ADJ	EACH	3.000				
60500040	REMOV MANHOLES	EACH	64.000				
60500060	REMOV INLETS	EACH	96.000				
60603800	COMB CC&G TB6.12	FOOT	6,859.000				
60604400	COMB CC&G TB6.18	FOOT	29,209.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60605000	COMB CC&G TB6.24	FOOT	187.000				
60605900	COMB CC&G TB9.12	FOOT	140.000				
60608250	COMB CC&G TM2.06	FOOT	24.000				
60609200	COMB CC&G TM6.12	FOOT	2,491.000				
60609800	COMB CC&G TM6.18	FOOT	2,605.000				
60618300	CONC MEDIAN SURF 4	SQ FT	694.000				
66700305	PERM SURV MKRS T2	EACH	1.000				
66900200	NON SPL WASTE DISPOSL	CU YD	85,500.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	42.000				
67000400	ENGR FIELD OFFICE A	CAL MO	36.000				
67100100	MOBILIZATION	L SUM	1.000				
70100200	TRAF CONT-PROT 701331	EACH	2.000				
70100500	TRAF CONT-PROT 701326	L SUM	1.000				
70102620	TR CONT & PROT 701501	L SUM	1.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
70102622	TR CONT & PROT 701502	L SUM	1.000				
70102625	TR CONT & PROT 701606	L SUM	1.000				
70102630	TR CONT & PROT 701601	L SUM	1.000				
70102632	TR CONT & PROT 701602	L SUM	1.000				
70102634	TR CONT & PROT 701611	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	410.000				
70106800	CHANGEABLE MESSAGE SN	CAL MO	60.000				
70300100	SHORT TERM PAVT MKING	FOOT	25,334.000				
70300210	TEMP PVT MK LTR & SYM	SQ FT	7,119.000				
70300220	TEMP PVT MK LINE 4	FOOT	256,700.000				
70300260	TEMP PVT MK LINE 12	FOOT	170.000				
70300280	TEMP PVT MK LINE 24	FOOT	3,692.000				
70301000	WORK ZONE PAVT MK REM	SQ FT	108,685.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
72000100	SIGN PANEL T1	SQ FT	30.000				
78008300	POLYUREA PM T2 LTR-SY	SQ FT	4,170.000				
78008310	POLYUREA PM T2 LN 4	FOOT	59,758.000				
78008330	POLYUREA PM T2 LN 6	FOOT	13,802.000				
78008340	POLYUREA PM T2 LN 8	FOOT	10,453.000				
78008350	POLYUREA PM T2 LN 12	FOOT	9,565.000				
78008370	POLYUREA PM T2 LN 24	FOOT	1,669.000				
78100100	RAISED REFL PAVT MKR	EACH	1,220.000				
78300100	PAVT MARKING REMOVAL	SQ FT	15,000.000				
78300200	RAISED REF PVT MK REM	EACH	150.000				
80400100	ELECT SERV INSTALL	EACH	4.000				
80500100	SERV INSTALL TY A	EACH	6.000				
81028370	UNDRGRD C PVC 3	FOOT	5,535.000				
81028390	UNDRGRD C PVC 4	FOOT	155.000				
81028740	UNDRGRD C CNC 1 1/2	FOOT	175.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
81028750	UNDRGRD C CNC 2	FOOT	17,499.000				
81028760	UNDRGRD C CNC 2 1/2	FOOT	666.000				
81028790	UNDRGRD C CNC 4	FOOT	1,923.000				
81400700	HANDHOLE PCC	EACH	57.000				
81400720	DBL HANDHOLE PCC	EACH	6.000				
81400730	HANDHOLE C CONC	EACH	68.000				
81603037	UD 2#6#6G XLPUSE 1.25	FOOT	21,314.000				
81702110	EC C XLP USE 1C 10	FOOT	9,960.000				
82500360	LT CONT BASEM 480V100	EACH	4.000				
83008200	LT P A 40MH 6MA	EACH	115.000				
83008300	LT P A 40MH 8MA	EACH	4.000				
83008400	LT P A 40MH 10MA	EACH	4.000				
83008500	LT P A 40MH 12MA	EACH	4.000				
83600300	LIGHT POLE FDN 30D	FOOT	1,495.000				
83800505	BKWY DEV COU AL SKIRT	EACH	460.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

	Project Number	Route
County Name - WINNEBAGO- -	ACF-0734/046/	FAP 734

Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
85700200	FAC T4 CAB	EACH	6.000				
86000100	MASTER CONTROLLER	EACH	1.000				
87300901	ELCBL C TRACER 12 1C	FOOT	17,538.000				
87301215	ELCBL C SIGNAL 14 2C	FOOT	9,960.000				
87301225	ELCBL C SIGNAL 14 3C	FOOT	10,678.000				
87301245	ELCBL C SIGNAL 14 5C	FOOT	11,983.000				
87301255	ELCBL C SIGNAL 14 7C	FOOT	7,670.000				
87301815	ELCBL C SERV 6 3C	FOOT	189.000				
87301900	ELCBL C EGRDC 6 1C	FOOT	2,554.000				
87502470	TS POST GALVS 13	EACH	2.000				
87502500	TS POST GALVS 16	EACH	13.000				
87600200	PED PUSH-BUT POST T2	EACH	4.000				
87702860	STL COMB MAA&P 26	EACH	1.000				
87702890	STL COMB MAA&P 32	EACH	1.000				
87702910	STL COMB MAA&P 36	EACH	1.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

Project Number	Route
ACF-0734/046/	FAP 734

County Name - WINNEBAGO- -
Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
87702930	STL COMB MAA&P 40	EACH	2.000				
87702940	STL COMB MAA&P 42	EACH	3.000				
87702950	STL COMB MAA&P 44	EACH	1.000				
87702955	STL COMB MAA&P 45	EACH	1.000				
87702960	STL COMB MAA&P 46	EACH	1.000				
87702970	STL COMB MAA&P 48	EACH	1.000				
87702980	STL COMB MAA&P 50	EACH	1.000				
87702990	STL COMB MAA&P 54	EACH	2.000				
87703000	STL COMB MAA&P 55	EACH	4.000				
87703040	STL COMB MAA&P 62	EACH	3.000				
87800100	CONC FDN TY A	FOOT	45.000				
87800200	CONC FDN TY D	FOOT	18.000				
87800400	CONC FDN TY E 30D	FOOT	55.000				
87800415	CONC FDN TY E 36D	FOOT	269.000				
87800420	CONC FDN TY E 42D	FOOT	63.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
SCHEDULE OF PRICES
CONTRACT NUMBER - 64C21

State Job # - C-92-003-13

Project Number	Route
ACF-0734/046/	FAP 734

County Name - WINNEBAGO- -
Code - 201 - -
District - 2 - -
Section Number - 78R-2

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
88040070	SH P LED 1F 3S BM	EACH	6.000				
88040090	SH P LED 1F 3S MAM	EACH	46.000				
88040110	SH P LED 1F 4S BM	EACH	2.000				
88040120	SH P LED 1F 4S MAM	EACH	2.000				
88040150	SH P LED 1F 5S BM	EACH	22.000				
88040160	SH P LED 1F 5S MAM	EACH	22.000				
88102717	PED SH LED 1F BM CDT	EACH	60.000				
88200100	TS BACKPLATE	EACH	66.000				
88800100	PED PUSH-BUTTON	EACH	54.000				
89000100	TEMP TR SIG INSTALL	EACH	6.000				
89500120	REM EX SERV INSTALL	EACH	6.000				
89502375	REMOV EX TS EQUIP	EACH	6.000				
89502380	REMOV EX HANDHOLE	EACH	39.000				
89502382	REMOV EX DBL HANDHOLE	EACH	3.000				
89502385	REMOV EX CONC FDN	EACH	45.000				

CONTRACT NUMBER **64C21**

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.

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

B. Negotiations

Section 50-15. Negotiations.

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

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

C. Inducements

Section 50-25. Inducement.

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

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

D. Revolving Door Prohibition

Section 50-30. Revolving door prohibition.

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

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

E. Reporting Anticompetitive Practices

Section 50-40. Reporting anticompetitive practices.

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

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

F. Confidentiality

Section 50-45. Confidentiality.

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

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

G. Insider Information

Section 50-50. Insider information.

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

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

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

III. CERTIFICATIONS

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

A. Bribery

Section 50-5. Bribery.

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

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

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

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

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

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

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

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

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

B. Felons

Section 50-10. Felons.

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

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

C. Debt Delinquency

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

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

D. Prohibited Bidders, Contractors and Subcontractors

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

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

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.

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

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

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

_____**NA-FEDERAL**_____

_____

_____

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

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

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

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

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

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

M. Lobbyist Disclosure

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

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

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

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

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

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

Or

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

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.

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. _____
_____

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 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess 100% of the annual salary of the Governor? Yes ___ No __

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or any minor children entitled to receive (i) more than 15% in the aggregate of the total distributable income from your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?

Yes ___ No __

(c) Elective status; the holding of elective office of the State of Illinois, the government of the United States, any unit of local government authorized by the Constitution of the State of Illinois or the statutes of the State of Illinois currently or in the previous 3 years. 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 statues of the State of Illinois, which office entitles the holder to compensation in excess of the expenses incurred in the discharge of that office currently or in the previous 3 years. 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 __

(h) Relationship to anyone who is or was a registered lobbyist in the previous 2 years; spouse, father, mother, son, or daughter. Yes ___No __

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

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

---

3. Communication Disclosure.

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

Name and address of person(s): _____

_____

_____

_____

RETURN WITH BID

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

Name of person(s): _____

Nature of disclosure: _____
_____
_____
_____

APPLICABLE STATEMENT

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

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

NOT APPLICABLE STATEMENT

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

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

☐ _____ _____
Signature of Authorized Representative Date

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

RETURN WITH BID

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B
Other Contracts & Financial Related Information Disclosure

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

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

DISCLOSURE OF OTHER CONTRACTS AND PROCUREMENT RELATED INFORMATION

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

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

THE FOLLOWING STATEMENT MUST BE CHECKED

☐ _____ _____
Signature of Authorized Representative Date

OWNERSHIP CERTIFICATION

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

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

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

RETURN WITH BID

SPECIAL NOTICE TO CONTRACTORS

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

CONSTRUCTION EMPLOYEE UTILIZATION PROJECTION

(a) All bidders on construction contracts shall complete and submit, along with and as part of their bids, a Bidder's Employee Utilization Form (Form BC-1256) setting forth a projection and breakdown of the total workforce intended to be hired and/or allocated to such contract work by the bidder including a projection of minority and female employee utilization in all job classifications on the contract project.

(b) The Department of Transportation shall review the Employee Utilization Form, and workforce projections contained therein, of the contract awardee to determine if such projections reflect an underutilization of minority persons and/or women in any job classification in accordance with the Equal Employment Opportunity Clause and Title 44, Illinois Administrative Code, Section 750.120. If it is determined that the contract awardee's projections reflect an underutilization of minority persons and/or women in any job classification, it shall be advised in writing of the manner in which it is underutilizing and such awardee shall be considered to be in breach of the contract unless, prior to commencement of work on the contract project, it submits revised satisfactory projections or an acceptable written affirmative action plan to correct such underutilization including a specific timetable geared to the completion stages of the contract.

(c) The Department of Transportation shall provide to the Department of Human Rights a copy of the contract awardee's Employee Utilization Form, a copy of any required written affirmative action plan, and any written correspondence related thereto. The Department of Human Rights may review and revise any action taken by the Department of Transportation with respect to these requirements.

RETURN WITH BID

Illinois Department of Transportation

Contract No. 64C21
WINNEBAGO County
Section 78R-2
Project ACF-0734(046)
Route FAP 734
District 2 Construction Funds

PART I. IDENTIFICATION

Dept. of Human Rights # _____ Duration of Project: _____

Name of Bidder: _____

PART II. WORKFORCE PROJECTION

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

TABLE A

TOTAL Workforce Projection for Contract													TABLE B: CURRENT EMPLOYEES TO BE ASSIGNED TO CONTRACT			
			MINORITY EMPLOYEES						TRAINEES				TOTAL EMPLOYEES		MINORITY EMPLOYEES	
JOB CATEGORIES	TOTAL EMPLOYEES		BLACK		HISPANIC		*OTHER MINOR.		APPREN-TICES		ON THE JOB TRAINEES					
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
OFFICIALS (MANAGERS)																
SUPERVISORS																
FOREMEN																
CLERICAL																
EQUIPMENT OPERATORS																
MECHANICS																
TRUCK DRIVERS																
IRONWORKERS																
CARPENTERS																
CEMENT MASONS																
ELECTRICIANS																
PIPEFITTERS, PLUMBERS																
PAINTERS																
LABORERS, SEMI-SKILLED																
LABORERS, UNSKILLED																
TOTAL																

TABLE C

TOTAL Training Projection for Contract								
EMPLOYEES IN TRAINING	TOTAL EMPLOYEES		BLACK		HISPANIC		*OTHER MINOR.	
	M	F	M	F	M	F	M	F
APPRENTICES								
ON THE JOB TRAINEES								

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

FOR DEPARTMENT USE ONLY

BC 1256 (Rev. 12/11/07)

Note: See instructions on page 2

RETURN WITH BID

Contract No. 64C21
WINNEBAGO County
Section 78R-2
Project ACF-0734(046)
Route FAP 734
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.

BC-1256 (Rev. 12/11/07)

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. 64C21
WINNEBAGO County
Section 78R-2
Project ACF-0734(046)
Route FAP 734
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.

Firm Name _____

(IF AN INDIVIDUAL) Signature of Owner _____

Business Address _____

_____

Firm Name _____

By _____

(IF A CO-PARTNERSHIP) Business Address _____

_____
Name and Address of All Members of the Firm:

_____ _____

Corporate Name _____

By _____
Signature of Authorized Representative

(IF A CORPORATION)

_____
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 _____

Corporate Name _____

By _____
Signature of Authorized Representative

(IF A JOINT VENTURE)

_____
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.

Illinois Department of Transportation

Return with Bid

Division of Highways
Annual Proposal Bid Bond

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

KNOW ALL PERSONS BY THESE PRESENTS, That We _____

as PRINCIPAL, and _____

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., _____.

_____
(Company Name)

By _____
(Signature and Title)

Notary for PRINCIPAL

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)

by _____
(Name of Notary Public)

(Seal)

_____
(Signature of Notary Public)

_____
(Date Commission Expires)

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

_____
(Company Name)

By _____
(Signature of Attorney-in-Fact)

Notary for SURETY

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)

by _____
(Name of Notary Public)

(Seal)

_____
(Signature of Notary Public)

_____
(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.

Illinois Department of Transportation

Return with Bid

Division of Highways Proposal Bid Bond

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., _____.

_____
(Company Name)

By _____
(Signature and Title)

Notary for PRINCIPAL

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)
by _____
(Name of Notary Public)

(Seal)

_____
(Signature of Notary Public)

_____
(Date Commission Expires)

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

_____
(Company Name)

By _____
(Signature of Attorney-in-Fact)

Notary for SURETY

STATE OF _____
COUNTY OF _____

Signed and attested before me on _____ (date)
by _____
(Name of Notary Public)

(Seal)

_____
(Signature of Notary Public)

_____
(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

Illinois Department of Transportation

DBE Utilization Plan

(1) Policy

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

(2) Obligation

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

(3) Project and Bid Identification

Complete the following information concerning the project and bid:

Route _____ Total Bid _____

Section _____ Contract DBE Goal _____ (Percent) _____ (Dollar Amount)

Project _____

County _____

Letting Date _____

Contract No. _____

Letting Item No. _____

(4) Assurance

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

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

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

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

Disadvantaged Business Participation _____ percent

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

_____
Company

By _____

Title _____

Date _____

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

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

Bureau of Small Business Enterprises
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.

Illinois Department of Transportation

DBE Participation Statement

Subcontractor Registration Number _____ Letting _____

Participation Statement Item No. _____

(1) Instructions Contract No. _____

This form must be completed for each disadvantaged business participating in the Utilization Plan. This form shall be submitted in accordance with the special provision and will be attached to the Utilization Plan form. If additional space is needed complete an additional form for the firm. Trucking participation items; description must list what is anticipated towards goal credit.

(2) Work:

Please indicate: J/V _____ Manufacturer _____ Supplier (60%) _____ Subcontractor _____ Trucking _____

Pay Item No.	Description (Anticipated items for trucking)*	Quantity	Unit Price	Total
			Total	

(3) Partial Payment Items (For any of the above items which are partial pay items)
Description must be sufficient to determine a Commercially Useful Function, specifically describe the work and subcontract dollar amount:
*Applies to trucking only

(4) Commitment

When a DBE is to be a second-tier subcontractor, or if the first-tier DBE subcontractor is going to be subcontracting a portion of its subcontract, it must be clearly indicated on the DBE Participation Statement, and the details of the transaction fully explained.

In the event a DBE subcontractor second-tiers a portion of its subcontract to one or more subcontractors during the work of a contract, the prime must submit a DBE Participation Statement, with the details of the transaction(s) fully explained.

The undersigned certify that the information included herein is true and correct, and that the DBE firm listed below has agreed to perform a commercially useful function in the work of the contract item(s) listed above and to execute a contract with the prime contractor or 1st Tier subcontractor. The undersigned further understand that no changes to this statement may be made without prior approval from the Department's Bureau of Small Business Enterprises and that complete and accurate information regarding actual work performed on this project and the payment therefore must be provided to the Department.

Signature for Contractor __ 1st Tier __ 2nd Tier

Date _____

Contact Person _____

Title _____

Firm Name _____

Address _____

City/State/Zip _____

Phone _____

Email Address _____

Signature for DBE Firm __ 1st Tier __ 2nd Tier

Date _____

Contact Person _____

Title _____

Firm Name _____

Address _____

City/State/Zip _____

Phone _____

Email Address _____

E _____

WC _____

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

PROPOSAL ENVELOPE

Illinois Department of Transportation

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. 64C21
WINNEBAGO County
Section 78R-2
Project ACF-0734(046)
Route FAP 734
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 suspended or debarred for violations of the Code. Furthermore, the CPO may void the contract.

B. Financial Interests and Conflicts of Interest

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

The financial interests to be disclosed shall include ownership or distributive income share that is in excess of 5%, or an amount greater than 60% of the annual salary of the Governor, of the subcontracting entity or its parent entity, whichever is less, unless the subcontractor is a publicly traded entity subject to Federal 10K reporting, in which case it may submit its 10K disclosure in place of the prescribed disclosure. If a subcontractor is a privately held entity that is exempt from Federal 10K reporting, but has more than 100 shareholders, it may submit the information that Federal 10K companies are required to report, and list the names of any individual or entity holding any ownership share that is in excess of 5%. The disclosure shall include the names, addresses, and dollar or proportionate share of ownership of each individual making the disclosure, their instrument of ownership or beneficial relationship, and notice of any potential conflict of interest resulting from the current ownership or beneficial interest of each individual making the disclosure having any of the relationships identified in Section 50-35 and on the disclosure form.
The current annual salary of the Governor is $177,412.00.

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

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

C. Disclosure Form Instructions

Form A Instructions for Financial Information & Potential Conflicts of Interest

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

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

   (Note: Distributive income is, for these purposes, any type of distribution of profits. An annual salary is not distributive income.)
4. Does anyone in your organization receive greater than 5% of the subcontracting entity's or parent entity's total distributive income, but which is less than 60% of the annual salary of the Governor? YES ___ NO __

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

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

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

RETURN WITH SUBCONTRACT

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

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

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

RETURN WITH SUBCONTRACT

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. _____
_____

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 71/2% of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of of 100% of the annual salary of the Governor? Yes ___No __

4. If your spouse or any minor children are currently appointed to or employed by any agency of the State of Illinois, and his/her annual salary exceeds 60% of the annual salary of the Governor, are you and your spouse or minor children entitled to receive (i) more than 15 % in the aggregate of the total distributable income of your firm, partnership, association or corporation, or (ii) an amount in excess of two times the salary of the Governor?
Yes ___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 __

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

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

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

---

3 Communication Disclosure.

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

Name and address of person(s): _____

_____

_____

_____

RETURN WITH SUBCONTRACT

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

Name of person(s): _____

Nature of disclosure: _____

_____

_____

_____

APPLICABLE STATEMENT

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

Completed by: ☐ _____ _____

Signature of Individual or Authorized Officer — Date

NOT APPLICABLE STATEMENT

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

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

☐ _____ _____

Signature of Authorized Officer — Date

RETURN WITH SUBCONTRACT

ILLINOIS DEPARTMENT OF TRANSPORTATION

Form B
Subcontractor: Other Contracts & Financial Related Information Disclosure

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

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

DISCLOSURE OF OTHER CONTRACTS, SUBCONTRACTS, AND PROCUREMENT RELATED INFORMATION

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

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

THE FOLLOWING STATEMENT MUST BE CHECKED

☐ _____ _____
Signature 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)

Illinois Department of Transportation

NOTICE TO BIDDERS

1. **TIME AND PLACE OF OPENING BIDS.** Sealed proposals for the improvement described herein will be received by the Department of Transportation. Electronic bids are to be submitted to the electronic bidding system (iCX-Integrated Contractors Exchange). Paper-based bids are to be submitted to the Chief Procurement Officer for the Department of Transportation in care of the Chief Contracts Official at the Harry R. Hanley Building, 2300 South Dirksen Parkway, in Springfield, Illinois until 10:00 a.mSeptember 18, 2015. All bids will be gathered, sorted, publicly opened and read in the auditorium at the Department of Transportation's Harry R. Hanley Building shortly after 10:00 a.m.

2. **DESCRIPTION OF WORK**. The proposed improvement is identified and advertised for bids in the Invitation for Bids as:

   Contract No. 64C21
   WINNEBAGO County
   Section 78R-2
   Project ACF-0734(046)
   Route FAP 734
   District 2 Construction Funds

Reconstruction of IL 2 (N. Main St.) from Riverside Blvd. to Auburn St. in Rockford.

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, 2015

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-12) (Revised 1-1-15)

SUPPLEMENTAL SPECIFICATIONS

RECURRING SPECIAL PROVISIONS

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

TABLE OF CONTENTS

STATE OF ILLINOIS

SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction, Adopted January 1, 2012", the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, which apply to and govern the construction of FAP Route 734 (IL 2), Project ACF-0734(046) Section 78R-2, Winnebago County, Contract No. 64C21 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

IL 2 (North Main Street) from Auburn Street to Riverside Boulevard in Rockford

DESCRIPTION OF PROJECT

Reconstructing the existing pavement with 11 foot and 12 foot lanes and 12 foot bi-directional left-turn lane and left-turn lanes at some intersections. New storm sewer, curb and gutter, sidewalks and multi-use path will be included.

TRAFFIC CONTROL PLAN

Effective: January 14, 1999 Revised: April 10, 2014

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.

701001	701006	701011	701101	701106	701301
701311	701326	701331	701426	701427	701501
701502	701601	701602	701606	701611	701701
701801	701901				

Details:

Staging Plans
Informational Warning Sign (for Narrow Travel Lanes) (39.2)
Stay in Your Lane (40.2)
Traffic Control and Protection at Turn Bays (To Remain Open to Traffic) (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.

"UNEVEN LANES" W8-11(O)48 signs shall be installed at 1 mile intervals or as directed by the Engineer.

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).

Plate altering signs shall have the same sheeting as the base sign.

No more than one plate 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 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 the device shall be type II barricade when within 12' of opposing traffic. The taper shall not be broken for an intersection, turn bay, or commercial entrance.

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 where the existing speed limit is 65 mph or greater.

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

Flaggers shall comply with all requirements contained in the Department's "Flagger Handbook" dated September 2011. 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 Brown, Fulton, Ford/Willoughby, Eddy, Halsted, River bluff, and Riverside Boulevard.

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 Rosecrance Ware Center, Spectrum School, Kelly Williamson Mobile, Road Ranger and North Towne Mall. The actual locations of these entrances are LT STA 578+50, RT STA 583+25, LT STA 605+84, RT STA 609+60, RT STA 623+66, RT STA 728+00 respectively.

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 the first and second paragraph of Article 701.20(i) of the Standard Specifications to read:

> "Signs, barricades, or other traffic control devices required by the Engineer, over and above those shown on the standard or detailed in the plans and provisions, will be paid for according to Article 109.04. All flaggers required at sideroads and commercial entrances remaining open to traffic not shown on the Highway Standards, required by Article 701.13(a) or listed above, shall be paid for according to Article 109.04."

Pavement Marking:

All temporary pavement markings that will be operational during the winter months (December through March) shall be paint.

Short term pavement markings on a milled surface shall be 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. Conflicting pavement marking shall be anything within 6' of the new lane / pavement marking.

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.

District Standards Application.

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".

Traffic Control for Narrow Travel Lanes: The Contractor shall provide informational warning signs regarding narrow travel lanes in construction areas. MAX WIDTH XX'-XX" X MILES AHEAD (W12-I103-48) signs with a width restriction of 9'-6" shall be installed at the following locations and the distance from the crossroads as noted; IL 2 and US Bus. 20 (both direction) (2 MILES AHEAD) and at IL 2 and IL 75 (10 MILES AHEAD).

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 for Road and Bridge Construction.

Additional Narrow Width (W12-I102(O)-48) signs with a width restriction of 9'-6" and a "____ MILES" (W16-3A(O)-3612) plate mounted below the signs shall be installed near the intersections of IL 2 and Rockton Road (10 MILES), IL 2 and Roscoe Road (6 MILES), IL 2 and Latham Road (3 MILES), and after the ROAD CONSTRUCTION AHEAD sign in the sign series on IL 2, Riverside Blvd., and Auburn Street. An arrow plate W1-6(0)-3618 shall be mounted below the signs on Riverside Blvd. and Auburn Street.

The material of these signs shall be 0.125 inch thick aluminum, Type AA Fluorescent orange reflective sheeting, and 12 inch D Series font black vinyl lettering meeting the requirements of Sections 1090 and 1091 of the Standard Specifications for Road and Bridge Construction.

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

The Contractor shall notify the Traffic Operations Section of the Bureau of Operations by fax (815/284-5489) and the Bureau of Project Implementation (815/284-5348) in writing by means of fax (to the numbers provided) and also by letter to the District Office. **This request shall be submitted between three and four weeks (21 to 28 days) prior to the anticipated lane restriction to allow the State adequate time to permit wide 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 701611

Flexible Delineator 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 701606 or 701431.

The re-attachment of the flexible delineator to the base shall be considered incidental to 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 at his/her expense. Any flexible delineator which needs to be replaced within seven (7) calendar days after installation shall be replaced by the Contractor at his/her expense.

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

Any flexible delineator which needs to be replaced after seven (7) calendar days shall be paid for at the contract unit price per Each for FLEXIBLE DELINEATOR MAINTENANCE to maintain the flexible delineator required as part of Standards 701431 or 701606.

Maintenance of Traffic: The Contractor shall be required to notify the Winnebago County Highway Department, the corresponding Township Commissioner, emergency response agencies (i.e.: fire, ambulance, police), school bus companies and the Department of Transportation (Bureau of Project Implementation) regarding any changes in traffic control.

The Contractor shall be required to notify the Winnebago County Highway Department and/or corresponding Township Commissioner for any sideroad closure or opening.

The Contractor shall submit a 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 Standard 701206 and/or barricades. This traffic plan will need to be approved by the Engineer before the roadway is closed to traffic.

The Contractor shall be responsible for providing a weekly article and map to the news media describing work being performed and stages closed to traffic. News media shall be WREX 13 Rockford, WTVO 17 of Rockford, WIFR 23 Rockford and WQRF FOX 39 Rockford.

Traffic on IL 2 and the sidestreets shall be maintained using the staging sequence shown in the plans. This work shall be included in the Traffic Control and Protection Standards 701601, 701602, 701606, and 701701.

Striping shall be done using Traffic Control and Protection Standards 701311 and 701427.

The modified sign spacing on IL 2 south bound traffic and advanced arrow board are included in the cost of 701601, 701602, and 701611.

Placing and removing pavement markings shall be completed using 701301, 701311, 701427, and 701701.

The construction of Benington Road shall be staged as shown in the plans. The Contractor shall have 21 consecutive calendar days to construct the road. After the 21 calendar days, Benington Road shall be opened to traffic.

The construction of Walgreen parking lot shall be completed within 14 consecutive calendar days.

The construction of Halsted Ave. and Eddy Ave. shall be done as shown in the plans while the roads are open to traffic. This work shall be done as shown in the plans and using 701331.

Construction of the side roads shall be done as shown in the plans while the roads are closed.

Construction of Riverside Blvd. shall be completed while the road is open to traffic as shown in the plans and using 701601, 701602, 701606, 701701.

Widening on the Side streets shall be done using 701326.

Construction of some storm sewer, temporary storm sewer, temporary inlets, temporary manholes, permanent drainage structures, and other utilities such as sanitary and water main items as shown in the plans may need to be constructed early on in order to maintain drainage during construction staging. This work shall be done using the applicable Traffic Control and Protection Highway Standards 701427, 701501, 701502, 701601, 701602 and 701606.

ABANDON AND FILL EXISTING SANITARY MANHOLE

Description: This work shall consist of abandoning and filling the existing sanitary sewer manholes that are no longer necessary as a result of this project. Manhole abandonment shall be in accordance with section 605.04 and 605.05 of the IDOT. Standard Specifications for Road and Bridge Construction (Current Edition), RRWRD requirements, and shall include the following work by the contractor:

Place permanent watertight concrete plugs with non-shrink hydraulic mortar and bricks in all pipes connected to the manholes.

Drill ten (10) one inch (1") diameter holes in the manhole bottom. As an alternative, the contractor may break up the bottom of the manhole with a jack hammer.

Remove and haul away all masonry with three feet (3') of existing or proposed grade whichever is lower.

Remove the frame and cover.

Fill manhole and void with compacted IDOT.-approved trench backfill.

Basis of Payment: This work shall be paid for at the contract unit price per Each for ABANDON AND FILL EXISTING SANITARY MANHOLE.

FILL EXISTING SANITARY SEWERS

Description: This work includes abandoning and filling of various diameters of existing sanitary sewer between manholes or as shown on the plans. Sanitary sewers designated to be abandoned shall be abandoned by filling, as full as possible, the sewer with bentonite grout material. After insertion of the grout material is completed, as determined by the Inspector, the ends of the abandoned pipe shall be plugged to the satisfaction of the Engineer by using brick and mortar or another approved method.

Not only shall the mainline sewer be filled with flowable grout material but all other voids either upstream of the mainline sewer or outside of the sewer pipe shall also be filled. Voids outside of the mainline pipe caused by broken and missing pipe and the subsequent erosion of supporting pipe materials shall also be filled as much as possible.

The Contractor shall continue filling the line to be abandoned to the satisfaction of the Inspector.

This work shall include filling the existing sanitary sewer line with a bentonite grout material as directed by the Inspector. The bentonite grout material shall have the following mix design:

“Mix” – 60%

Mason Sand or Torpedo Sand - 40%

Bentonite Vul-Clay Powder - 5 pounds per 25 pounds of "Mix" and Sand Water - Add as required for pumping material

The "Mix" design is detailed below. All material in the "Mix" shall be pulverized, mixed and screened with 100% passing through a #4 sieve.

Light Sandy Clay Mixture - 80% (100% passing #4 Sieve)

Limestone Powder - 15% (100% passing #50 Sieve)

Mason Sand - 5%

The Bentonite Vul-Clay Powder shall be the following properties:

pH: 9-10

Moisture: 9%

Grind % - 200 Mesh" 88%

Basis of Payment: This work shall be paid for at the contract unit price per CUBIC YARD for **FILL EXISTING SANITARY SEWERS**. Sanitary sewers to be abandoned and filled shall be from manhole to manhole or as shown on the plans.

ABANDON EXISTING WATER MAIN, FILL WITH CLSM

This work consists of furnishing and placing Controlled Low-Strength Material (CLSM) for abandoning pipes and constructing miscellaneous bulkheads or forms.

Supply CLSM incorporating an engineered material such as Elastizell Engineered Fill or approved equal.

The Engineer reserves the right to adjust the proportions of the mix design in the field to meet the design criteria, provide adequate flowability, maintain proper solid suspension, and meet other criteria established by the Engineer.

The installation of the Engineered Fill shall be in accordance with procedures provided by the Elastizell Corporation. The area to be filled shall not have any standing water in it prior to fill placement. Items encased in the fill shall be set and stable prior to installation.

Method of Measurement: Measurement for this work will be per foot in place.

Basis of Payment: This work will be paid for at the contract unit price per foot for ABANDON EXISTING WATER MAIN, FILL WITH CLSM which price shall include any labor, materials and trench backfill necessary for a complete installation.

BUTTERFLY VALVES

This work shall consist of furnishing all labor, equipment and material necessary to install 12" Butterfly Valves, complete with valve boxes at the locations shown on the plans or as directed by the Engineer and in accordance with the City of Rockford Water Main Specifications, Section 12 and Section 602 of the IDOT Standard Specifications. Valve boxes shall be Tyler/Union cast iron 6850 series, with "WATER" imprinted on top cover with a debris cap and with an Adapter II by Adaptor Inc. installed.

The cost of the valve, valve box and trench backfill, where applicable, shall be included in the contract unit price bid for this item.

Method of Measurement: Measurement for this work will be per each in place.

Basis of Payment: This work will be paid for at the contract unit price per each for BUTTERFLY VALVES 12" which price shall include any labor, materials, and trench backfill necessary for a complete installation.

COLORED SURFACE

Work shall be coordinated with concrete work as shown on drawings and shall include the coloring of the concrete and the pattern application to the surfaces of the concrete.

Add the following to Section 1020 of the Standard Specifications.

1. The work shall include the use of a color admixture to integrally color the concrete used on concrete islands and medians as shown on the drawings and the stamping or imprinting of the surfaces of the concrete to achieve the specified pattern.

2. Submit all admixture and imprinting pattern data including the data for the color admixture, the imprinting and texturing tools, the powdered bond breaker release agent, and the curing compound. Submit design mixes, manufacturer's color charts, and manufacturer's qualifications in the production of the specified products.

3. The installer shall have a minimum of five years' experience with work of similar scope and quality. Installer shall provide a list of projects as reference and proof of experience and expertise.

4. Obtain the specified material from the same source and maintain a high degree of consistency in workmanship throughout the project.

5. At a location on the project site selected by the City of Rockford, place and finish an integrally colored concrete mockup/field sample for each color and pattern that is imprinted and 4 feet by 4 feet in size.

   For accurate color, the quantity of concrete mixed to produce the sample should not be less than 3 cubic yards (or not less than 1/3 the capacity of the mixing drum on the Ready-Mix truck) and should always be in full cubic yard increments. Excess material shall be discarded according to local regulations.

   Construct the field sample using processes and techniques intended for use on permanent work, including curing procedures. Include samples of control, construction, and expansion joints in sample panels. Field sample shall be produced by the individual workers who will perform the concrete work for the project. Retain samples of cements, sands, aggregates, and color additives used in mockup for comparison with materials used in remaining work. Accepted field sample provides visual standard for work of section. Field sample shall remain through completion of the work for use as a quality standard for finished work. Remove field sample when directed.

6. Comply with the admixture manufacturer's instructions. Deliver the color admixtures in the original, unopened packaging and store in dry conditions.

7. Schedule the placement of colored concrete to minimize exposure to wind and hot sun before curing materials are applied. Avoid placing concrete if rain, snow or frost is forecast within 24 hours. Protect the fresh concrete from moisture and freezing.

8. Schedule concrete delivery so that consistent mix times are provided from batching to discharge. Mix times shall meet manufacturer's written recommendations.

9. One week prior to placement of integrally colored concrete, a meeting shall be held on-site to discuss the project and the installation methods. It is recommended that the City of Rockford representative, the general contractor, subcontractor, Ready-Mix Concrete representative and the manufacturer's representative be present at this meeting.

10. The color admixtures for the integrally colored concrete shall be as follows:

    For Colored Surface A, the admixture shall be Uni-Mix, Integral Concrete Colorant, U37-Sienna as manufactured by Butterfield Color, 625 W. Illinois Avenue, Aurora, IL 60506 (800-282-3388). For Colored Surface B, the admixture shall be Uni-Mix, Integral Concrete Colorant, U-16 Harvest Wheat as manufactured by Butterfield Color, 625 W. Illinois Avenue, Aurora, IL 60506 (800-282-3388). Both colorants shall conform to ASTM Standard C979 and be a blend of non-fading, synthetic iron oxides and a water-reducer which produce uniform, streak-free colors in the concrete.

11. The stamping tools and materials shall be manufactured by Butterfield Color.

    For Colored Surface A, the pattern shall be Old Chicago Running Bond Brick- Part No. BST6600, as manufactured by Butterfield Color.

    For Colored Surface B, the pattern shall be Ashlar Slate-Part No. BST4000, as manufactured by Butterfield Color.

    All stamping and imprinting shall be done in accordance with the manufacturer's instructions. Standard or professional grade tools shall be used. Touch up patterns and finish edges with hard tools as necessary.

12. The antiquing release is color powdered bond breaker used with the stamping mats and materials to accent the underlying concrete colors.

    For Colored Surface A, the antiquing release shall be Perma-Cast Antiquing Release, R-13 Deep Charcoal, as manufactured by Butterfield Color.

    For Colored Surface B, the antiquing release shall be Perma-Cast Antiquing Release, R-14 Walnut, as manufactured by Butterfield Color.

    The antiquing release is a finely ground, streak-free powder that is a blend of UV-Resistant pigments and water repelling additives, and shall be broadcast, per the manufacturer's instructions, over the concrete surface prior to placing the stamping tools.

13. Curing and sealing compound for the integrally colored concrete shall comply with ASTM C-309 and be Clear Guard PRO 350 Cure and Seal as manufactured by Butterfield Color.

14. Apply the curing and sealing compound for integrally colored concrete according to manufacturer's instructions using manufacturer's recommended application techniques. Applying curing and sealing compound at a consistent time for each pour to maintain close color consistency. Do not cover concrete with plastic sheeting.

15. Do not add calcium chloride to the concrete design mix as it causes mottling and surface discoloration. Supplemental admixtures shall not be used unless approved by the color admixture manufacturer. Do not add water to the mix in the field. Add color admixture to the concrete mix according to the manufacturer's instructions in premeasured bags, not by weight of cement content.

16. Protect all surrounding surfaces during installation of colored concrete. Adjacent or abutting standard concrete shall not be dis-colored during the installation of colored concrete.

Basis of Payment: This item shall be paid for at the contract unit price per square foot for COLORED SURFACE which shall be payment in full for all labor, materials, samples, and equipment necessary to color and pattern the concrete as indicated on the drawings.

COMBINATION CONCRETE CURB AND GUTTER, TYPE M (SPECIAL)

This work shall consist of constructing combination concrete curb and gutter as shown in plans. This work shall be done in accordance with Section 606 of the Standard Specifications and Standard 606001.

Description: This work shall consist of construction a 2" high mountable curb with an 18" gutter flag to match adjacent combination curb ad gutter.

Basis of Payment: Combination concrete curb and gutter shall be paid for at the contract unit price per Foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE M (SPECIAL)

COMBINATION CONCRETE CURB AND GUTTER, TYPE M B-6.18 (TEMPORARY)

This work shall consist of constructing combination concrete curb and gutter in accordance with Section 606 of the Standard Specifications and Standard 606001.

Description: This work shall consist of construction of temporary concrete curb and gutter at the locations shown in plans needed for staging.

Basis of Payment: Combination concrete curb and gutter shall be paid for at the contract unit price per Foot for COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18 (TEMPORARY)

COMPACTION OF POLYMERIZED HOT-MIX ASPHALT CONCRETE
Effective: January 16, 2002

This work shall consist of furnishing a pneumatic tired roller as specified in Article 406, in addition to all other rollers specified in the Standard Specifications. The spray system shall be in good working order. The tires shall be in good condition and be constructed heavy enough to withstand 90 to 110 psi inflation pressures on a continual basis. An approved water based release agent shall be utilized on the tires similar to, but not limited to Tech Shield that effectively prevents mix adhesion. The dilution rate shall be as per manufacturer's recommendations. The mixture compaction temperature will be the maximum possible without experiencing surface damage to the mix caused by adhesion to the tires. The recommended range is from 200º to 260º Fahrenheit. This work shall be included in the cost of the Polymerized Hot-Mix Asphalt of the type and size specified.

COMPLETION DATE PLUS WORKING DAYS
Effective: December 29, 2006 Revised: April 10, 2014

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

"(b) Completion Date Plus Working Days. When a completion date plus working days is specified, the Contractor shall complete the project by 11:59 p.m. on or prior to August 16, 2019. The PROJECT shall have all work completed, except the landscape items, punch list items, permanent pavement marking, and traffic signal inspection for the PROJECT to be considered complete.

The Contractor will be allowed twenty (20) working days after the completion date to complete landscaping items, punch list items, permanent pavement marking, and traffic signal inspection.

SEQUENCE OF WORK, STARTING DATES, AND INTERIM COMPLETION DATES

2016

Work on this project is expected to start in 2016. Pavement widening, side street reconstruction, water main work, sanitary sewer, and some storm sewer work as shown in the staging plans in Stage 1A and 1B shall be completed prior to all lanes being opened.

The contractor shall have all lanes open to traffic on IL 2 and side streets on or before November 18, 2016.

2017

Work on this section of IL 2 from Auburn Street to the railroad crossing as shown on the staging plans (Stage 2A, 2B, 2B1, 2B2, 2C, and 2C1) may start on or after April 3, 2017 unless approval is granted by the Engineer to start the work earlier.

All work on this section of IL 2 from Auburn Street to the railroad crossing as shown on the staging plans (Stage 2A, 2B, 2B1, 2B2, 2C, and 2C1) except landscaping shall be completed on or before November 17, 2017. All lanes on IL 2 and side streets shall be opened to traffic on or before November 17, 2017.

2018

Work on this section of IL 2 from the railroad crossing to north of Riverside Boulevard as shown on the staging plans (Stage 3A1, 3A2, 3B1, 3B2, and 3C) may start on or after April 2, 2018 unless approval is granted by the Engineer to start the work earlier.

All work on the section of IL 2 from the railroad crossing to north of Riverside Boulevard as shown on the staging plans (Stage 3A1, 3A2, 3B1, 3B2, and 3C) except landscaping shall be completed on or before November 16, 2018. All lanes on IL 2 and side streets shall be opened to traffic on or before November 16, 2018.

2019

Work on this section of IL 2 from station 591+10 to station 594+00 including the railroad crossing may start on or after April 1, 2019 unless approval is granted by the Engineer to start the work earlier.

All work on IL 2 from station 591+10 to station 594+00 including the railroad crossing shall be completed on or before August 16, 2019. All lanes on IL 2 shall be opened to traffic on or before August 16, 2019. Refer to project completion date special provision.

CORRUGATED MEDIAN (SPECIAL), CONCRETE MEDIAN (SPECIAL), CONCRETE MEDIAN SURFACE, 4 INCH (SPECIAL)

This work shall be done according to Section 606 of the Standard Specifications, Applicable Highway Standards 606301, 606306 and District Standard 4.1. The concrete shall be colored and shall confirm to COLORED SURFACE special provisions and landscape plans included in the contract plans.

Coloring and brick stamping of the median shall be paid separately at the contract unit price per square Foot for COLORED SURFACE.

This work shall be paid for per square foot for corrugated median (special), concrete median (special), concrete median surface, 4 inch (Special).

CONCRETE MEDIAN, TYPE SM (SPECIAL)

This work shall consist of constructing concrete median in accordance with Section 606 of the Standard Specifications and as mentioned herein. The concrete median, type SM (Special) shall be constructed with SM6.18 and/or SM 6-12 curb and gutter on either side of the median as called out in the plans.

This work shall be paid for per square foot for CONCRETE MEDIAN, TYPE SM (SPECIAL).

CONCRETE STEP REMOVAL

Description: This work consists of the removal and disposal of the existing concrete steps as shown to be removed in the plans in accordance with Section 501 of the Standard Specifications.

Removal and disposal of all posts, railing and connecting hardware associated with the concrete step removal will not be measured for payment

Basis of Payment: Removal of existing concrete steps shall be paid for at the contract unit price per Each for CONCRETE STEP REMOVAL at the location designated on the plans.

CONNECTION TO EXISTING WATER MAIN 6", 8", 12"

This work shall consist of furnishing and installing all material and providing all labor necessary to connect the proposed water main to the existing water system.

All workmanship and materials shall conform to the City of Rockford Water Division Specifications Section 12, latest revisions.

The cost of the trench backfill, where applicable, shall be included in the contract unit price bid for this item.

Method of Measurement: Measurement for this work will be per each in place for the various size water mains.

Basis of Payment: This work will be paid for at the contract unit price per each for CONNECTION TO EXISTING WATER MAIN 6", CONNECTION TO EXISTING WATER MAIN 8", and CONNECTION TO EXISTING WATER MAIN 12", which price shall include any labor, materials, and trench backfill necessary for a complete installation.

CRITICAL PATH SCHEDULE
Effective: February 10, 1995

The construction of this project will be planned and recorded with a conventional Critical Path Method (CPM) as specified in Article 108.02 of the Standard Specifications and the following:

The Contractor is responsible for preparing the initial schedule in the form of an activity on arrow diagram which shall include activity description and duration, two copies shall be submitted to the Engineer at the preconstruction meeting. The construction time, as determined by the schedule shall not exceed the specified contract time. The schedule shall be updated the first of each month, when there is a delay in completion of any critical activity, or when the contract is modified causing additions, deletion or revision of activities required.

As determined by CPM analysis, only delays in activities which affect milestone dates or contract completion dates will be considered for a time extension.

If the Contractor does seek a time extension of any milestone or contract completion date, he/she shall furnish documentation as required by the Engineer to enable him to determine whether a time extension is appropriate under the terms of the contract.

CUT AND CAP EXISTING WATER MAIN 6", 8", 12"

This work shall conform to the Standard Specifications for Water and Sewer Main Construction, latest edition, the City of Rockford Water Division Specifications, Section 12, and the requirements of the Engineer. Contractor shall sawcut the existing water main and install a mechanical joint end cap with restrained glands. The contractor shall also thrust block the cap against the end of the existing water main that is to be abandoned in place for additional thrust restraint. This item shall include removal and proper disposal of all material. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per each in place.

Basis of Payment: This work will be paid for at the contract unit price per each for CUT AND CAP EXISTING WATER MAIN 6", CUT AND CAP EXISTING WATER MAIN 8", and CUT AND CAP EXISTING WATER MAIN 12" which price shall include any labor, materials, and trench backfill necessary for a complete installation.

DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED

This work shall conform to the Standard Specifications for Water and Sewer Main Construction, latest edition, and the requirements of the Engineer. Where shown on the plans, the existing domestic water service box assembly shall be excavated and adjusted to final grade.

This item shall include removal and proper disposal of all material. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for DOMESTIC WATER SERVICE BOXES TO BE ADJUSTED which price shall include any labor, materials, and trench backfill necessary for a complete installation.

DUCTILE IRON WATER MAIN CLASS 52 WITH POLYETHYLENE ENCASEMENT 6", 8", 12"

This work shall be furnished and installed in accordance with the City of Rockford Water Division Specifications and the requirements of the Engineer. Bacteriological sampling shall be done in accordance with the AWWA C651-99 regulations and EPA regulation section 652.203. The City of Rockford shall receive a copy of all bacteriological laboratory reports. All water mains shall be made from ductile iron or an approved equal material. All fittings (bends, tees, crosses, and plugs) required to complete this installation shall be as shown upon the plans or as directed by the Engineer. The pipe shall be cement mortar lined inside conforming to AWWA Standard C104, and bituminous coated on the outside. All pipe shall be Class 52 with the exception of the 16" diameter pipe which shall be Class 51.

Pipe joints on straight runs of main shall be push-on type. All joints on fittings, valves, and bends shall be mechanical type. To ensure electrical conductivity, brass wedges must be used with push on joints in accordance with Section 41-2.05C of the Standard Specifications for Sewer and Water in Illinois. All mechanical joints shall be tightened to the manufacturer's specifications using a torque stick. Thrust restraint shall be provided by thrust blocks wherever there is a change in horizontal direction, tees, and on dead ends. On vertical down and vertical up bends and reducers, restrained glands are required.

Polyethylene Encasement (Poly-Wrap) shall be furnished and installed on all Ductile Iron Watermain, and associated valves, hydrant lines, fittings, and appurtenances. This work shall be done according to the requirements of AWWA C105, the requirements of the City of Rockford Water Division Specifications, Section 12, latest revision, and as detailed on the plans.

Tube form Poly-Wrap is required, 8 mil minimum thickness.

Where Poly-Wrapped watermain joints existing unwrapped watermain, the Poly–Wrap shall be extended at least 3 feet onto the unwrapped pipe with the ends sealed with adhesive tape.

All cuts, tears, or damage to the Poly-Wrap shall be repaired with adhesive tape or with a short section of additional Poly-Wrap wrapped around the pipe over the damaged area and secured in place.

Bacteriological sampling to be done in accordance with AWWA C651-99 regulations and EPA regulation section 652.203. Bacteriological sampling shall be collected from the pipeline following disinfection and final flushing. Samples shall be delivered to the City of Rockford Environmental Laboratory (1111 Cedar Street) for analysis. Samples must be submitted in City of Rockford Laboratory approved bottles that may be obtained from the laboratory. A Coliform Analysis Report shall be submitted with each sample (also available at this address) and shall indicate the chlorine residual (either free or total) at the time the sample was collected. Failure to record the residual shall result in the rejection of the sample. If the sample shows the presence of coliform organisms, the contractor shall be notified (contact information MUST appear on the bacteriological form) and repeat the disinfection procedure. On resampling, two (2) consecutively passing samples collected on successive days (a minimum of 24 hours between sampling) shall be required.

If valved sections of the pipeline are disinfected separately, each section will be considered a separate pipeline for disinfection, flushing and sampling.

The City of Rockford will retain a copy of all bacteriological laboratory reports and submit results to the Illinois EPA as required. A copy of the bacteriological report shall also be sent to the City Water Engineer and the Contractor. This work will be incidental to the contract and will not be considered for further payment.

All water main trenches shall be backfilled from the bottom of trench (4" below pipe) to 1 foot above the top of pipe with FA-6.

The contractor shall provide all materials, labor, equipment, and all other incidentals necessary to install Poly-wrap with all costs incidental to the unit cost for Ductile Iron Water Main of the diameter indicated.

Method of Measurement: Measurement for this work will be per foot in place. All fittings required for the water main will not be measured separately, but shall be included in the cost of the associated water mains.

Basis of Payment: This work will be paid for at the contract unit price per foot for DUCTILE IRON WATER MAIN CLASS 52 WITH POLYETHYLENE ENCASEMENT, 6", DUCTILE IRON WATER MAIN CLASS 52 WITH POLYETHYLENE ENCASEMENT 8" and DUCTILE IRON WATER MAIN CLASS 52 WITH POLYETHYLENE ENCASEMENT, 12" which price shall include any labor, materials, and trench backfill necessary for a complete installation.

ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C (TRAFFIC SIGNAL WORK)

Note that this special provision to be used for TRAFFIC SIGNALS work.
The cable shall meet the requirements of Section 817 of the current "Standard Specifications for Road and Bridge Construction" except for the following:

Add the following to Article 817.03 of the Standard Specifications:

In order to trace the fiber optic cable after installation, the tracer cable shall be installed in the same conduit as the fiber optic cable in locations shown on the plans. The tracer cable shall be continuous, extended into the controller cabinet and terminated on a barrier type terminal strip mounted on the side wall of the controller cabinet. The barrier type terminal strip and tracer cable shall be clearly marked and identified. The tracer cable will be allowed to be spliced at the handholes only. All tracer cable splices shall be kept to a minimum and shall incorporate maximum lengths of cable supplied by the manufacturer. The tracer cable splice shall use a Western Union Splice soldered with resin core flux. All exposed surfaces of the solder shall be smooth. Splices shall be soldered using a soldering iron. Blow torches or other devices which oxidize copper cable shall not be allowed for soldering operations. The splice shall be covered with WCSMW 30/100 heat shrink tube, minimum length 4 inches (100 mm) and with a minimum 1 inch (25 mm) coverage over the XLP insulation, underwater grade.

Add the following to Article 817.05 of the Standard Specifications:

Basis of Payment: The tracer cable shall be paid for separately as ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C per Foot, which price shall include all associated labor and material for installation.

ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C (LIGHTING WORK)

Note that this special provision apply to LIGHTING work

Description: This work shall consist of furnishing all equipment, material and labor necessary to properly install an electric cable in conduit as a tracer wire for underground conduit, coilable nonmetallic conduit at locations as indicated on the plans.

Materials: The materials shall be in accordance with Article 873.02(a) of the "Standard Specifications", plan details, and the following:

The electric cable in conduit for tracer cable will be 12 gauge THHN stranded.

General: The work shall be completed in accordance with Section 873 of the "Standard Specifications", plan details, and the following:

A tracer cable shall be installed in the same conduit as the fiber optic cable in order to trace the fiber optic cable after installation.

The tracer cable shall be continuous, extended into the controller cabinet and terminated on a barrier type terminal strip mounted on the side wall of the controller cabinet. The barrier type terminal strip and tracer cable shall be clearly marked and identified.

All tracer cable splices shall only be permitted in handholes or junction boxes on bridge structures above grade. The tracer cable splices shall be kept to a minimum and shall incorporate maximum lengths of cable supplied by the manufacturer. The tracer cable splice shall use a Western Union Splice soldered with resin core flux and shall be soldered using a soldering iron: blow torches or other devices, which oxidize copper cable, shall not be allowed for soldering operation. All exposed surfaces of the solder shall be smooth. The splice shall be covered with a black shrink tube meeting UL 224 guidelines, Type V and rated 600V, minimum length 4 inches (100 mm) and with a minimum 1 inch (25 mm) coverage over the insulation, underwater grade.

Method of Measurement: This work will be measured for payment in accordance with Article 873.05 of the "Standard Specifications."

Basis of Payment: This work will be paid for at the contract unit price per foot for ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12 1C.

EMERGENCY VEHICLE PRIORITY SYSTEM

This work shall be performed in accordance with the manufacturer's specifications and with Section 887 of the current "Standard Specifications for Road and Bridge Construction".
Emergency Vehicle Priority System shall be compatible with the system in place with the City of Rockford. The Contractor with the City of Rockford shall verify that the system is operating properly with the equipment in place on their emergency vehicles.

EMERGENCY VEHICLE SIGNAL CONTROL SYSTEM cost shall include the following items:

1. Light Detector Amplifier
   The emergency preemption system shall be the Tomar/Optronix Optical Preemption System. The light detector amplifier shall be the Tomar 2140 card and backed with a four-channel capacity. The System shall have ID capability with necessary software included so that events can be down loaded to a laptop.
2. Confirmation Beacon
   This work shall be performed in accordance with the Manufacturer's specifications and with Section 1072 of the current "Standard Specifications for Road and Bridge Construction".
3. Electric Cable in conduit, Signal No. 20 3c
   This item shall be to supply the following electric cable for use with the emergency vehicle priority system.

   Cable: the cable shall meet requirements for IPCEA-S-61-402/NEMA WC 5, Section 7.4, 600 volt control cable, 75 degree C, Type B, and the following:

   The cable shall contain 3 conductors, each of which shall be #20 (7X28) stranded, tinned copper with 25 mil minimum average thickness low density polyethylene insulation. Insulation shall be color coded: 1-yellow, 1-blue, and 1-orange.

   The shield shall be aluminized polyester film with a nominal 20% overlap. A #20 (7X28) stranded, tinned, bare drain wire shall be placed between the insulated conductors and shield and in the contact with the conductive surface of the shield.

   The jacket shall be black PVC with minimum ratings of 600 volts and 80 degrees C and minimum thickness of 45 mils. The jacket shall be marked as required by IPCEA/NEMA.

   The finished outside diameter of the cable shall not exceed 0.335 inch.

   The capacitance as measured between any conductor and the other conductors and the shield shall not exceed 40 pico farads per foot at 100 Hz.

This work shall be paid for at the contract unit price per Each for EMERGENCY VEHICLE PRIORITY SYSTEM, which price shall be payment in full for furnishing and installing the cable equipment as described above.

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.

The contractor shall utilize the existing building Rt Sta 630+18 as a field office. The contractor shall be responsible for connecting all utilities (electric, phone, etc.) to the building before construction starts and also disconnecting them after construction is completed.

The work shall be included in the contract unit price per calendar month for ENGINEER'S FILED OFFICE TYPE A.

ESTABLISHING AND REFERENCING LAND SECTION MARKERS

Effective: November 8, 1996 Revised: April 14, 2010

The Contractor shall monument or re-monument all Section Corners, Quarter Corners with their Reference Monuments, (and any lesser Corners which are in place including those which have been monumented by others and do not conform with the Department's procedures), that will be destroyed. The Section Corners will be monumented according to District Reference Marker Detail No. 63.4. It is required that an Illinois Professional Land Surveyor prepare a Department Monument Record Form which is in compliance with the Land Surveying Monuments Acts (765 ILCS 220/0.01 et seq.) for any designated Section Corner Monument or any Reference Monument that is disturbed. The Contractor shall secure the I.D.O.T. Monument Record Form (with I.D.O.T. logo) from the Department and furnish said form to the Illinois Professional Land Surveyor. Each Monument Record Plat shall note how the Section Corner Monument and all Reference Monuments were set, either flush with the ground, buried 28 inches, (if monuments are buried, four 3.5 foot by 5/8 inch rebars shall be placed around said monuments to make recovery an easier task), or in other cases what was done. A graphic illustration of physical landmarks and their relationship to the Monument Reference Markers shall be shown upon said Monument Record Plat. These Monument Record Plats shall be recorded by the Surveyor. Recorded copies will then be furnished to the Department by the Contractor.

The determination of those Section Corners which are to be re-monumented for this project will be made by said Department.

If any of the before described Section Corners have been previously monumented by Department standards and all Reference Monuments are in place, a signed and sealed letter from the Illinois Professional Land Surveyor shall be sent to this office affirming this fact. In case a Reference Monument has been destroyed, it will be reset and a new Monument Record Plat shall be recorded.

Any questions or deviations from these procedures shall be referred to the Plats and Plans Unit at 815/284-5370.

This work will be paid for at the contract unit price per Each for ESTABLISHING AND REFERENCING LAND SECTION MARKERS, or for REFERENCING LAND SECTION MARKERS when the land section marker has been previously located. All work shall be done under the direction of a registered land surveyor of the State of Illinois.

Each item shall include the placement of four reference markers and a land section marker where applicable.

FENCE REMOVAL

Effective September 17, 2014

This work shall consist of the satisfactory removal of portions or entire existing fence and its appurtenances, at locations shown in the Schedule of Quantities, or as directed by the Engineer.

The contractor shall also be required to transport all removed material off the project site as specified in applicable portions of Article 202.03 of the Standard Specifications.

This work shall be measured and paid for at the contract unit price per Lineal Foot for FENCE REMOVAL, which price shall be payment in full for all work required, including disposal of material as specified.

FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE

This work shall consist of furnishing and installing a fiber optic cable of the type, size and number of fibers specified.

This work shall be in accordance with Section 801, 864, 871, and 1076 of the current Standard Specifications for Road and Bridge Construction.

General Requirements

Materials and Equipment

Materials and equipment shall be the standard products of a manufacturer regularly conforming to the following specifications and fully support ALL Wave certification for all four fiber transmission frequencies. The fiber optic shall be manufactured utilizing Corning glass fiber conforming to the following specifications. All materials and equipment furnished shall be completely free from defects and poor workmanship. All fibers shall be glass. The cable shall be rated for gigabyte data bandwidth. All fiber shall be loose tube construction for both indoor and outdoor installation. Indoor cabling shall use plenum rated conduit to within less than 50 foot of point of termination eliminating the requirement to convert to indoor cable unless otherwise specified on the plans.

Contractor Qualifications

Trained and experienced personnel shall supervise the fiber optic cable installation. Qualified technicians shall make the cable terminations and splices. The Contractor upon request of the Engineer shall provide documentation of qualifications and experience for fiber optic equipment installations. The Engineer shall determine if the Contractor is qualified to perform this work. The Contractor shall have attended a certified fiber optic training class mandated by these specifications prior to starting work.

Codes Requirements

The fiber optic cable installation shall be in accordance with or exceed all minimal requirements of State codes, National codes, and manufacturer codes as applicable.

Miscellaneous Equipment

The Contractor shall furnish and install all necessary miscellaneous connectors and equipment to make a complete and operating installation in accordance with the plans, standard sheets, standard specifications, special provisions, and accepted good practice of the industry.

General Considerations

The cable shall meet all requirements stated within this specification. The cable shall be new, unused, and of current design and manufacture.

Fiber Characteristics

All fibers in the cable must be usable fibers and meet required specifications.

Multi-mode Fiber

Core diameter: 62.5 +3.0um

Cladding diameter: 125.0 +2.0um

Core-to-cladding offset: <3.0um

Coating diameter 250 +15um

Graded Index

Attenuation uniformity: No point discontinuity shall be greater than 0.25 dB, except terminations or patch cords, at either 850nm or 1300nm. The coating shall be a layered UV cured acrylate applied by the fiber manufacturer. The coating shall be mechanically or chemically removable without damaging the fiber.

Factory cable rating shall be 3.5 dB/km at 850 nm and 1.0 dB/km at 1300 nm, or less. Installed tolerance shall be less than 3.85 dB/km at 850 nm and less than 1.1 dB/km at 1300 nm, testing tolerance. Multimode fiber shall be rated for serial gigabit Ethernet distances of 300 meters @ 850 nm and 550 meters @ 100 nm.

Single-Mode Fiber

Typical core diameter: 8.3 um

Cladding diameter: 125 +1.0 um by fiber end measurement

Core-to –cladding offset: <1.0 um

Coating diameter: 250 +15 um

Attenuation uniformity: No point discontinuity shall be greater than 0.1 dB, except terminations or patch cords, at either 1310 um or 1550 nm. The coating shall be a layered UV cured acrylate applied by the fiber manufacturer. The coating shall be mechanically or chemically removable without damaging the fiber.

Factory cable rating shall be 0.35 dB/KM at 1310 nm and 0.25 dB/KM at 1550 nm. Installed tolerance shall be less than 0.44 dB/km at 1310 nm and less than 0.33 dB/KM at 1550 nm, testing tolerance. Single mode fibers shall be rated for serial one gigabit Ethernet distances of 5000 meters @ 1310 nm and serial ten gigabit Ethernet distances of 10,000 meters @ 13xx nm and 40,000 meters @ 1550 nm.

Fiber Specification Parameters

All fibers in the cable shall meet the requirements of this specification. The testing tolerance attenuation specification shall be a maximum attenuation for each fiber over the entire operating temperature range of the cable when installed.

The change in attenuation at extreme operational temperature for single-mode fibers shall not be greater than 0.20 dB/KM at 1550 nm, with 80 percent of the measured values no greater than 0.10 dB/km at 1550 nm.

Optical fibers shall be placed inside a loose buffer tube, minimum six (6) fibers per tube, normally twelve (12) fibers per tube. Actual number of fibers per tube shall be twelve fibers per tube unless specified differently on the plans.

Multimode only – each buffer tube shall contain 12 or 6 fibers.

Single-mode only – each buffer tube shall contain 12 or 6 fibers.

The buffer tubes will meet EIA/TIA-598, “Color coding of fiber optic cables.”

Single-mode fibers shall be placed in the first buffer tubes. Multimode fibers shall be in the remaining tubes. Fiber count, tubes of fiber shall be as specified on the plans.

Fillers shall be included in the cable core to lend symmetry to the cable cross-section where needed.

The central anti-buckling member shall consist of a glass reinforced plastic rod. The purpose of the central member is to prevent buckling of the cable.

The cable shall use a completely dry cable design without the use of gels and filling compounds. Dry water blocking material shall be used around the buffer tubes as well as internal to the tubes. Water blocking gels shall not be acceptable on this project.

Buffer tubes shall be stranded around a central member. Acceptable techniques include the use of the reverse oscillation, or “SZ”, stranding process.

All dielectric cables (with no armoring shall be sheathed with medium density polyethylene. The minimum nominal jacket thickness shall be 1.4 mm. Jacketing material shall be applied directly over the tensile strength members and flooding compound. Cable jacketing shall utilize the newer designs to provide maximum flexibility without loss or appreciable dB attenuation. Cable diameter shall not exceed 0.50 inch.

The jacket or sheath shall be marked with the manufacturer's name, the words "optical cable", the year of manufacture, number of fibers, type of fiber (SM or MM) and sequential feet or meter marks. The markings shall be repeated every one-meter or three feet. The actual length of the cable shall be within – 0/ + 1 % of the length marking. The marking shall be in a contrasting color to the cable jacket. The height of the marking shall be approximately 2.5mm. A copy of the manufacturer fiber definition and shipping sheet identifying all tests, results and fiber indexes shall be provided to the Engineer on delivery of cable to the City or shall be included with a contractor's listing of place(s) of installation when installed by a Contractor.

The maximum pulling tension shall be 600 pounds (2700 N) during installation.

Where ever possible, six (6) buffer tubers with twelve (12) fibers each, or subsets specified, shall be provided and designated as follows:

Buffer Tube / Fiber	Tube / Fiber Color
#1, 1st tube or fiber	blue
#2, 2nd tube or fiber	orange
#3, 3rd tube or fiber	green
#4, 4th tube or fiber	brown
#5, 5th tube or fiber	slate
#6, 6th tube or fiber	white
#7, 7th tube or fiber	red
#8, 8th tube or fiber	black
#9, 9th tube or fiber	yellow
#10, 10th tube or fiber	violet
#11, 11th tube or fiber	rose
#12, 12th tube or fiber	aqua

Quality Assurance Provisions

All optical fibers shall be proof tested by the fiber manufacturer at a minimum load of 100 kpsi.

All optical fibers shall be 100% attenuation tested at the manufacturer. The attenuation of each fiber shall be provided with each cable reel. The measured attenuation shall be for both 850 and 1300 frequency for multimode and 1310 or 1550 frequency for single mode. This documentation shall be provided with each spool. The Contractor shall designate on the Plans and on this documentation the location where each spool has been installed and provide this data to the Engineer.

Cable Installed in Ducts and Conduits

A suitable cable feeder guide shall be used between the cable reel and the face of the duct and conduit to protect the cable and guide it into the duct off the reel. It shall be carefully inspected for jacket defects. If defects are noticed, the pulling operation shall be stopped immediately and the Engineer notified. Precautions shall be taken during installation to prevent the cable from being “kinked” or “crushed”. A pulling eye shall be attached to the cable and used to pull the cable through the duct and conduit system. A pulling swivel shall be sued to eliminate twisting of the cable. As the cable is played off the reel into the cable feeder guide, it shall be sufficiently lubricated with a type of lubricant recommended by the cable manufacturer. Dynamometers or breakaway pulling swing shall be used to ensure that the pulling line tension does not exceed the installation tension value specified by the cable manufacturer. The mechanical stress placed on a cable during installation shall not be such that the cable is twisted or stretched. The pulling of cable shall be hand assisted at each controller cabinet. The cable shall not be crushed kinked or forced around a sharp corner. If a lubricant is used it shall be of water based type and approved by the cable manufacturer. Sufficient slack shall be left at each end of the cable to allow proper cable termination, MINIMUM OF 30 FEET. This slack shall be in addition to installation slack as hereinafter specified. Additional slack cable shall be left in each hub cabinet, handhole, and at the top of each conduit riser. Excess slack at hub cabinets shall be re-pulled into the nearest handhole to provide a neat and orderly installation. The minimum slack amounts shall be as follows:

Hub cabinet – 30 feet
Type 1 Handhole – 20 feet
Type 2 Handhole – 100 feet

Storage of minimum slack cable in controller cabinets and additional slack at pull boxes shall be coiled. The slack soils shall be bound at a minimum of 3 points around the coil parameter and supported in their static storage positions. The binding material and installation shall not bind or kink the cable. Storage of additional slack cable adjacent to conduit risers and support poles shall be as visibly marked/tagged as “CAUTION – FIBER OPTIC CABLE”. Maximum length of cable pulling tensions shall not exceed the cable manufacturer’s recommendations. Along with the fiber optic cable, one (1) #10 AWG THHN 600 volt single conductor cable (identifier conductor), orange in color shall be pulled with ten feet (10’) slack in each pull box, except where rigid metallic conduit or other metallic conductors are installed. All fiber cables shall be marked with a metallic or preapproved identifier in the handhole adjacent to the traffic signal cabinet or hub cabinet and on the cable in the signal cabinet or hub cabinet at the point of termination**.** The identifier, both in the cabinet and in the handhole, shall indicate the direction the cable is going, cable contents [SM or MM], and the abbreviated location for the other end destination. Fiber cabling between traffic controllers and adjacent hub locations shall be outdoor rated, loose tube fiber, when not linked by a direct, continuous conduit installation.

Minimum Bend Radius

For static storage, the cable shall not be bent at any location to less than ten times the diameter of the cable outside diameter or as recommended by the manufacturer. During installation, the cable shall not be bent at any location to less than twenty times the diameter of the cable outside diameter or as recommended by the manufacturer.

Splicing in Handhole

The fiber optic cable shall be continuous between FDP locations and splices to the local controller cabinets shall be completed by the contractor installing fiber optic waterproof enclosures *[torpedo tubes]* in handholes *[junction boxes]* and by the use of splice trays internal to the waterproof enclosure, splicing a feeder cable to the traffic controller cabinet. Only the fiber to be utilized in the traffic controller cabinet shall be spliced in the handhole and brought into the traffic controller cabinet. All other fiber in the primary cable run shall remain uncut in the handhole passing through the enclosure between locations. Exceptions to this standardized wiring procedure shall be specifically identified in the wiring diagram provided on the fiber optic project and/or in the special provisions. All terminations and splices of the main trunk fiber optic cable shall be in FDP cabinets where cabling starts, ends or multiple fiber cables are concentrated.

After Fiber Optic Cable Installation

Each section of the cable shall be tested for continuity and attenuation as a minimum. If the attenuation is found not to be within the acceptable nominal values, the Contractor shall use an optical time domain reflectometer (OTDR) to locate points of localized loss caused by bends or kinks. If this is not successful the Contractor shall replace the damaged section of cable with no additional payment. Splices will not be allowed to repair the damaged section. After all fiber cable is install between traffic controller cabinets and fiber links between fiber distribution points (FDP) complete links, all fiber, whether terminated or non-terminated, shall be tested with a OTDR, All fiber terminated shall be tested with a power meter. The Contractor may jumper termination points at controller cabinets to minimize the number of tests and run a single OTDR test between several controller cabinets, subject to the range of the OTDR. Links between FDP's shall be tested separately. Each OTDR trace, for documented test result submittal, shall be displayed individually and not be combined with other fiber traces as overlays. Multimode fiber shall be tested using 1300 nM and single mode fiber shall be tested at 1310 nM. The results of the OTDR test shall be provided on an electronic media (disk) and paper printout. The OTDR wave, pictorial diagram of dB loss over the length of fiber tested, shall be provided along with the measured data values. The printout shall contain the manufacturer's fiber optic Index of Refraction to the third decimal point for the fiber provided. The Contractor shall provide the Engineer with a written report showing all the values measured compared to the calculated values for length and coupler/connector losses at the completion of these test. Outdoor patch cords between FDP and controller units less than 151 feet do not need be OTDR tested.

Documentation provided to the Engineer shall include a written indication of every splice, termination, patch cord, etc. for cable being measured. Power meter measurement recordings shall indicate the exact measured distance [OTDR if field measurement with cross reference for oscillation multiplier] on the sheet showing the power meter readings. Any deviations between fiber readings in the same tube shall be notated for OTDR graphs as well as deviations greater than 5% on power meter readings. Rated values for acceptable installation shall be based on the following parameters:

Patch cords/Pigtails	.60 MM & .15 SM dB each
Unicam Terminations	1.0 dB set of 2 [In and Out]
Splices	0.08 each

1 KM = 0.3077 KF where KF is 1000 feet

Data documentation shall include for each test between cabinets or between FDP sites, the length of fiber as measured by OTDR, frequency used in test on OTDR by each fiber, distance to each splice, termination or patch cord jumper, dB loss rating by manufacture from spool documentation, index of refraction by type of fiber in section, and the dB loss of each section as measured in the final test for each fiber. A special test shall be made on all continuous spliced fiber from start to end that includes the total dB loss measured and the OTDR plot on electronic disk. Splice points shall be identified on the trace.

The fiber optic cable installed not using a prefabricated connector shall be installed and polished in accordance with the highest industry standards to include the polishing of the glass end to a bright finish without blemish as shown on industry displays of polished fiber ends. Ends having brownish or non-polished sections shall be rejected based on viewing the terminated end under the 400 zoom power microscope viewer. The contractor shall provide a 400 zoom power microscope viewer on site to the Engineer for spot inspections at the time of termination, testing and inspection periods.

Cable Termination

Terminations shall be made using the method recommended by the connector manufacturer. All fibers shall utilize a fan-out kit of the size and type recommended by the manufacture and of the number of gibers provided in each fiber tube. All fibers terminated shall utilize a ceramic ferrule (outdoor connections), ST mechanical termination equal to Siccor UniCam connectors, or be wide temperature (-40 to +170 degrees Fahrenheit) epoxy. Heat cured or epoxy type connections meeting the full temperature ratings are acceptable for this Project, including factory manufactured pigtails. The Contractor shall be required to provide proof of purchase of sufficient quantities of ceramic connector usage or temperature ratings on epoxy or heat cured processes prior to terminating any fibers. The Contractor may terminate fibers by splicing factory pigtails to the fiber ends and then connecting the pigtail to the fiber coupler in the fiber tray. When splicing pigtails to terminate, all splices shall be provided with the metal reinforced shrink tube protector. The contractor may terminate fibers by the use of UniCam mechanical termination connectors. All termination ST couplers shall be rated for dual fiber application, MM and SM.

Breakout Kits

The breakout kits or termination boxes used to terminate each fiber cable in the cabinet shall provide for the separation and protection of the individual fibers with the buffer tubing and jacketing materials. The termination housing shall be installed within a wall or shelf mountable interconnect housing which shall provide for storing fibers, ample room for feed through cable, strain relief for multiple cables with in unit, and accommodate ST compatible connectors. All fiber pigtails shall be terminated through ST connectors on the wall or shelf mounted interconnect panel. All terminations shall be ST type, ceramic core (outdoor connections) and plug into the provided controller unit internal fiber optic modem. Acceptable enclosures for combination termination/splice points shall be MIC-024 or WDC-024 enclosures or pre-approved equal. Splices to pigtail fiber, where used shall utilize fan out kit protection to the fiber heat shrink tubing with metal bar reinforcement and 900 micron rated pigtail insulation. Splices to factory pigtails shall use pigtails that are rated for a minimum temperature range of zero degrees to +150 degrees Fahrenheit. In the absence of pigtails meeting this temperature rating, fibers shall utilize loose tube fiber in fan-out kit tubes and UniCam mechanical ST connectors. These splices, fiber cable to pigtail, may be external to splice trays mounted internally to the enclosure, when shown on the wiring diagrams. All other splices, not specified to be installed external to the fiber splice tray, shall be installed in splice trays and supported with heat shrink tubing. Acceptable splice trays include MIC-024-048 or 067 series or pre-approved equal.

Connectors

Connectors shall be mechanical ST (ceramic ferrule-outdoor connections) compatible, field installable and self-aligning and centering or factory fabricated pigtails. Connectors to the special devices used for Ethernet network connections shall utilize factory converter cable of SC to ST or for terminating fibers, shall be rated for the type of connectors used. Connectors shall be Seicor CamLite, UniCam, or NEMA temperature rated epoxy type, or Engineer approved equal.

Splices

The fiber cable shall be installed in continuous runs between FTP cabinets. No splices shall be allowed, unless shown on the plans in torpedo tubes connecting fiber to and from the traffic controller cabinets or for testing. Mechanical splices, Siecor CamLite or approved equal will only be allowed, when specified, for testing of non-terminated fiber or for immediate temporary repairs. Splices, where specified, shall be by fusion splice and shall be installed using an automatic fusion splice between two fibers leaving the cabinet/torpedo tube shall be supported in splices trays installed in splice enclosures. All splices shall be protected by heat shrink tubing designed for fiber optic splicing applications. Fibers being terminated in two separate termination or splice enclosures shall be supported between enclosures by the use of buffer tubing or approved equal support material or shall be pigtail patch cords and shall only be permitted in FTP or controller cabinets. Termination/splice enclosures shall be separated by less than 12 inches unless a conduit is installed between enclosures. All splices shall be performed by an automated splicer device that verifies the final splice termination quality. All splices shall be nominally .03 to .05 dB loss but shall be less than 0.08 dB loss.

Fiber installation

Fiber cable shall be installed in conduit or suitable enclosure to protect the cable for the environment. Conduits for fiber shall be installed a minimum of 36 inches below grade level to protect fiber Cabling from freezing pressures in winter weather conditions. Conduits entering handholes shall be brought into a handhole at either a 45 degree upsweep or in line parallel to the surface being drilled thru the side of the handhole sidewall material. Cable shall be stored in handholes a hereinbefore specified and shall be coiled using a minimum of three hooks for small handholes and four hooks for handholes greater than30 inches circular, installed at the mid-point of the handhole., top to bottom, with the hooks pointed toward the top and the fiber lying on the extended hooks for physical support. This installation should keep the fiber out of the dirt and debris at the base of the handhole. Each conduit entry shall be sealed to preclude moisture and condensing problems and prevent rodent access to conduit systems.

Light Source

An LED light source with a wavelength that is the system wavelength, 850 and 1300 nm for multimode and 1310 and 1550 nm for single mode, shall be used. The LED shall be stable within 0.1 dB in intensity over a time period sufficiently long enough to perform the measurement. The output of the LED shall overfill the input end of the launch fiber/cable in both numerical apertures (NA) and core diameter. The accuracy of the combined light source and power meter shall be less than .05 dB and be temperature compensated stabilized to 0.01 dB over the operating range of the meter(s).

The Contractor shall provide one each Light Source and Power Meter and /or one each 650 nM visible light source, Model VF13 or approved equal, to the Fiber Optic Coordinator or City Technician complete with all attachments for measuring individual fibers of multimode at both 850 and 1300 nanometers and single mode at both 1310 and 1550 nanometers for spot testing/inspecting of installed and terminated fibers. This test kit shall include one each 200X power zoom scope for observing fiber ends for smoothness and fractures. AC power adapters shall be provided with all light and power meters as well as battery operation. This test kit shall remain the property of the City. This test kit shall be made available for the beginning to completion of the project and be on-site at all times. This test kit shall be considered incidental to the cost of installing the fiber optic cable and no additional compensation shall be provided.

Power Meter

The detector in the power meter shall have an effective numerical aperture and active region that is larger than the receive reference cable and/or the fiber under test. The power meter shall have a minimum range for +3 DBMS to -40 DBMS. The power meter shall have an accuracy of +/-0.5dB through the operating temperature and minimum resolution of 0.1dB.

Launch Reference Attenuator

The launch attenuator, two each for single and multimode fiber testing, shall be utilized for al OTDR tests such that one launch cable shall be at the beginning of the fiber being tested and the second launch cable shall be on the end of the fiber being tested past the final connector. Only one launch cable shall be required when testing non-terminated fiber. The launch attenuator(s) shall be of the same fiber core size and type as the fiber under test. The attenuator shall emulate 300 foot fiber length minimum, for multimode and 900 feet length, minimum, for single mode fiber or as specified by the OTDR manufacturer for stabilization of the pulse generation. Launch cables shall be of identical length for incoming and outgoing light during tests ST connectors shall be utilized with each attenuator to connect the device to the test device, OTDR. One launch cable shall be installed on the end of each terminated to view the dB loss of the final connector.

The OTDR shall have the Threshold Loss set at a value to show each splice or termination junction of a single fiber in each tube without showing the extraneous noise caused by handhole coils or turns into the cabinets. This level is normally a value [Threshold Loss] between 0.3 and 0.8 on the OTDR. This trace shall be provided for one fiber in each tube tested and each “event” shall be marked as to splice, jump or patch cord. The Threshold Loss shall then be set to a value of 0.25 for multimode fiber tests and to a value of 0.10 for single mode fiber tests. The test of each fiber installed shall be conducted and any recorded events above this threshold shall be identified, such as jumper or patch cord. Events that are in excess the provided values shall be corrected prior to documentation submittal, such as terminations in excess of the rated value or bends in the fiber at the point of splice entering or leaving the splice tray (See testing). For measured values recorded in excess of the above (0.25 MM and 0.10 SM) listed values, refer to the paragraph 12.2 specification as hereinbefore defined. The Engineer reserves the right to spot test fiber terminations, splices, or re-testing of all fibers in a section to insure proper quality assurance both during and after installation and testing. Deviations from Engineer testing and report documentation shall be reviewed and the Contractor shall be able to retest any or all challenged measurements to verify a valid test. Inconsistent test results, in the sole opinion of the Engineer, shall be cause for the contractor to retest the entire fiber installation.

Testing

General
The Contractor shall provide all personnel, equipment, instrumentation and supplies necessary to perform all testing. All testing shall be performed in an accepted manner and in accordance with the testing equipment manufacturer’s recommendations. All data shall be recorded and submitted to the Traffic Engineer as hereinbefore specified. The Contractor shall provide one copy of operating software to read and view all OTDR traces.

Attenuation

The end-to-end attenuation shall be measured for each fiber for each link after installation and termination**.** A patch cord jumper cable shall be connected to both the light source and the receive cable to the power meter by the use of a connector (barrel). The two reference cables shall then be connected via a termination coupler and the power meter "Zeroed" to eliminate the line loss. This process results in a reading of the actual line loss (dB) of the input connector, fiber cable, existing connector and any other splices or jumpers installed in the measured test link. The Calculated "loss" shall not include the input or departing cables in the loss calculation. The calculated fiber loss measured shall list the number of terminations, including the input and departing connectors, the number of splices and number of patch cords used to jumper the link(s) into the measured final link. The measured values for each terminated fiber in each tube shall include the Tube number, Fiber number, the number feet in the link, the number of splices, the number of patch cords and the number of connectors, if any. The length of optical cable shall be as measured by the OTDR rather than the fiber cable jacket as the fiber is reverse oscillation process resulting in a greater optical distance than the fiber cable jacket.

The value for both the OTDR length and the cable jacket shall be provided in the recorded documentation for each link distance. All distances shall be recorded in feet rather than meters for both recorded length.

Fibers that are not continuous from, beginning of the link to the end of the link shall be noted in the documentation; otherwise, all fibers in a single tube may be listed with a single data entry for all required data listed above for all fibers in the tube. The fiber documentation for each fiber shall identify the fiber being tested by either fiber number or fiber coating color and be recorded by complete tube, Tube 1 through Tube 6, fiber 1 through fiber 12. The direction of the test shall be recorded for information purposes only to resolve discrepancies in replicating the test during inspections of the final installation. The power meter reading recordings shall log total dB loss over the length of the fiber measured equivalent to a dB loss budget.

Each tube of a cable shall be in the same file divider where the tube cover OTDR page shows the overview of all splice, patch cords, and terminations from start to end. The second section shall include all Power Meter readings and the mandated documentation to show the calculated line loss (losses). The third section shall contain all OTDR traces, one trace per screen. The fourth section shall include the spool sheet for the fiber installed on the test section. An "explanation" sheet may be included where required to clarify an unusual reading that is called but difficult to be explained through traditional data presentation, such as a video feed fiber that is attached to a jumper to provide continuous feed from the start to the end of the tube length where other fibers in the same tube are simply spliced. The above format shall be repeated for each tube of a cable. Traffic multimode fiber measured in sections marked by traffic controller cabinets between Hub Sites may be sub-sectioned in an easy to understand format or may be jumped using patch cords as a single OTDR Link with each section separated for power meter readings.

Continuity

Continuity tests shall be used to determine whether a test or system jumper does or does not pass light. A continuity test shall also be used to assure the fibers have not been crossed over in the jumper and that the transmit fiber goes to the receiver fiber. The visible light tester shall be utilized to illuminate faulty terminations or fibers with excessive bends failing to pass light.

To perform continuity test, a high-intensity red light (Visible Fault Identifier) light source shall be aimed into the connector at one end, while an observer watches for a flicker of light at the other end. One each 650 nm red NFL light source shall be furnished to the Engineer by the Contractor on request during the testing of the fiber by the Contractor for spot testing. This device shall be made available during testing of continuity to the Engineer to assist in verifying faulty locations and connector bleeding.

OTDR Testing

An Optical Time Domain Reflectometer (ODTR) shall be used to evaluate the quality and length of cable reels prior to their use on the project. A minimum of one fiber per tube per reel shall be tested if payment for stored goods is requested. The fiber loss in dB/km and the length of each reel shall be recorded in the documentation. The maximum attenuation of the cable shall be as hereinbefore specified. This test does not require an electronic document; but is provide to insure that the fiber has been received in useable quality without shipment damage. The test results of the Contractor OTDR test of received spools shall be provided to the Engineer, in a minimum of hard copy print, prior to receiving payment for stored good.

An Optical Time Domain Reflectometer (OTDR) shall be used to evaluate the quality and length of cable installed on the project. This test shall be conducted on all fibers, terminated and non-terminated, and shall be conducted after all terminations on the fibers for a link have been completed. The fiber loss in dB/km and the length of each reel shall be recorded in the documentation. The index of refraction, minimum of three decimal points, provided by the manufacturer on the spool documentation shall be used for the test on the OTDR. The maximum attenuation shall be as hereinbefore specified. A hard copy of OTDR signature traces, electronically and in printed form, for all fiber links shall be made and provided in the documentation as specified. The data provided shall be in easy to understand format and of sufficient detail to verify the results. Fiber testing shall include only one fiber trace per graph. One copy of the operating system software to view the fiber graphs shall be provided with the final documentation.

Documentation

The result of all testing shall be recorded along with the date of test, name of person performing test, brand name, model number, serial number of equipment used during test, and any other pertinent information and data. The Contractor shall be responsible to provide input to the Engineer reviewing the recorded data documentation to resolve all questions or data discrepancies. A copy of the evaluation calculation equations to be used may be obtained by the Contractor by request and by supplying a floppy disk. (The evaluation FO Calculator is an EXCEL program worksheet that calculates design dB Loss based on required inputs) Documentation shall be considered incidental to bid items and no additional compensation shall be provided.

Basis of Payment
This work will be paid for at the contract unit price per Foot for FIBER OPTIC CABLE 48 FIBERS, SINGLE MODE and shall be payment in full for all labor equipment and materials required to provide, install, terminate, splice and test the fiber optic cable described above, complete.

FIRE HYDRANT COMPLETE

Fire hydrants shall be furnished and installed in accordance with the City of Rockford Water Division requirements and associated standards.

Valves and valve boxes shall be furnished and installed in accordance with the City of Rockford Water Division specifications and the requirements of the Engineer. Grade, type and style of valves and fittings required to complete installation shall be in conformance with the City of Rockford Water Division Specifications, Section 12, latest revision.

All fire hydrants, public and private, shall have a Harrington Integral Hydrant Storz nozzle (5”) installed on hydrants during assembly and shall meet or exceed the requirements of AWWA C502 regarding material and pressure testing. The Storz nozzle shall have a brass metal face seal and hard anodized aluminum Storz ramps and lugs. The aluminum’s finish shall be hardcoat anodized to Mil-A-8625f, Type 3, dark gray. The adapter shall be made of forged or extruded 6061-T6 aluminum. The blind cap shall have hard anodized aluminum Storz ramps and lugs, made of forged or extruded 6061-T6 aluminum. The center cap shall be equipped with a suction seal. The cap shall be connected to the adapter of the hydrant with a 0.15” vinyl coated aircraft cable.

All pipe and fittings from the main to the valve and hydrant, along with associated trench backfill, shall be included in this pay item.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for FIRE HYDRANT COMPLETE which price shall include any labor, materials, and trench backfill necessary for a complete installation.

FIRE HYDRANTS (SPECIAL)

This work shall be constructed according to all requirements of the special provision for FIRE HYDRANT COMPLETE. In addition to said requirements, this work shall also include making a new connection to an existing water main under pressure. A mechanical joint tapping sleeve and a tapping gate valve shall be installed in a water valve box. Cost of all labor, equipment, and material to locate existing water main, excavate, furnish and install tapping sleeve, valve and valve box with casting shall be included in this work item.

The cost of the trench backfill, where applicable, shall be included in the contract unit price bid for this item.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for FIRE HYDRANTS (SPECIAL) which price shall include any labor, materials, and trench backfill necessary for a complete installation

FIRE HYDRANTS TO BE REMOVED

This work shall conform to the Standard Specifications for Water and Sewer Main Construction, latest edition, and the requirements of the Engineer. Where shown on the plans, the existing fire hydrant assembly and the associated valve, valve box or vault, and hydrant line shall be excavated and removed. The hydrant tee connection at the main shall be capped with a mechanical cap.

This item shall include removal and proper disposal of all material, and any required shut down of the main to allow for abandoning the hydrant line at the main. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for FIRE HYDRANTS TO BE REMOVED which price shall include any labor, materials, and trench backfill necessary for a complete installation

FOUNDATION REMOVAL

This work shall be done according to section 737 and 842 of the Standard Specifications for Road and Bridge Construction and as specified herein. This work shall include removing and disposing of either concrete sign foundations, metal/wooden post foundations, or others as described below. The following are the locations and description of the items to be removed:

- 40' LT STA 549+93. Concrete pole foundation approximately 14" in diameter flush with existing ground.
- 31' RT STA 569+65. Concrete pole foundation 24" in diameter, 24" in height.
- 27' RT STA 568+90. Concrete pole foundation 24" in diameter, 24" in height.
- 50' LT STA 568+72. Concrete pole foundation 24" in diameter, 24" in height.
- 52' LT STA 569+02. Concrete sign foundation 36"x36", 12" in height.
- 43' LT STA 569+95. Concrete pole foundation 24" in diameter, 24" in height.
- 47' RT STA 577+87. Metal pole approximately 12" in diameter, 19" in height.
- 52' LT STA 585+21. Brick pillar 26"x26", 6' in height.
- 52' LT STA 585+64. Brick pillar 26"x26", 6' in height.
- 43' LT STA 586+05. Concrete sign foundation 36"x36" flush with existing ground.
- 40' LT STA 589+32. Concrete sign foundation 24"x24", 18" in height.
- 45' LT STA 590+07. Concrete sign foundation 36"x36", 6" in height.
- 45' LT STA 591+19. Concrete sign foundation 18"x18", 5" in height.
- 39' LT STA 591+25. Concrete sign foundation 26"x26", 5" in height.
- 45' RT STA 591+25. Concrete pole foundation 24" diameter, 18" in height.
- 46' RT STA 591+96. Concrete foundation 24" diameter flush with existing ground.
- 54' RT STA 594+97. Concrete sign foundation 24" diameters, 36" in height.
- 43' RT STA 595+83. Concrete light pole foundation 24" diameters, 36" in height.
- 36'RT STA 597+84. Brick Pillar 25"x25" on concrete base, 30" in height.
- 36' RT STA 597+96. Brick Pillar 25"x25" on concrete base, 30" in height.
- 36' RT STA 598+12. Brick Pillar 25"x25" on concrete base, 30" in height.
- 36' RT STA 598+30. Brick Pillar 25"x25" on concrete base, 30" in height.
- 43' RT STA 601+59. Concrete sign foundation 2' 10"x10' 5", 14" in height.
- 34' RT STA 604+32. Concrete sign foundation 8'x12' flush with existing ground.
- 44' LT STA 604+30. Concrete sign foundation 4'x9' flush with the ground.
- 41' LT STA 605+27. Concrete light pole foundation 22"x22", 6" in height.
- 39' RT STA 605+42. This is a sign that has 2- 12" diameter metal posts, 6-4" metal posts, with two metal channels welded to the 6 posts forming a parameter around the sign.
- 42' RT STA 606+33. Concrete light pole foundation 24" diameter, 24" in height.
- 41' RT STA 607+18. Concrete light pole foundation 24" diameter, 24" in height.
- 41' LT STA 607+31. Sign with two metal posts bolted to metal plates at the bottom of the posts.
- 49' RT STA 607+33. Concrete sign foundation 3'x6' flush with existing ground.
- 40' RT STA 608+18. Concrete sign foundation 1'x3', flush with existing ground.

- 33' LT STA 608+87. Concrete light pole foundation 18" diameter, 24" in height.
- 37' RT STA 608+60. Concrete light pole foundation 24" diameter, 24" in height.
- 40' RT STA 609+04. Concrete light pole foundation 24" diameter, 24" in height.
- 38' RT STA 611+00. Sign with two metal posts and bolted to concrete foundation 15"x24".
- 41' LT STA 611+17. Concrete sign foundation 18"x18", flush with existing ground.
- 37' LT STA 612+23. Concrete sign foundation 2-12" in diameter flush with existing ground.
- 38' RT STA 616+49. Concrete sign foundation 21" in diameter, 27" in height.
- 58' LT STA 618+18. Concrete flag pole foundation 14" in diameter, flush with existing ground.
- 47' RT STA 619+04. Concrete sign foundation 12" in diameter, 2" in height.
- 49' RT STA 619+02. Concrete light pole foundation 18" diameter, 24" in height.
- 50' RT STA 620+28. Concrete sign foundation 2'x2', 2" in height.
- 71' RT STA 620+52. Concrete light pole foundation 18" diameter, 30" in height.
- 63' RT STA 621+32. Concrete light pole foundation 2'x2', 14" in height.
- 61' RT STA 623+38. Concrete light pole foundation 2'x2', 42" in height.
- 37' LT STA 715+98 (Riverside Blvd.). Concrete light pole foundation 24" diameter, 32" in height.
- 66' LT STA 716+75 (Riverside Blvd.). Concrete light pole foundation 24" diameter, 32" in height.
- 40' LT STA 717+21 (Riverside Blvd.). Two sign foundation at 30" diameter each flush with existing ground.
- 56'LT STA 722+71 (Riverside Blvd.). Three sign foundation at 15" diameter each flush with existing ground.
- 63'LT STA 724+72 (Riverside Blvd.). Concrete light pole foundation 18" diameter, 24" in height.

FULL ACTUATED CONTROLLER AND TYPE IV CABINET

This item shall consist of furnishing, installing and placing into operation a multi-phase microprocessor based controller at the locations indicated on the plans, or as directed by the Engineer. The controller shall comply with the requirements of Section 857, 1073.01 and 1074.03 of the current "Standard Specifications for Road and Bridge Construction" and the following additions and exceptions.

The controller shall meet the requirements of the NEMA TS2 standards for a Type 2 controller. Data entry shall be by keyboard or personal computer. The intersection of Illinois 2 (N. Main) with Riverside Boulevard shall house the Master Controller.

The Controller and Master Controller must be compatible with the City of Rockford's existing Eagle System.

The cabinet shall have an aluminum finish. If rivets are exposed on the outside of the cabinet, they shall be either stainless steel or aluminum to prevent oxidation.

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

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

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

Cabinet Lighting:

The traffic signal cabinet shall be equipped with a cabinet-door-switchable LED service light fixture.

The traffic signal cabinet shall be equipped with a conventional light bulb socket receptacle on a manual on/off switch.

A separate 20-amp breaker shall be provided for a street light circuit.

Transfer Switch:

The traffic signal cabinet shall be equipped with a transfer switch on the outside of the cabinet, no less than 24” above ground level, for the use of an emergency generator to power the signals in case of a signal blackout. The transfer switch shall be in accordance with the 2002 National Electric Code Article 702.6 to prevent feeding back to the utility source.

The transfer switch shall be rated for 20 amps at 125 volt with a jumper cord for transitioned from the twist-lock plug in the transfer switch to the standard 120 volt plug for the generator.

A circuit breaker-based switch shall be required to have overload protection in accordance with the National Electric Code/NFPA70.

The housing shall be no less than a heavy duty 12 gauge rust and corrosion-resistant material.

The housing surface shall be smooth, free of marks and scratches and provide an unpainted aluminum finish.

The housing shall be rain tight with the outlet connect underneath the box to maintain the rain tight rating.

The Switch shall be equipped with a sliding interlock to prevent the generator and the utility from feeding at the same time,

The Switch shall be tamper resistant with a #2 key lock system.

The Transfer Switch shall come with a 2 year warranty.

All materials parts and labor for the installation of the Transfer Switch shall be included in the cost of the Full Actuated Controller and Type IV Cabinet paycode at no additional cost.

Each Cabinet shall include a transfer switch which shall be include in the cost of the cabinet.

Fiber Optic Compatible:

Each Controller shall be Fiber Optic Compatible.

The contractor shall have a factory-trained technician from the manufacturer and/or supplier, with expertise in the controllers being installed, present during the controller installation. He will be expected to be able to program the controller timer, trouble-shoot and correct any problems with the equipment that arises and verify that the equipment is functioning according to the plans and specifications.

All main panel wiring shall conform to the following wire size and color:

Green load switch output	brown wire, 14 gauge
Yellow load switch output	yellow wire, 14 gauge
Red load switch output	red wire, 14 gauge
MMU (other than AC Power)	violet wire, 22 gauge
Controller I/O	blue wire, 22 gauge
AC Line – power panel to main panel (1 for each 4 LS)	Black wire, 10 gauge
AC Line – main panel	black wire, 14 gauge
AC Neutral – power panel to main panel	White wire, 10 gauge
Earth ground – power panel	green wire, 8 gauge
Flashing programming	
Flashing terminal	orange wire, 14 gauge
Red or yellow field terminal	black wire, 14 gauge

The traffic signal controller and cabinet assembly shall be fully tested by the equipment supplier. The supplier of the controller assembly shall provide a Certificate of Acceptance verifying that the conflict monitor has been tested, under load, for all possible combinations and functions properly.

Basis of Payment: This item shall be paid for at the contract unit price EACH for FULL ACTUATED CONTROLLER AND TYPE IV CABINET, which price shall be payment in full for furnishing the equipment described above and installing it in satisfactory operating condition.

GEOTECHNICAL REINFORCEMENT

Effective: November 30, 2010 Revised: April 10, 2014

Biaxial Geogrid Flat Installation

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/yd2	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 to the satisfaction of the Engineer.

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 his expense, 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.

HANDHOLE, COMPOSITE CONCRETE

Description: This work shall consist of furnishing all equipment, material and labor necessary to properly install the proposed composite concrete handholes at locations as indicated on the plans.

Materials: The materials shall be in accordance with Article 814.02(c) of the "Standard Specifications", plan details, and the following:

The handhole box and cover as shown on the plans shall be PG series manufactured by Quazite or approved equal. The cover shall contain cast-in-place legend "COMMUNICATION" or "STREET LIGHTING" when used for future fiber optic or roadway lighting, respectively.

Type 1 Handhole shall be 24" x 36" x 36" as detailed on the plans.
Type 2 Handhole shall be 30" x 48" x 36" as detailed on the plans.

General: The work shall be completed in accordance with Section 814 of the "Standard Specifications", plan details, and as modified herein.

Basis of Payment: This work will be paid for at the contract unit price per each for HANDHOLE, COMPOSITE CONCRETE.

HOT MIX ASPHALT MIXTURE IL 9.5 FG (BMPR)

Effective: July 1, 2005 Revised: December 28, 2010

Description. This work shall consist of constructing fine graded hot-mix asphalt (HMA) surface course or leveling binder with an IL-9.5FG mixture. Work shall be according to Sections 406, 407 and 1030 of the Standard Specifications, except as modified herein.

Materials. Revise Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, or FA 21. For mixture IL-9.5FG, the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof."

Mixture Design. Add the following to the table in Article 1030.04(a)(1):

"High ESAL, MIXTURE COMPOSITION (% PASSING) [1/]		
Sieve Size	IL-9.5FG	
	min	max
1 1/2 in (37.5 mm)		
1 in. (25 mm)		
3/4 in. (19 mm)		
1/2 in. (12.5 mm)		100
3/8 in. (9.5 mm)	90	100
#4 (4.75 mm)	60[4/]	75[4/]
#8 (2.36 mm)	45[4/]	60[4/]
#16 (1.18 mm)	25	40
#30 (600 μm)	15	30
#50 (300 μm)	8	15
#100 (150 μm)	6	10
#200 (75 μm)	4	6.5
Ratio Dust/Asphalt Binder		1.0

4/ When used as level binder placed less than 1 in. (25 mm) thick, the min and max percent passing shall each be increased 5%.

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

"VOLUMETRIC REQUIREMENTS High ESAL					
	Voids in the Mineral Aggregate (VMA), % minimum				Voids Filled with Asphalt Binder (VFA), %
N_{design}	IL-25.0	IL-19.0	IL-12.5	IL-9.5	
50	12.0	13.0	14.0	15 [1/]	65 - 78
70					65 - 75 [2/]
90					
105					

1/ The VMA for IL-9.5FG shall be a minimum of 15.0 percent.
2/ The VFA range for IL-9.5FG shall be 65 - 78 percent."

Quality Control/Quality Assurance (QC/QA). Revise the second table in Article 1030.05(d)(4) to read:

DENSITY CONTROL LIMITS			
Mixture Composition		Parameter	Individual Test[3/]
IL-9.5FG	Lifts < 1.25 in. (32 mm)	N_{design} 50 - 105	91.0 – 97.0% [2/]
	Lifts ≥ 1.25 in. (32 mm)	N_{design} 50 - 105	93.0 – 97.0%
IL-9.5, IL-12.5		N_{design} ≥ 90	92.0 – 96.0 %
IL-9.5, IL-9.5L, IL-12.5		N_{design} < 90	92.5 – 97.4 %
IL-19.0, IL-25.0		N_{design} ≥ 90	93.0 – 96.0 %
IL-19.0, IL-19.0L, IL-25.0		N_{design} < 90	93.0 – 97.4 %
All Other		N_{design} = 30	93.0 [1/] - 97.4 %

1/ 92.0 % when placed as first lift on an unimproved subgrade.

2/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.

3/ Bulk Specific Gravity and Density that are determined using coated samples must be in accordance with ASTM 1188-96.

CONSTRUCTION REQUIREMENTS

Leveling Binder. Revise the table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder	
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition
≤ 1 1/4 (32)	IL-9.5, IL-9.5 FG, or IL-9.5L
> 1 1/4 to 2 (32 to 50)	IL-9.5, IL-9.5FG, IL-9.5L, or IL-12.5

The density requirements of Article 1030.05(d)(4) shall apply for leveling binder, machine method, when the nominal, compacted thickness is: 3/4 in. (19 mm) or greater for IL-9.5FG mixtures, 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures, and 1 1/2 in. (38 mm) or greater for IL-12.5 mixtures."

Compaction. Revise Table 1 in Article 406.07(a) of the Standard Specifications to read:

"TABLE 1 - MINIMUM ROLLER REQUIREMENTS FOR HMA				
	Breakdown Roller (one of the following)	Intermediate Roller	Final Roller (one or more of the following)	Density Requirement
Level Binder: (When the density requirements of Article 406.05(c) do not apply.)	P 3/	- -	VS, P 3/, TB, TF, 3W	To the satisfaction of the Engineer.
Level Binder: (When placed at ≤ 1 ¼ (32 mm) and density requirements apply.)	TB, 3W	P 3/	VS, TB, TF	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
Binder and Surface 1/ (When the density requirements of Article 406.05(c) apply.)	VD, P 3/, TB, 3W	P 3/	VS, TB, TF	As specified in Articles: 1030.05(d)(3), (d)(4), and (d)(7).
Bridge Decks 2/	TB	- -	TF	As specified in Articles: 582.05 and 582.06.

1/ If the average delivery at the job site is 85 ton/hr (75 metric ton/hr) or less, any roller combination may be used provided it includes a steel wheeled roller and the required density and smoothness is obtained.

2/ One TB may be used for both breakdown and final rolling on bridge decks 300 ft (90 m) or less in length, except when the air temperature is less than 60 ºF (15 ºC).

3/ A vibratory roller (VD) may be used in lieu of the pneumatic-tired roller on mixtures containing polymer modified asphalt binder.

Basis of Payment. Add the following two paragraphs after the third paragraph of Article 406.14 of the Standard Specifications:

" Mixture IL-9.5FG will be paid for at the contract unit price per ton (metric ton) for LEVELING BINDER (HAND METHOD), IL-9.5FG, of the Ndesign specified; LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the Ndesign specified; or HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the Ndesign specified.

Mixture IL-9.5FG in which polymer modified asphalt binders are required will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED LEVELING BINDER (HAND METHOD), IL-9.5FG, of the Ndesign specified; POLYMERIZED LEVELING BINDER (MACHINE METHOD), IL-9.5FG, of the Ndesign specified; or POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5FG, of the Ndesign specified."

HOT-MIX ASPHALT PATCHING AND HOT-MIX ASPHALT BINDER AND SURFACE COURSE
Effective: August 18, 1993

Article 406.07 - Compaction. This is to modify the first paragraph of the subject Article. Immediately after the Binder or Surface Course Mixtures are placed, each shall be given an initial or breakdown rolling with a three wheeled or tandem roller. After the initial rolling, the Binder or Surface course shall be given an intermediate rolling with a pneumatic-tired roller. The final or finish rolling shall be done with a tandem roller or vibratory roller in the static mode only. If density cannot be obtained with one three wheeled or tandem roller additional static rollers shall be added until density can be achieved.

HOT MIX ASPHALT – QUANTITY CORRECTION (BMPR)
Effective: October 1, 2014

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

"HMA and Stone Matrix Asphalt (SMA) mixture in excess of 103 percent of the quantity shown on the plans or the plan quantity as specified by the Engineer will not be measured for payment. The "adjusted quantity to be placed" and the "adjusted pay quantity" for HMA and SMA mixtures will be calculated as follows.

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

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

and where: G_{mb} = average bulk specific gravity from approved mix design
U = unit weight of surface course shown on the plans in lb/sq yd/in. (kg/sq m/25 mm), used to estimate plan quantity
46.8 = English constant
24.99 = metric constant

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

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

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

HOT-MIX ASPHALT SURFACE REMOVAL (VARIABLE DEPTH)

This work shall consist of removing by rotomilling, with a machine and automatic grade control, according to article 440.03 of the Standard Specifications, the necessary existing hot-mix asphalt material from the existing surface at locations indicated on the plans. Additionally, it is expected that some of the milling to be on concrete base 2" to 3" in depth and approximately 50' long the entire IL 2 roadway width between STA 591+10 to 592+00.
This work will be paid for at the contract unit price per SQUARE YARD for HOT-MIX ASPHALT SURFACE REMOVAL (VARIABLE DEPTH).

IRRIGATION SLEEVES

This work shall consist of furnishing and installing 4-inch diameter PVC conduit sleeves below proposed grade for the installation of a water service line intended to provide water to the median irrigation systems. The PVC conduit sleeves shall be placed 3 feet below proposed grade. The conduit shall be extended three feet beyond the proposed back of curb. The conduit material shall conform to AWWA C900 and shall have a thickness as indicated by PC 100. Where possible, the conduit shall be placed without joints. If joints are required to achieve the length of conduit required, the joints shall conform to the following requirements: 1) The gaskets shall be flexible seals that conform to ASTM F477. The spigot pipe ends shall be beveled with no burrs. Joints shall meet or exceed ASTM D3139 for pressure and vacuum situations. However, no test of the joint is required. Installation of the irrigation service line through the sleeve will not require the use of skid material. However, the irrigation service line will be pulled through the conduit instead of pushed through the conduit. Therefore, each sleeve shall be placed with twine capable of pulling 25 pounds with a maximum tensile strength of 200 pounds. The ends of the conduit shall be sealed with duct tape prior to burial. After installation of the irrigation service line the conduit ends shall be sealed with hydrophobic polyurethane grout rated NSF 61 potable water approved. The hydrophobic polyurethane grout shall not be placed in quantities that can cause extensive physical damage to the conduits.

Method of Measurement: Measurement for this work will be made per foot in place.

Basis of Payment: This item shall be paid for at the contract unit price per foot for IRRIGATION SLEEVES which shall be payment in full for all labor, materials, samples and equipment necessary to install as indicated on the drawings.

IRRIGATION SYSTEM SPECIAL

This work shall consist of furnishing and installing all items necessary for the completion of an Automatic Irrigation System located in the landscaped medians. Work shall include, but is not limited to, providing and installing the following:

1. Plumbing Equipment: Including meter, master valve, backflow prevention device, ball valves, drain valves, reducer, unions, piping, and related miscellaneous items required to complete the intended work in place.

2. Utility Enclosure: Insulated above grade aluminum utility enclosure installed per manufacturer's instructions (Model SBBC-45AL by Strong Box, VIT Enclosures or equal) including padlock and three keys.

3. Concrete Pad: 53"x 24", 4" thick concrete pad including 4" depth compacted aggregate base course (CA-6) for utility enclosure.

4. Irrigation Equipment: Including mainline, lateral lines, PVC sleeves, pop-up spray heads, solenoid valves, wiring, valve boxes, controller, and related miscellaneous items required to complete the intended work in place.

5. Electrical Connection: Including the conduit and wire. The electric service and connection to the electrical service shall be included in this work.

The Contractor shall submit to the owner or owner's representatives all specifications for copper piping, P.V.C., lateral piping, pipe fittings, saddle tees, risers, control valves, control cables, sprinkler heads, control equipment, meter, quick coupling valves, isolation valves, valve box, sleeves, thrust block and swing joints.

Basis of Payment: This item shall be paid for at the contract unit price, lump sum for IRRIGATION SYSTEM SPECIAL which shall be payment in full for all labor, materials, samples and equipment necessary to install the irrigation system as indicated on the drawings.

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.

LIGHT POLE, ALUMINUM, 40 FT. M.H.

Description: This work shall consist of furnishing all equipment, material and labor necessary to properly install the proposed light poles with mast arms as specified at the locations as indicated on the plans. All extra light poles shall become maintenance stock and shall be delivered to the satisfaction of the Engineer and the City of Rockford.

The work shall be completed in accordance with Section 830 of the "Standard Specifications", plan details, and as modified herein.

Materials: The materials shall be in accordance with Article 830.02 of the "Standard Specifications", plan details, and the following:

Light poles shall be 40 feet mounting height with 6-foot, 8-foot, 10-foot or 12-foot mast arm.

Light poles shall be as manufactured by Valmont, or approved equal, to match with existing light poles in the City of Rockford.

The aluminum pole, pole base, FHWA approved aluminum clamshell breakaway base (shroud), bracket arms and attachments shall be painted black using a powder coat process or Engineer approved equivalent. They shall be cleaned prior to the powder coat process by the immersion process using both an alkaline and acid bath. The black finish shall be a thermosetting powder coat. The powder resin shall be type TGIC super durable polyester or an Engineer approved equivalent. The aluminum shall be preheated to a sufficient temperature, prior to the coating process, to insure all water vapor is removed in order to fuse the powder to the metal. The pole and appurtenances shall be over cured, after spraying, for a cycle of 5 to 15 minutes at a temperature of 375 to 400 degrees Fahrenheit. The finished coat shall have a dry coat minimum of 3 mil.

A thorough visual inspection shall be made of the painted finish of the installed pole and a field touchup or recoat shall be performed by the Contractor at no additional cost.

Basis of Payment: The work will be paid for at the contract unit price per Each for LIGHT POLE, ALUMINUM, 40 FT. M.H., of the arm length specified. The unit price shall include the cost of all materials, equipment and labor required to furnish and install the light poles with clamshell base and mast arms of the length specified including the Valmont, or approved equal, smooth powder finish.

LUMINAIRE, METAL HALIDE HORIZONTAL MOUNT 400 WATT

Description: This work shall consist of furnishing all equipment, material and labor necessary to properly install the proposed luminaires at locations as indicated on the plans.

Materials: The materials shall be in accordance with Article 821.02 of the “Standard Specifications”, plan details, and the following:

Luminaires shall be 400 Watt, Pulse Start, Metal Halide. Luminaires on aluminum light poles with mast arms shall be catalog number DMS55-400PSMH-SG3-480-SMB-HE-BKTX as manufactured by Lumec, or an approved equal, to match with existing luminaires in the City of Rockford.

General: The work shall be completed in accordance with Article 821.02 of the “Standard Specifications”, plan details, and as modified herein.
Basis of Payment: The work will be paid for at the contract unit price per each for LUMINAIRE, METAL HALIDE HORIZONTAL MOUNT 400 WATT. The unit price shall include the cost of all materials, equipment and labor required to furnish and install the luminaires.

In addition to the requirements of the Standard Specifications, luminaires shall meet the following criteria listed in this table:

IDOT LUMINAIRE PERFORMANCE TABLE

Rockford North Main St. Lighting Improvements

GIVEN CONDITIONS		
ROADWAY DATA	Pavement Width	44 Feet
	Number of Lanes	4
	I.E.S. Surface Classification	R3
	Q-Zero Value	.07
	Median Width	24 Feet
LIGHT POLE DATA	Mounting Height	40.00 Feet
	Mast Arm Length	6 Feet
	Pole Set-Back From Edge of Pavement	3 Feet
LUMINAIRE DATA	Lamp Type	PSMH
	Lamp Lumens	40,000
	I.E.S. Vertical Distribution	Medium
	I.E.S. Control of Distribution	Cutoff
	I.E.S. Lateral Distribution	Type III
	Total Light Loss Factor	0.53
LAYOUT DATA	Spacing	220 Feet
	Configuration	2 Sided Staggered
	Luminaire Overhang Over Edge of Pavement	3 Feet

NOTE: Variations from the above specified I.E.S. distribution pattern may be requested and acceptance of variations will be subject to review by the Engineer based on how well the performance requirements are met.

PERFORMANCE REQUIREMENTS

NOTE: These performance requirements shall be the minimum acceptable standards of photometric performance for the luminaire, based on the given conditions listed above.

ILLUMINATION	Average Horizontal Illumination, E_{AVE}	0.9 Footcandle
	Uniformity Ratio, E_{AVE}/E_{MIN}	3.0 to 1
LUMINANCE	Average Luminance, L_{AVE}	0.6 Cd/m²
	Uniformity Ratio, L_{AVE}/L_{MIN}	3.5 to 1
	Uniformity Ratio, L_{MAX}/L_{MIN}	6.0 to 1
	Max. Veiling Luminance Ratio, L_V/L_{AVE}	0.3 to 1

LUMINAIRE, METAL HALIDE HORIZONTAL MOUNT 400 WATT, SPECIAL

This modification as stated below is to be used for traffic signal work.

Description: This work shall consist of furnishing all equipment, material and labor necessary to properly install the proposed luminaires on the combination mast arms at locations as indicated on the plans.

Materials: The materials shall be in accordance with Article 821.02 of the "Standard Specifications", plan details, and the following:

Luminaires on combination mast arms shall be catalog number DMS55-400PSMH-SG3-120-SMB-PH8-BKTX as manufactured by Lumec, or an approved equal, to match with existing luminaires in the City of Rockford.

General: The work shall be completed in accordance with Section 821 of the "Standard Specifications", plan details, and as modified herein.

Basis of Payment: The work will be paid for at the contract unit price per each for LUMINAIRE, METAL HALIDE HORIZONTAL MOUNT 400 WATT, SPECIAL. The unit price shall include the cost of all materials, equipment and labor required to furnish and install the luminaires.

MAINTENANCE OF ROADWAYS
Effective: June 26, 2003

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

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

MEDIAN INLETS, SPECIAL

This work shall be completed in general accordance with Section 601, except work shall include the installation of in-line drainage structures, tees, and risers at locations specified on the plans to capture the grass median surface drainage and drain storm water into a drain pipe and the storm sewer system for the roadway project.

Add the following to Section 601 of the Standard Specifications:

1. The work shall include the installation of in-line drainage inlet structures, tees, and risers to achieve positive drainage of water in the roadway medians.

2. PVC surface drainage inlets shall be Nyoplast (a division of Advanced Drainage Systems, Inc.) 10” in-line drains, 2710AG or an approved equal with 10” to 6” reducers. The ductile iron grates for each of these fittings are to be considered an integral part of the surface drainage inlet and shall be furnished by the same manufacturer.

3. The in-line drains shall be manufactured from PVC pipe stock, utilizing a thermo-molding process to reform the pipe stock to the furnished configuration. The drainage pipe connection stubs shall be manufactured from PVC pipe stock and formed to provide a watertight connection with the specified pipe system. The joint tightness shall conform to ASTM D3212 for joints for drain and sewer plastic pipe using flexible elastomeric seals. The flexible elastomeric seals shall conform to ASTM F477. The pipe bell spigot shall be joined to the in-line drain body by use of a swage mechanical joint. The raw material used to manufacture the pipe stock that is used to manufacture the in-line drain body and pipe stubs of the surface drainage inlets shall conform to ASTM D1784 cell class 12454.

   The grates furnished for all surface drainage inlets shall be 10” ductile iron grates part #1099CES as manufactured by Nyoplast (a division of Advanced Drainage Systems, Inc.) or an approved equal, and shall be made specifically for each fitting so as to provide a round bottom flange that closely matches the diameter of the surface drainage inlet. Grates for in-line drains shall be capable of supporting H-10 loading for pedestrian areas. Metal used in the manufacture of the casting shall conform to ASTM A536 grade 70-50-05 for ductile iron. Grates shall be provided painted black.

4. The specified PVC surface drainage inlets shall be installed using conventional flexible pipe backfill materials and procedures. The backfill material shall be crushed stone or other granular material meeting the requirements of Class 2 material as defined in ASTM D2321. Bedding and backfill for surface drainage inlets shall be placed and compacted uniformly in accordance with ASTM D2321. The drain basin body will be cut at the time of the final grade. No brick, stone, or concrete block will be required to set the grate to the final grade height.

5. All risers will be 6" diameter, HDPE material and will vary in height. The 6" HDPE pipe shall be cut at each inlet location once the median swale grades are established in the field, and will be adjusted as necessary to establish the inlet drain elevation shown on the plans. All risers will be considered incidental as part of the Median Inlets, Special work.

6. All tees will be dual-wall, fabricated tees, 6" in size, as manufactured by Advanced Drainage Systems, Inc., or an approved equal. Tees will be secured to the 6" perforated drain pipe in the median per the manufacturer's installation instructions and provide a connection for the inlet risers at the inlet locations indicated on the plans. All tees will be considered incidental as part of the Median Inlets, Special work.

Basis of Payment: This item shall be paid for at the contract unit price per Each for MEDIAN INLETS, SPECIAL, which price shall be payment in full for all coordination time, labor, materials, and equipment necessary to complete the work described above and as indicated on the drawings.

PAINT TRAFFIC SIGNAL EQUIPMENT

This work shall consist of cleaning and painting of the new traffic signal posts, combination mast arm assemblies and any other components as directed by the Field Engineer at the following six (6) intersections, in City of Rockford, of IL 2 (N. Main) with:

Fulton Ave
Eddy Ave
Halsted Rd
River Bluff Blvd
Riverside Blvd
Bennington Rd/Light St

Description: This work shall include surface preparation, powder type painted finish application and packaging of new galvanized steel traffic signal mast arm poles and post assemblies. All work associated with applying the painted finish shall be performed at the manufacturing facility for the pole assembly or post or at a painting a facility approved by the Engineer. Traffic signal mast arm shrouds and post bases shall also be painted the same color as the pole assemblies and posts.

The color of any traffic signal posts, pushbuttons, hardware, polycarbonate vehicle and pedestrian heads, including exposed conduits for the bracket mounted signal heads shall match the black finish of the mast arm assemblies.

Materials

Galvanizing: All materials to be powder coated shall be galvanized in accordance with ASTM A 123. Only the dry-kettle (pre-fluxing) process shall be used. The material shall not be water or chromate quenched. Galvanized materials to be powder coated shall be air cooled only. An American Galvanizers Association trained Master Galvanizer shall be on the premises during the hot dipped galvanizing process.

Powder: Powder coating material shall be a thermosetting, durable TGIC polyester powder of a degassing grade. Such coating powder must be recommended by its manufacturer for use over hot dipped galvanizing. The coating powder's particle size distribution shall be recommended by its manufacturer to produce the best results for powder coating components under this specification.

Surface Preparation
The Zinc surface shall be prepared for powder coat application using a multistage system employing appropriate cleaners and imparting a phosphate conversion coat to provide an appropriate substrate for the powder coat material. During the cleaning process, water rinses shall be used as appropriate between stages of clean the items and prepares them for the subsequent stages. Water for the rinses, unless specified elsewhere shall be potable with a hardness not be more than 250 ppm as $CaCO_3$ and a combined chloride and sulfate level less than 100 ppm.

Surface Defects: All weld flux and other contaminates shall be mechanically removed. All drainage spikes, tears, high spots, protrusions or other surfaces defects shall be removed using hand or power tools in accordance with the manufacturer's specifications. Such operations shall not remove the galvanized coating below the thickness allowed by ASTM A 123.

Thickness of the galvanizing shall be verified using a properly calibrated magnetic thickness gauge as per ASTM E 376. Any item falling below the required zinc thickness, before or after removal of any high spots, shall be repaired in accordance with Practice A780.

Surface Cleaning: The galvanized surface shall be clean and free of oils and grease before they are powder coated. These shall be removed by use of an aqueous alkaline solution and /or hand or power tool cleaning. Subsequent to alkaline/power cleaning, trace zinc oxide will be removed by mild acidic solution.

- An alkaline solution, pH in the range of 11 to 12 may be used to remove traces of oil, grease, or dirt. The alkaline solution shall not have a pH exceeding 13. After cleaning the piece shall be rinsed thoroughly in water under pressure.
- Hand or power tool cleaning may be used to clean light deposits of zinc reaction products such as wet storage stain, as specified to SSPC surface Preparation Specification 2 or 3 appropriate.
- An acidic solution with a pH of 3.5 to 4.5 shall be sprayed onto the item to remove residual zinc oxide.

Surface Profiling: The galvanized surface shall be profiled to promote proper powder coating adhesion. This shall be accomplished by applying a phosphate treatment to create a protective crystalline phosphate conversion coating on the zinc surface. The coating shall have a coating weight between 20 to 70 mb/ft2.

Final Rinse: To ensure the most optimum performance possible, a final rinse of de-mineralized water shall be applied as a final rinse prior to pre-baking. This stage will remove any un-reacted phosphate and other contaminants.

Powder Coat Application
The finish color shall be one of the manufacturer's standard colors and shall be as selected by the local agency responsible for paint costs. The contractor shall confirm, in writing, the color selection with the local responsible agency and provide a copy of the approval to the Engineer and a copy of the approval shall be included in the material catalog submittal. The City desires a smooth powder black finish to match the DECORATIVE LIGHT POLE being installed as part of the project and the existing light poles in the City of Rockford.

Pre-baking: Following phosphating of all items to be powder coated shall be place in an oven capable of maintaining a temperature of 500^{o} Specimens shall be baked at a temperature of 25^{o} above the normal cure temperature for the powder that will be employed. The specimens shall remain in the oven for a minimum of 20 minutes after having equalized to the temperature of the oven to remove any residual moisture from the preparation phase, and insure expulsion of any entrapped gases or moisture. Typically, specimens are pre-baked for one hour.

Powder Coat Application: Polyester powder shall be applied through electrostatic/tribomatic application guns. The powder shall be applied in multiple coats. The first coat shall have a thickness of 1.5 to 3 mils. Each intermediate coat shall be partially cured at a temperature of 350^{o} F to insure adhesion. Subsequent costs shall be then applied in 1.5 to 3 mil increments to bring the specimen to its final (cured) thickness be less than 5 mils.

Cure: The powder coating shall be cured by heating the coated specimens to a temperature and duration specified by the powder coat material manufacturer to insure sufficient curing of the powder coating material. The resulting coating shall be uniform in color and free of pinholes, blisters, and other surface defects. Correct cure shall be checked by a solvent rub.

Properties of Cure Coating:
Minimum film thickness TGIC 5.0 MILS (120µM)
Direct impact ASTM D 2794 160 in./lb (9.0m/kg)
Reverse impact ASTM D 2794 160 in./lb (9.0m/kg)
Pencil hardness (scratch/gouge) ASTM D 383 2H
Flexibility (Mandrel test) ASTM D 522 1/8 in. (3m mm)
Minimum adhesion ASTM D 3359 5A,%B (100% crosshatch)
Salt spray ASTM B 117 + 1000 hrs< 2mm

Repair of Powder Coated Material:

- Damage shall be defined as exposed galvanized coating.
- Damaged coatings less than ½ of 1% if the surface area shall be acceptable for repair. Damaged greater than that amount shall be recoated. Final finish shall be damage free FOB the plant
- Coating to be repaired shall be touched up as recommended by the galvanizer and the powder coating supplier. Touch up and/or field repair can be accomplished using either powder coating material or paint. Typically acrylic based paint as recommended by the powder coating material manufacturer, applied either by spray or brushed on liquid is used for touch up and repair of the powder coating.

Any damage to the finish after leaving the manufacturer's facility shall be repaired to the satisfaction of the Engineer using a method approvable by the Engineer and manufacturer. If while at the manufacturer's facility the finish is damaged, the finish shall be re-applied.

Warranty: The Contractor shall furnish in writing to the Engineer, the paint manufacturer's standard warranty and certification that the paint system has been properly applied.

Packaging: Prior to shipping, the poles and posts shall be wrapped in ultraviolet inhibiting plastic foam or rubberized foam.

Basis of Payment: This work shall be paid for at the contract unit price per Each, which include all six (6) intersection listed above, for PAINT TRAFFIC SIGNAL EQUIPMENT which shall be payment in full for painting and packaging the traffic signal mast arm poles and posts described above including all shrouds, bases appurtenance, and as described in this specification.

PAINTING STEEL RAILING

Work shall be in accordance with Section 506 except that Article 506.08 and 506.09 shall not apply and the painting system shall consist of a black powder coat system that shall conform to the following specifications and shall be approved by the Engineer prior to the coating process.

This work shall include surface preparation, powder type painted finish application and packaging of new steel railing assemblies. All work associated with applying the powder coat system shall be performed at the manufacturing facility for the railing assembly or at a facility approved by the Engineer.

Materials:

Section 506.02 of the Standard Specification is replaced by the following material specifications for steel coatings to be used for Painting Steel Railing (Special).

Galvanizing: All materials to be powder coated shall be galvanized in accordance with ASTM A 123. Only the dry-kettle (pre-fluxing) process shall be used. The material shall not be water or chromate quenched. Galvanized materials to be powder coated shall be air cooled only. An American Galvanizers Association trained Master Galvanizer shall be on the premises during the hot dipped galvanizing process.

Powder: Powder coating material shall be a thermosetting, durable, TGIC polyester powder of a degassing grade. Such coating powder must be recommended by its manufacturer for use over hot dipped galvanizing. The coating powder's particle size distribution shall be recommended by its manufacturer to produce the best results for powder coating components under this specification.

The zinc surface shall be prepared for powder coat application using a multistage system employing appropriate cleaners and imparting a phosphate conversion coat to provide an appropriate substrate for the powder coat material. During the cleaning process, water rinses shall be used as appropriate between stages to clean the items and prepare them for the subsequent stages. Water for the rinses, unless specified elsewhere shall be potable with a hardness not to be more than 250 ppm as CaCO3 and a combined chloride and sulfate level less than 100 ppm.

Surface Defects: All weld flux and other contaminates shall be mechanically removed. All drainage spikes, tears, high spots, protrusions or other surface defects shall be removed using hand or power tools in accordance with the manufacturer's specifications. Such operations shall not remove the galvanized coating below the thickness allowed by ASTM A 123. Thickness of the galvanizing shall be verified using a properly calibrated magnetic thickness gauge as per ASTM E 376. Any item falling below the required zinc thickness, before or after removal of any high spots, shall be repaired in accordance with Practice A 780.

Surface Cleaning: The galvanized surface shall be clean and free of oils and grease before they are powder coated. These shall be removed by use of an aqueous alkaline solution and/or hand or power tool cleaning. Subsequent to alkaline/power cleaning, trace zinc oxide will be removed by a mild acidic solution.

- An alkaline solution, pH in the range of 11 to 12 may be used to remove traces of oil, grease, or dirt. The alkaline solution shall not have a pH exceeding 13. After cleaning the piece shall be rinsed thoroughly in water under pressure.

- Hand or power tool cleaning may be used to clean light deposits of zinc reaction products such as wet storage stain, as specified to SSPC Surface Preparation Specification 2 or 3 as appropriate.

- An acidic solution with a pH of 3.5 to 4.5 shall be sprayed onto the item to remove residual zinc oxide.

Surface Profiling: The galvanized surface shall be profiled to promote proper powder coating adhesion. This shall be accomplished by applying a phosphate treatment to create a protective crystalline phosphate conversion coating on the zinc surface. The coating shall have a coating weight between 20 to 70 mg/ft2.

Final Rinse: To ensure the most optimum performance possible, a final rinse of de-mineralized water shall be applied as a final rinse prior to pre-baking. This stage will remove any un-reacted phosphate and other contaminants.

The finish color shall be one of the manufacturer's standard colors and shall be as selected by the local agency responsible for paint costs. The Contractor shall confirm, in writing, the color selection with the local responsible agency and provide a copy of the approval to the Engineer and a copy of the approval shall be included in the material catalog submittal. The City desires a smooth powder black finish to match the proposed DECORATIVE LIGHT POLE, ALUMINUM, 40 FT. M.H., being installed as part of the project and the existing light poles in the City of Rockford.

Pre-baking: Following phosphating all items to be powder coated shall be placed in an oven capable of maintaining a temperature of 500°F. Specimens shall be baked at a temperature 25°F above the normal cure temperature for the powder that will be employed. The specimens shall remain in the oven for a minimum of 20 minutes after having equalized to the temperature of the oven to remove any residual moisture from the preparation phase, and insure expulsion of any entrapped gases or moisture. Typically, specimens are pre-baked for one hour.

Powder Coat Application: Polyester powder shall be applied through electrostatic/tribomatic application guns. The powder shall be applied in multiple coats. The first coat shall have a thickness of 1.5 to 3 mils. Each intermediate coat shall be partially cured at a temperature of 350°F to insure adhesion. Subsequent coats shall be then applied in 1.5 to 3 mil increments to bring the specimen to its final (cured) thickness as required by the customer specification. In no case will the final (cured) thickness be less than 5 mils.

Cure: The powder coating shall be cured by heating the coated specimens to a temperature and duration specified by the powder coat material manufacturer to insure sufficient curing of the powder coating material. The resulting coating shall be uniform in color and free of pinholes, blisters, and other surface defects. Correct cure shall be checked by a solvent rub test.

Properties of Cured Coating:		
Minimum film thickness	TGIC	5.0 mils (120µm)
Direct impact	ASTM D 2794	160 in./lb (9.0 m/kg)
Reverse impact	ASTM D 2794	160 in./lb (9.0 m/kg)
Pencil hardness (scratch/gouge)	ASTM D 383	2H
Flexibility (Mandrel test)	ASTM D 522	1/8 in. (3m mm)
Minimum adhesion	ASTM D 3359	5A,5B (100% crosshatch)
Salt spray	ASTM B 117	+ 1000 hrs < 2mm

Repair of Powder Coated Material:

- Damage shall be defined as exposed galvanized coating.
- Damaged coatings less than ½ of 1% of the surface area shall be acceptable for repair. Damage greater than that amount shall be recoated. Final finish shall be damage free FOB the plant.
- Coatings to be repaired shall be touched up as recommended by the galvanizer and the powder coating supplier. Touch up and/or field repair can be accomplished using either powder coating material or paint. Typically acrylic based paint as recommended by the powder coating material manufacturer, applied either by spray or brushed on liquid is used for touch up and repair of the powder coating.

Any damage to the finish after leaving the manufacturer's facility shall be repaired to the satisfaction of the Engineer using a method approvable by the Engineer and manufacturer. If while at the manufacturer's facility the finish is damaged, the finish shall be re-applied.

Warranty: The Contractor shall furnish in writing to the Engineer, the paint manufacturer's standard warranty and certification that the paint system has been properly applied.

Packaging: Prior to shipping, the railings shall be wrapped in ultraviolet-inhibiting plastic foam or rubberized foam.

Method of Measurement This work will be measured for payment by the running lineal foot of railing. Individual railing elements will not be measured separately.

Basis of Payment: This item shall be paid for at the contract unit price per Foot for PAINTING STEEL RAILING which shall be payment in full for painting and packaging the railings described above including all pickets, bases, appurtenances, and as described in this specification.

PCC AUTOMATIC BATCHING EQUIPMENT
Effective: January 1, 2015

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

The Contractor's QC personnel shall be responsible for electronically submitting BMPR MI654 "Concrete Air, Slump, and Quantity," BMPR MI655 "P.C. Concrete Strength," and BMPR 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.

PRESSURE CONNECTION 12"X 8"

This work shall consist of making a new connection to an existing water main under pressure. A mechanical joint tapping sleeve and a tapping gate valve shall be installed in a water valve box. Cost of all labor, equipment, testing of tapping sleeve, and material to locate existing water main, excavate, furnish and install tapping sleeve, valve and valve box with casting shall be included in this work item. Valve boxes shall be Tyler/Union cast iron 6850 series, with "WATER" imprinted on top cover with a debris cap and with an Adapter II by Adaptor Inc. installed.

The cost of the trench backfill, where applicable, shall be included in the contract unit price bid for this item.

Method of Measurement: Measurement for this work will be per each in place.

Basis of Payment: This work will be paid for at the contract unit price per each for PRESSURE CONNECTION 12" X 8", which price shall include any labor, materials, and trench backfill necessary for a complete installation.

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.

RAILROAD PERMITS AND LICENSES

Description: The Contractor, before entering upon the right-of-way of a railroad for the performance of any construction work, or work preparatory thereto, shall secure permission from the Railroad. This work shall be done in accordance with Article 107.04 of the "Standard Specifications" and as specified as herein.

General: Add the following to the end of the Article 107.04:

"Prior to entering the Railroad's right-of-way, the Contractor shall comply with the Railroad's requirements for safety, including the CONTRACTOR SAFETY BREIFING CARD, E-RAILSAFE UNITED STATES SAFETY OPERATIONS, and the Canadian Pacific's minimum safety requirements for contractors working on railway property in U.S. can be found here: http://www.cpr.ca/en/about-cp-site/Documents/safety-requirements-contractors-US.pdf. The Contractor shall attend local safety orientation and any briefings required by the Railroad."

Basis of Payment: This work will not be paid for separately but shall be included in the cost of the Contract.

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
Dakota, Minnesota and Eastern (DME) Railroad doing business as the Canadian Pacific Railway 120 S. Sixth Street, Suite 9126 Minneapolis, MN 55402	0	3 per week at 10 MPH

Mr. Edward A. Oom - Manager of Public Works
Southern Region East - Engineering

DOT/AAR No.: 387 281G RR Mile Post: 16.25
RR Division: RR Sub-Division: Rockford

For Freight/Passenger Information Contact: Scott Volden Phone: 605-321-8589
For Insurance Information Contact: Edward A. Oom Phone: 612-330-4553
Edward_Oom@cpr.ca

Comments:
Railroad flaggers are required if working within 25 feet of the tracks. Contact Scott Volden.

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.

REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT

Add the following to Article 895.05 of the Standard Specifications:

The traffic signal equipment which is to be removed and is to become the property of the Contractor shall be disposed of outside the right-of-way at the Contractor’s expense.

All equipment to be returned to the City of Rockford shall be delivered by the Contractor to the City's Traffic Signal Maintenance Contractor's main facility. Contact Calvin Kinard with the City of Rockford for instructions for location to deliver, 815-209-7528. The Contractor shall contact the City's Electrical Maintenance Contractor to schedule an appointment to deliver the equipment. No equipment will be accepted without a prior appointment. All equipment shall be delivered within 30 days of removing it from the traffic signal installation. The Contractor shall provide 5 copies of a list of equipment that is to remain the property of the City, including model and serial numbers, where applicable. He shall also provide a copy of the Contract plan or special provision showing the quantities and type of equipment. Controllers and peripheral equipment from the same location shall be boxed together (equipment from different locations may not be mixed) and all boxes and controller cabinets shall be clearly marked or labeled with the location from which they were removed. If equipment is not returned with these requirements, it will be rejected by the City's Electrical Maintenance Contractor. The Contractor shall be responsible for the condition of the traffic signal equipment from the time he takes maintenance of the signal installation until the acceptance of a receipt drawn by the City's Electrical Maintenance Contractor indicating the items have been returned in good condition.

The Contractor shall safely store and arrange for pickup of all equipment to be returned to agencies other than the City. The Contractor shall package the equipment and provide all necessary documentation as stated above.

Traffic signal equipment which is lost or not returned to the City for any reason shall be replaced with new equipment meeting the requirements of these Specifications.

Basis of Payment: The above work will be paid for at the contract unit price

ROCK EXCAVATION

Description: This item shall consists of furnishing all labor, equipment, tools, transportation and material necessary to perform all operations needed to excavate, remove and dispose of rock material during the construction of the sanitary sewer system improvements.

The Contractor shall demonstrate to the Engineer, by all possible standard methods, that the material encountered while excavating within the lines and grades shown on the plans within the designated limits of payment as described in T.S. 2:2 of the *General Provisions and Technical Specifications for Sanitary Sewer Construction located at* http://www.rrwrd.dst.il.us/ is not able to be removed with conventional excavation methods. This demonstration shall be completed before the subsurface material is classified as rock.

The following criteria will be used in the determination of whether or not the work will be considered ROCK EXCAVATION:

The guidelines and requirements of the *General Provisions and Technical Specifications for Sanitary Sewer Construction*

Substantial reduction in production rate

Visual evidence of large boulders, rock, granite, trap quartzite, chert, limestone, hard sand stone, hard shale or slate, or other hard materials, in natural ledges or displaced masses which cannot be removed by a modern backhoe without resorting to the continuous use of pneumatic tools, blasting, barring or wedging for removal from their original beds.

The maximum trench width payment limits shall not exceed the diameter of the pipe plus eighteen inches (18”) for pipe diameters 8” to 24” or the diameter of the pipe plus two feet (2’) for pipe sizes greater than 24” inches in (inside) diameter.

Method of Measurement: This work shall be determined by the Engineer based on the length and depth of material encountered in the field and the maximum payment width described in these Special Provisions. No payment shall be made for excavation or rock removal beyond these limits. No additional payment will be made for rock removal needed for sanitary manhole or sanitary sewer service construction.

Basis of Payment: This work shall be paid at the contract unit price per Cubic Yard for ROCK EXCAVATION.

SANITARY MANHOLES, SPECIAL

Description: This work shall consist of furnishing all excavation, materials, castings, casting seals, exterior joint seals, accessories, outside drop connections, connection to existing sanitary sewers, equipment, tools, transportation, excavation, trench backfill, services and performance of all operations required to construct four-foot (4') inside diameter manholes as shown and detailed on the plans or as directed by the Rock River Water Reclamation District, all in accordance with Article 6:3 and 7 of the Technical Specifications, and the pipe manufacturers requirements.

The frame and lid shall be a Neenah Model 1670 or East Jordan E1117 frame with self-sealing, non-rocking lid, twenty-four inch (24") diameter or approved equal. The lid shall have two-inch (2") high "SANITARY" lettering and a concealed pick hole.

Rim of frame to be set to grade as shown on plans or as specified in this section; Contractor shall field-verify all rim and invert elevations shown in the plans, as these are approximate. The top of the precast cone section shall be at an elevation to allow for adjustment of frame (12" maximum) without disturbing precast cone section. Precast concrete adjusting rings meeting the requirements of RRWRD shall be installed between cone section and manhole frame.

Should it be required to stub a section of pipe out of a manhole or install a drop connection, this section of pipe and plug shall be considered incidental to the cost of the size and type of manhole installed.

Unless otherwise specified or shown, manhole frames shall be set at one inch (1") above finish grade in turf areas and at finish grade in paved areas. Concrete adjusting rings shall be standard reinforced concrete pipe pattern. Minimum ring thickness shall be two inches (2"). Maximum ring thickness shall be twelve inches (12"). ASTM requirements for adjusting rings: conform to ASTM C478 and ASTM C139, latest revision. Concrete for adjusting rings: Class "A" as specified in T.S. 5:3 (a). Concrete in the most current edition of the District's General Provisions and Technical Specifications for Sanitary Sewer Construction; manufacturer to supply certified test results showing compliance with concrete strength requirements. Absorption requirements: ACI Specification P-1-C and ASTM C139, latest revision.

All adjusting ring joints shall be sealed watertight by means of EZ Stik, Kent-Seal, or equal (including cast iron frame to concrete adjusting ring). Minimum adjusting ring placement height: four inches (4"). Maximum adjusting ring placement height: twelve inches (12"); no more than thirty inches (30") from the top of casting to the first step. A maximum of one (1) 2" adjusting ring will be allowed. No adjusting rings are required for manholes in turf areas or with roadway having curb and gutter.

In roadways only: metal or plastic shims will be required only if the casting in the roadway must be pitched to match the grade of the adjacent roadway pavement. Shims must be equally spaced with no more than one inch (1") of total adjustment. No butyl materials seal (E-Z Stik, Kent-Seal, or equal) will be used under the casting and the void area between the casting, and masonry shall be grouted from the outside to the inside face of the adjusting ring, with the entire void to be filled. No trench compaction shall take place until the concrete has cured and hardened to the District's satisfaction. Final manhole adjustment shall meet IDOT and City of Rockford requirements (concrete collar around casting and adjusting rings).

The Contractor shall install a District-approved external casting seal on all proposed manholes as indicated on the RRWRD Detail Sheet. The Contractor shall install external seals on all manhole barrel section joints, Cretex Mac Wrap or CANUSA Wrapid Seal.

All manholes shall be vacuum tested per ASTM C124493 Standard Test Method For Concrete Sewer Manholes By The Negative Pressure (Vacuum) Test prior to placing into service.

The Contractor shall construct a concrete manhole bench in each manhole per the standard details or per the Engineer's direction. Manhole benches shall have a minimum slope of two inches (2") per foot.

Pipe connections to manholes shall be made by means of a watertight flexible pipe to manhole connector gasket meeting the requirements of ASTM C 923, "Resilient Connectors between Reinforced Concrete Manhole Structures and Pipes". Integrally cast and expandable gaskets are acceptable (A-LOK Model X-CEL, PSX Series 6, or approved equal). The design shall be in accordance with the manhole and pipe manufacturer requirements and shall receive prior District approval.

If the manhole is to connect to existing sanitary sewer, only the Invert-Out of the structure shall be precast prior to delivery to the site. All other openings shall be core-drilled in the field. A flexible pipe to manhole connector (PSX Positive Seal Gasket System w/ Power Sleeve Expansion or approved equal) shall be installed.

All connections to the existing sanitary sewer shall be made with PVC SDR 35 pipe (ASTM D-3034) or as shown on the plans. A minimum of 3.0' of new PVC pipe shall be installed. Transitions between the new sanitary sewer pipe and the existing pipe shall meet RRWRD requirements, using coupling fittings where necessary. The connection shall be made at a location where the existing sanitary sewer pipe is structurally sound and in good conditions. The sanitary sewer needed to connection the sanitary manholes to the existing sewer, including all fittings, labor, etc. shall be considered part of this item and will not be measured for payment separately.

Manhole shop drawings must be submitted to the District for approval prior to manufacture and delivery to the site. Manhole shop drawings shall include a specified detail for each manhole showing the number and height of barrel sections, height of cone section, number and size of adjusting rings, location and spacing of steps and elevations of all pipes. A plan view shall be provided showing the orientation of pipe openings.

Flat tops sections will not be permitted; eccentric cone sections must be a component of all sanitary sewer manholes.

This item shall include all materials, labor, transportation, connection to existing sanitary sewer pipes, shear resistant transition couplings and piping, as required, reworking existing manhole inverts and/or benches as required, outside drop connections, all manholes of the sizes and types required, dewatering, pipe stubs, gasket seals, equipment, supervision and service necessary to complete the above described operation with all necessary appurtenances , site preparations and restoration work.

Basis of Payment: This work shall be paid for at the contract unit price per Each for SANITARY MANHOLE, SPECIAL.

SANITARY MANHOLE TO BE ADJUSTED

Description: This work shall conform to Sections 603 and 604 of the IDOT. Standard Specification for Road and Bridge Construction and RRWRD requirements.
This work shall consist of removing existing manhole frames and lids, installation of new frames and lids, castings, seals, adjusting rings as required, and exterior manhole casting seals. The new frame and lid shall be set to finish grade.

New manhole castings shall be either Neenah R1670 or East Jordan E117 frame with non-rocking, self-sealing lid. The lid shall have two-inch (2") high "SANITARY" lettering and a concealed pick-hole.

The joint between the manhole casting and adjusting rings on top of manhole shall be watertight by means of a Butyl material (E-Z Stik, Kent Seal or equal).

The Contractor shall install a District approved exterior casting seal on all manholes as shown on the standard detail sheet.

Basis of Payment This work shall be paid for at the contract unit price per Each for SANITARY MANHOLES TO BE ADJUSTED.

SANITARY MANHOLES TO BE RECONSTRUCTED

This work shall consist of reconstructing existing sanitary sewer manholes as required to construct this project. This work shall conform to Section 602 of the IDOT. Standard Specifications for Road and Bridge Construction and RRWRD requirements. This item shall include all pavement removal, excavation, disposal of soil and existing manhole material, manhole casting replacement, installation of a District approved external casting seal and installation of a new precast cone or barrel sections.

Manhole reconstruction shall include the removal of the existing casting, adjusting rings, and bricks or blocks to an elevation in order to reconstruct the manhole structure to a depth of four feet (4'). The removal shall stop at a course of bricks or blocks which is a minimum of 90% intact. If necessary, a leveling bed of non-shrink cement shall be applied to the top of the remaining top course. The bottom of the new precast cone or barrel section to be placed on the existing structure shall not have a ship- lap. It shall be full thickness and set on 2 beads of 1" mastic material. A one foot (1') high by six-inch (6") thick concrete collar shall be poured around the entire outside of the manhole, centered on the joint.

New manhole castings shall be either Neenah R1670 or East Jordan E117 frame with non-rocking, self-sealing lid. The lid shall have two-inch (2") high "SANITARY" lettering and a concealed pick-hole.

Rim of frame to be set to grade as shown on plans or as specified in this section; Contractor shall field-verify all rim and invert elevations shown in the plans, as these are approximate. The top of the precast cone section shall be at an elevation to allow for adjustment of frame (12" maximum) without disturbing precast cone section. Precast concrete adjusting rings meeting the requirements of RRWRD shall be installed between cone section and manhole frame.

Unless otherwise specified or shown, manhole frames shall be set at one inch (1") above finish grade in turf areas and at finish grade in paved areas. Concrete adjusting rings shall be standard reinforced concrete pipe pattern. Minimum ring thickness shall be two inches (2"). Maximum ring thickness shall be twelve inches (12"). ASTM requirements for adjusting rings: conform to ASTM C478 and ASTM C139, latest revision. Concrete for adjusting rings: Class "A" as specified in T.S. 5:3 (a). Concrete in the most current edition of the District's General Provisions and Technical Specifications for Sanitary Sewer Construction; manufacturer to supply certified test results showing compliance with concrete strength requirements. Absorption requirements: ACI Specification P-1-C and ASTM C139, latest revision.

All adjusting ring joints shall be sealed watertight by means of EZ Stik, Kent-Seal, or equal (including cast iron frame to concrete adjusting ring). Minimum adjusting ring placement height: four inches (4"). Maximum adjusting ring placement height: twelve inches (12"); no more than thirty inches (30") from the top of casting to the first step. A maximum of one (1) 2" adjusting ring will be allowed. No adjusting rings are required for manholes in turf areas or with roadway having curb and gutter.

In roadways only: metal or plastic shims will be required only if the casting in the roadway must be pitched to match the grade of the adjacent roadway pavement. Shims must be equally spaced with no more than one inch (1") of total adjustment. No butyl materials seal (E-Z Stik, Kent-Seal, or equal) will be used under the casting and the void area between the casting, and masonry shall be grouted from the outside to the inside face of the adjusting ring, with the entire void to be filled. No trench compaction shall take place until the concrete has cured and hardened to the District's satisfaction. Final manhole adjustment shall meet IDOT and City of Rockford requirements (concrete collar around casting and adjusting rings).

The Contractor shall install a District-approved external casting seal on all proposed manholes as indicated on the RRWRD Detail Sheet. The Contractor shall install external seals on all manhole barrel section joints, Cretex Mac Wrap or CANUSA Wrapid Seal.

Basis of Payment: This work shall be paid for at the contract unit price per Each for SANITARY MANHOLES TO BE RECONSTRUCTED.

SANITARY MANHOLES TO BE REMOVED

Description: This work shall consist of removing existing sanitary sewer manholes, including outside drop manholes as required to construct this project. Any existing sanitary sewers to be abandoned as part of the manhole removal shall be bulkheaded with a watertight plug. This work shall conform to Section 605 .03 of the IDOT Standard Specifications for Road and Bridge Construction.

This work shall include complete removal of existing sanitary manholes as well as proper disposal of all excavated soil, masonry material, concrete, backfill, grading, compaction, etc.

Prior to removal of each sanitary manhole, the Contractor shall perform a visual inspection to assess the existing site conditions. If there is any evidence of another utility (water main/service, natural gas, electric conduit, etc.) inside the manhole to be removed, the Contractor shall immediately contact the RRWRD inspector and the IDOT Resident Engineer. The Contractor shall not remove any manhole containing a non-sanitary utility line until proper coordination and/or abandonment of the utility has been completed.

Basis of Payment: This work shall be paid for at the contract unit price per Each for SANITARY MANHOLES TO BE REMOVED

SANITARY SERVICE CLEANOUT

Description: This work shall consist of installing a vertical cleanout riser on an existing sanitary sewer service; this item is does not apply to work involving construction or reinstallation of a new sanitary sewer service. The service riser shall be installed as indicated on the Standard District Detail Sheet at the property line or the location shown on the drawings.

Clay or Cast Iron Pipe to PVC pipe transitions shall be made by use of shear resistant flexible Clay or C.I.P.-to-PVC adapters (Fernco Model 5000, or approved equivalent). The transition shall be made on existing pipe that is structurally sound. The cleanout cap shall be installed to 1 foot below finished grade.
All pipe and fittings shall be 6” diameter PVC SDR 26 (water-main quality) or PVC Schedule 40 ASTM D-1785.

All work shall be completed in accordance with the specifications and requirements of RRWRD.

Basis of Payment: This work shall be paid for at the contract unit price per Each for SANITARY SERVICE CLEANOUT.

SANITARY SEWER

Description: Project work includes permits, mobilization, site preparation, connection to existing manholes, bypass pumping, trench excavation, trench backfill, pipe bedding, temporary sewer main connections, temporary sewer main plugs, installing new sewer pipe (various sizes and types, as required) on grade and in line according to the plans and specifications. The work also includes trench dewatering, power tamping, grading and dust control, and all other materials, labor, supervision, transportation, services, and all else that is necessary for the completion of the work and not included elsewhere. Utility relocation shall be included in the work covered in this item unless specifically provided for elsewhere.

Sanitary sewer pipe construction that varies +0.05 feet from the proposed grade and/or +0.15 feet from the proposed line will not be accepted. This does not preclude the District from requiring closer tolerances in the field, nor does it create any obligation for the District to establish the grade or line during construction. The Contractor is solely responsible for maintaining proper lines and grades for the work. The Contractor shall provide at least one laser device for setting lines and grades for subgrade and pipe invert on all parts of the work. The device(s) shall be of acceptable design and maintained in good working condition throughout the length of the project. The Contractor shall employ workmen with the expertise to operate the device(s). The laser device(s) shall be considered as a convenience to the Contractor and will be operated at no extra cost to the District.

When directed by the District, the Contractor shall provide a blower for use in conjunction with the laser. The Contractor shall also provide, and have available on site at all times, a calibrated level and level rod.

Sanitary sewer pipe and pipe laying methods must conform to the requirements contained in the *General Provisions and Technical Specifications for Sanitary Sewer Construction* and as stipulated elsewhere herein.

Materials, PVC Pipe -Sewer Main: All new sanitary mains shall be air and deflection tested per RRWRD specifications and requirements. This requirement shall apply to full-run sanitary sewer installations; sewer installed as part of a point or partial-run repair shall not include air and deflection testing.

PVC pipe shall be installed as shown on the plans and meet the following requirements. PVC pipe shall be PVC SDR 35 meeting the requirements of ASTM D-3034 or F-679. Joints shall meet the requirements of ASTM D-3212.

If required, water-main quality PVC pipe shall be PVC SDR 26 meeting the requirements of ASTM D-2241. Joints shall meet the requirements of ASTM D-3139.

Method of Measurement: This work shall be measured horizontal along the centerline of the pipe from center of manhole casting to center of manhole casting after installation has been completed.

Basis of Payment: This work shall be paid for at the contract unit price per Foot for SANITARY SEWER, of the diameter and type specified

SANITARY SEWER MAIN LINE REPAIR

Description: Project work includes permits, mobilization/transportation, site access, site preparation, supervision, and all labor, equipment and materials needed to: complete sanitary sewer main line point or partial-run repairs on various diameters of Vitrified Clay (VC), Cast Iron (CI) and PVC sanitary sewer pipe with new sanitary sewer pipe on grade and in line. The work shall also include disposal of excavated soil and pipe material, transition couplings, traffic control, temporary by-pass pumping, pipe bedding and trench backfill, compaction, restoration as required, temporary plugs, transition couplings, trench dewatering, utility relocation, grading, erosion control, dust control and any ancillary items necessary for the completion of this project not specifically provided for elsewhere or herein.

PVC pipe shall be installed as shown on the plans and meet the following requirements. PVC pipe shall be PVC SDR 35 meeting the requirements of ASTM D-3034 or F-679. Joints shall meet the requirements of ASTM D-3212.

Pipe edges shall be square and free of jagged edges. Connection shall be made to structurally sound pipe with positive slope as verified by the RRWRD inspector.

The Contractor shall be responsible for locating the Main Line repair limits in the field; both for the J.U.L.I.E. locate and repair. Note: Sewer service locations on the location maps may not be totally accurate. If requested, RRWRD will provide the Contractor a copy of the T.V. reports for sewers to be repaired on this project. It is recommended that the Contractor reference the TV logs for accurate sewer service locations.

Contractor shall field verify the depth of all Main Line repairs on this project. The depths shown on the TV logs are at the upstream manholes on standard televising setups and at the downstream manhole on reverse televising setups.

The Contractor shall be responsible for any costs associated with corrective measures required to replace or repair items not meeting the requirements of these specifications as determined by the District.

Main Line repairs shall be televised by the District for Final Acceptance. Contact Terry Stoll at (815) 543-7983 to schedule televising. A minimum of forty-eight (48) hour notice is required. RRWRD Sewer Main Inspection Reports will be provided to the contractor.

Method of Measurement: This work shall be measured horizontal along the centerline of the pipe. If the point repair locations begins or terminates at a manhole, the measurement shall be to the outside of the manhole wall.

Basis of Payment: This work shall be paid for at the contract unit price per Foot for SANITARY SEWER MAIN LINE REPAIR, of the diameter specified.

SANITARY SEWER SERVICE, 6" PVC, COMPLETE

Description: This work shall consist of removal/abandonment, replacement, and reconnecting existing sanitary sewer services from the private VCP or ductile iron pipe at or near the property line (or point of connection as shown on the plans) to new or existing sanitary sewers with 6" PVC pipe as shown on the plans. This item shall include all necessary materials, pipe, risers, fittings, labor, bypass pumping, excavation, dewatering, bedding, trench backfill, temporary plugs, temporary connections, utility removal/replacement, capping existing sewer service connections at the main, equipment, supervision and work necessary to complete this work with all necessary appurtenances. All existing Sanitary Sewer services are believed to be 6" diameter.

At locations indicated on the plans and as required in the field, the Contractor shall install sanitary sewer service pipe at a 1% minimum slope in order to connect the existing service at or near the property line with the sanitary sewer main in the public right-of-way. In locations where the sanitary sewer service is being installed at the same location as the existing service, the existing sewer service pipe shall be removed. In instances where the new sanitary sewer service is being reconfigured, the existing sanitary sewer service shall be properly abandoned. Removal and abandonment of the existing services shall be incidental to the contract item for the new sanitary sewer service.

This item shall include the installation of a vertical service cleanout riser near the property line as shown on the drawings. The sanitary sewer service and service riser shall be constructed in accordance with the *General Provisions and Technical Specifications for Sanitary Sewer Construction* and the RRWRD Standard Details. The transition from the SDR 26 pipe to the Schedule 40 pipe shall be made with a factory PVC SDR 26 to Schedule 40 fitting. Cleanouts will be required as shown on the plans and where required by the Illinois State Plumbing Code.

All sanitary sewer services shall be installed to maintain a minimum 18" of vertical separation between proposed/existing storm sewer and water main.

Sanitary sewer service pipe shall be PVC SDR 26 meeting the requirements of ASTM D-2241. Joints shall meet the requirements of ASTM D-3139.

In locations where the new sanitary sewer service will connect to an existing sanitary sewer main, the Contractor shall perform a new cut-in connection using Inserta-Tee fittings or an approved equivalent. In locations where the new sanitary sewer service will connect to proposed sanitary sewer, the connection shall be made using a factory fitting.

The Contractor shall be responsible for maintaining the current level of service to all users connected to the existing sanitary sewer. Bypass pumping shall be provided as necessary.

Clay or Cast Iron Pipe to PVC pipe transitions shall be made by use of shear resistant flexible Clay or C.I.P.-to-PVC adapters (Fernco Model 5000, or approved equivalent). The transition shall be made on existing pipe that is structurally sound. Shop drawings shall be submitted to the District for approval prior to manufacture and delivery to the site.

Connection shall be made to a structurally sound pipe. Connection to the existing sewer service shall not be made until the District Inspector has verified the structural condition.

Location of the existing sewer services is based upon TV logs and Record Drawing information, and the proposed service connection is based on that location. Should the service connection alignment, diameter or point of connection vary from that shown in the plans, no claims for additional compensation will be entertained. The Contractor shall field-verify the location of all existing sanitary sewer services.

This work shall include excavating at the sewer main and capping of existing sewer services to be abandoned at the sewer main as shown on the plans. Existing services shall be capped as close as possible to the sewer main. The pipe ends shall be sealed with a District approved flexible rubber cap (Fernco Qwik Cap or approved equivalent) with stainless steel straps or an expandable mechanical plug Cherne Gripper or approved equivalent).

Basis of Payment: This work shall be paid for at the contract unit price per Each for SANITARY SEWER SERVICE 6" PVC, COMPLETE.

SIDEWALK CONSTRUCTION

The removal of sidewalk in accordance with Section 440 of the Standard Specifications and construction of Portland cement concrete sidewalk in accordance with Section 424 of the Standard Specifications shall have the following requirement added:

"All sidewalk construction located in front of a place of business shall be done outside of the normal business hours for that place of business and sidewalk opened for use prior to normal business hours. It shall be the Contractors responsibility to coordinate with the business during construction to determine each businesses normal business hours and schedule his work accordingly."

STORM SEWER (WATER MAIN REQUIREMENTS)
Effective: June 12, 1997 Revised: January 29, 2010

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 REQUIREMENTS), of the diameter specified.

TEMPORARY ACCESS

Description:

Revise Article 402.10 of the Standard Specifications to read:

"**402.10 For Temporary Access.** The contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances and roads according to Article 402.07 and as directed by the Engineer.

The aggregate surface course shall be constructed to the dimensions and grades specified below, except as modified by the plans or as directed by the Engineer.

(a) Private Entrance. The minimum width shall be 12 ft (3.6 m). The minimum compacted thickness shall be 6 in. (150 mm). The maximum grade shall be eight percent, except as required to match the existing grade.

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

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

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface coarse for any operation that may disturb or remove the temporary access. The same type and gradation of material used to construct the temporary access shall be used to maintain it.

Prior to any winter shutdown period or the end of construction, if required by the Engineer, the aggregate surface course shall be paved with 2" of Hot-Mix Asphalt Base Course in accordance with Section 406 of the Standard Specifications.

When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction or disposed of according to Article 202.03."

Add the following to Article 402.12 of the Standard Specifications:

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

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

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

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

(a) Upon construction of the temporary access, sixty percent of the contract unit price per each, of the type constructed, will be paid.

(b) Subject to the approval of the Engineer for the adequate maintenance and removal of the temporary access, the remaining forty percent of the pay item will be paid upon the permanent removal of the temporary access."

TEMPORARY FENCE
Effective: July 1, 1994

The Contractor shall perform this work according to Section 201 and 665 of the Standard Specifications with the type of fence and location as shown in the plans and as approved by the Engineer. The temporary fence shall replace any existing fence which is removed from areas noted in the plans and commitments and shall be erected in such to permit the Contractor to proceed with his operations.

This work will be paid for at the contract unit price per Foot for TEMPORARY FENCE.

TEMPORARY INLET

This work shall consist of construction of temporary drainage structures either attached to existing or proposed storm sewer at locations shown in the plans to maintain drainage during the various staging phases. The inlets can be INLETS, SPECIAL per District Standard 10.2 or equivalent as approved by the Engineer.

This work will be paid for at the contract unit price per EACH for TEMPORARY INLETS. The unit price shall include all material, labors, equipment to construct and tie the inlet to storm sewer, and removal and disposal of the items after construction is completed.

TEMPORARY MANHOLES

This work shall consist of temporary drainage structures that provide inlets into temporary storm sewer as indicated on the plans or as directed by the Engineer.

Temporary drainage structures shall be constructed to provide fully functional storm sewer system throughout the project staged construction. Upon completion of the permanent sewers and at the direction of the Engineer, the temporary drainage structures shall be removed and disposed of Temporary Manholes of the different types and sizes as indicated in the plans with frames and grates or closed lids will be measured per EACH for payment in place.

This work will be paid for at the contract unit price per EACH for TEMPORARY MANHOLES of the class, type, diameter specified. The unit price shall include all materials, labor, equipment and all necessary work to complete the installation including connections and removal and disposal of.

TEMPORARY PAVEMENT
Effective: October 17, 2007

This work shall consist of placing a Hot-Mix Asphalt Surface Course or Portland Cement Concrete Base Course and aggregate base to serve as a temporary widening or a runaround at the locations shown on the plans and for patching to plan watermain. 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 12 inches of Sub-base Granular Material, Type A and constructing six inches of Hot-Mix Asphalt Surface Course to serve as a temporary runaround at the location shown on the plans. If the thickness is 3 inches or more, it should be placed in 2 lifts. The Hot-Mix Asphalt shall be according to the Special Provision on Hot-Mix Asphalt Surface Course, Special, except it will not be paid for by the Ton. This work shall be completed according to Section 311 of the Standard Specifications.

Description: This work shall consist of designing, producing and constructing a HMA Surface Course on a prepared base, according to Sections 406, 1030 and 1102 of the 2012 Standard Specifications, except as follows.

Materials: Surface Mixture 9.5 or 12.5, Mix C, N50 shall be used.

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 hot-mix asphalt and subbase shall be removed after the final stage is completed. Removal shall be paid for separately at the contract unit price per Square Yard for TEMPORARY PAVEMENT REMOVAL.

PORTLAND CEMENT CONCRETE OPTION

This work shall consist of placing and compacting 4 inches of Subbase Granular Material, Type A and constructing an 8 inch thick Portland Cement Concrete Base Course to serve as a temporary runaround at the location shown on the plans. The minimum width shall be 3 feet. This work shall be completed according to Sections 311 and 353 of the Standard Specifications.

Pavement fabric shall not be utilized in the base course.

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

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

All work 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 base course and sub-base shall be removed after the final stage is completed. Removal shall be paid for separately at the contract unit price per Square Yard for TEMPORARY PAVEMENT REMOVAL.

TEMPORARY SIDEWALK

This work shall consist of constructing temporary sidewalk as needed to maintain pedestrian access during stage construction.

The contractor has the option to use either 2" PCC according to section 424 of the Standard Specifications or 2" HMA according to Section 406 of the Standard Specifications and as stated herein.

The temporary sidewalk shall be placed on suitable prepared subgrade according to the Standard Specifications. Removal of the sidewalk shall conform to Section 440 of the Standard Specifications.

This work including preparation of the subgrade and any additional material needed to level the ground, removal of the temporary sidewalk shall be included in the contract unit price per SQUARE FOOT of TEMPORARY SIDEWALK.

TEMPORARY STORM SEWERS, CLASS A, TYPE 2, 12"

This work shall consist of construction of temporary storm sewer as indicated on the plans or as directed by the Engineer. The temporary storm sewer shall be constructed to provide fully functional storm sewer system throughout the project staged construction. Upon completion of the permanent sewers and at the direction of the Engineer, the temporary sewer shall be removed and disposed of. All work shall comply with Section 550, 551 and 605 of the Standard Specifications.

This work will be paid for at the contract unit price per FOOT for TEMPORARYSTORM SEWERS, CLASS A, TYPE 2, 12". The unit price shall include all materials, labor, equipment and all necessary work to complete the installation including connections, trench back fill and removal and disposal of.

TEMPORARY WATER MAIN CAP

This work shall conform to the Standard Specifications for Water and Sewer Main Construction, latest edition, and the requirements of the Engineer. At locations indicated on the plans, the contractor shall install a mechanical joint end cap with restrained glands for the purpose of water main testing. The final locations for Temporary Water Main Caps shall be adequate to protect any items or permanent surfaces from any damage that are to be constructed between the time the Temporary Water Main Cap is placed and the time that it is removed and the installation of the effected water main or service is resumed. Temporary Water Main Caps shall be constructed in a manner to be left in place live and under pressure including pressures necessary for the required pressure testing of newly constructed water mains. The contractor shall properly backfill the hole excavated for the Temporary Water Main Cap and shall provide any required surface restoration. At the appropriate time, the contractor shall re-excavate the hole, expose the previously placed cap, remove the cap and associated appurtenances, dewater the hole, and provide all other work necessary to continue the installation of the water main or water service.

The contract unit price bid for this item shall include the cost for all labor and materials necessary to install and remove the temporary water main caps including: sawcutting the water main, excavation, removal and proper disposal of all material, pavement removal, proper backfilling (including trench backfill where required), and making connections (temporary and permanent).

Method of Measurement. Measurement for this work will be per each in place.

Basis of Payment. This work will be paid for at the contract unit price per each for TEMPORARY WATER MAIN CAP which price shall include any labor, materials, and trench backfill necessary for a complete installation.

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."

UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT

Description: This work shall consist of furnishing all equipment, material and labor necessary to properly install the proposed underground conduit, coilable nonmetallic conduit at locations as indicated on the plans.

Materials: The materials shall be in accordance with Article 810.02(c) of the "Standard Specifications", plan details, and the following:

The coilable nonmetallic conduits will be HDPE SDR-11 conduits for Traffic Signal Interconnect Conduits and Fiber Optic Conduits as shown on the plans and shall be manufactured from PE 3608, high density polyethylene (HDPE). The conduit shall meet or exceed the requirements of IGSHPA, sized in accordance with AWWA C901. Coiled lengths with factory installed U-bends shall be provided for seamless installations.

General: The work shall be completed in accordance with Section 810 of the "Standard Specifications", plan details, and the following:

The HDPE SDR-11 conduits shall be installed with fused or City of Rockford approved mechanical coupled joints.

Pull strings shall be installed in all spare conduits.

A tracer cable shall be installed in the same conduit as the fiber optic cable or pull strings in order to trace the fiber optic cable or conduit after installation. The tracer cable shall be according to the specifications for ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12.

Note for Traffic Signal work: A tracer cable shall be installed in the same conduit as the fiber optic or pull strings in order to trace the fiber optic cable or conduit after installation. The tracer cable shall be according to the specifications for ELECTRIC CABLE IN CONDUIT TRACER, NO. 12.

Method of Measurement: This work will be measured for payment in accordance with Article 810.06 of the "Standard Specifications."

The pull string will not be measured for payment but shall be considered incidental to the work.

The tracer cable will be measured for payment according to ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12.

Basis of Payment: This work will be paid for at the contract unit price per foot for UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, of the size specified.

The pull string will not be paid for separately but shall be considered incidental to the work.

Payment for the tracer cable will be paid for according to ELECTRIC CABLE IN CONDUIT, TRACER, NO. 12.

VALVE BOX

This work shall conform to the Standard Specifications for Water and Sewer Main Construction, latest edition, and the requirements of the Engineer. Where shown on the plans, the existing valve vault or valve box shall be excavated and removed under separate items. Under this item a new valve box shall be placed over the existing valve.

This item shall include removal and proper disposal of all material. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for VALVE BOX which price shall include any labor, materials, and trench backfill necessary for a complete installation.

VALVE BOXES TO BE ADJUSTED

This work shall conform to the Standard Specifications for Water and Sewer Main Construction, latest edition, and the requirements of the Engineer. Where shown on the plans, the existing valve box assembly shall be excavated and adjusted to final grade.

This item shall include removal and proper disposal of all material. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for VALVE BOXES TO BE ADJUSTED which price shall include any labor, materials, and trench backfill necessary for a complete installation.

VALVE VAULTS TO BE ADJUSTED

This item shall include furnishing of all labor and materials required to bring valve vaults to the new grade of the street as specified on the plans and in accordance with Section 602 for cases where less than two (2) vertical feet of masonry must be added, removed, or rebuilt to satisfy the requirements of this specification. Each valve vault shall have all debris cleaned from it and the Contractor shall properly dispose of the removed debris at no additional cost to project ownership.

Work shall be in accordance with Section 602 of the Standard Specifications. For all pavement removed for this item, pavement must be replaced with concrete base and the removal and replacement costs shall be considered incidental to the unit price. For all adjustments of vaults done in concrete pavement the concrete pavement shall be neatly saw cut and shall be considered incidental to the unit price.

After the valve vault has been repaired, a thin layer of grout shall be applied to the entire repaired area. The Contractor shall furnish all material, trench backfill, labor and equipment required to complete this work including removal and disposal of debris.

This item shall include removal and proper disposal of all material. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for VALVE VAULTS TO BE ADJUSTED which price shall include any labor, materials, and trench backfill necessary for a complete installation

VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID

This item includes furnishing all labor and materials required to bring valve vaults to the new grade of the street as specified on the plans and in accordance with Section 602 for cases where less than two (2) vertical feet of masonry must be added, removed, or rebuilt to satisfy the requirements of this specification.

A new valve vault frame and lid shall be supplied by the contractor and be to match existing pavement elevations. Castings shall be manufactured of cast iron conforming to ASTM A-48-74 class 30 or ductile iron conforming to ASTM A-536-72 grade 60-40-18.

Both the rim and cover shall be machined both vertically and horizontally so that there will be no variation from circular, straight edge.

Castings shall be supplied in three (3) weight patterns as follows:

(a) Light - Frame and cover weighing approximately 160 pounds complete.

(b) Heavy - Frame and cover weighing approximately 285 pounds complete.

(c) Extra-Heavy - Frame and cover weighing approximately 540 pounds complete.

The design of each casting is the Water Division's own, and is shown on detailed drawings that can be obtained from the City of Rockford Water Division. All casting must conform with the dimensions thereon in order to ensure interchangeability with existing castings. Castings shall be supplied as bare metal, without any coating or paint whatsoever.

Covers shall be supplied with a checkered pattern top lettered, "WATER" except where the water vault houses a water system boundary valve.

Each valve vault shall have all debris cleaned from it and the Contractor shall properly dispose of the removed debris at no additional cost to project ownership. The Contractor shall furnish all material, labor and equipment required to complete this work including removal and disposal of debris.

After the valve vault has been repaired, a thin layer of grout shall be applied to the entire repaired area. The Contractor shall furnish all material, trench backfill, labor and equipment required to complete this work including removal and disposal of debris.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for VALVE VAULTS TO BE ADJUSTED WITH NEW TYPE 1 FRAME, CLOSED LID which price shall include any labor, materials, and trench backfill necessary for a complete installation

VALVE VAULTS TO BE RECONSTRUCTED

This item includes furnishing all labor and materials needed to reconstruct or adjust valve vaults to grade where more than two feet of masonry will be either added, removed, or rebuilt to bring the specified casting to the finished grade of the street as specified on the plans and in accordance with Section 602. Each valve vault shall have all debris cleaned from it and the Contractor shall properly dispose of the removed debris at no additional cost to project ownership.

After the valve vault has been repaired, a thin layer of grout shall be applied to the entire repaired area.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for VALVE VAULTS TO BE RECONSTRUCTED, which price shall include any labor, materials and trench backfill necessary for the complete rebuild

VALVE VAULTS TO BE REMOVED

This work shall include the removal of existing valve and valve vaults where shown on the plans. The contractor shall remove the frame and cover and deliver to City Yards. The existing valve vault shall be excavated and removed for the full depth of the structure. The contractor shall sawcut the existing water main, and remove the valve and associated appurtenances. The existing pipes shall be plugged.

At locations where the plans indicate “Valve to Remain,” the contractor shall carefully preserve the valve so that it can receive a Valve Box, or be abandoned in place live under pressure at no additional expense. All remaining requirements under this provision for removing the vault shall still apply.

This item shall include removal and proper disposal of all material. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per each.

Basis of Payment: This work will be paid for at the contract unit price per each for VALVE VAULTS TO BE REMOVED which price shall include any labor, materials, and trench backfill necessary for a complete installation.

VIDEO VEHICLE DETECTION SYSTEM

The following video vehicle detection shall be installed at the following six (6) intersections, in the City of Rockford, of IL 2 (N Main) with:
Fulton Ave
Eddy Ave
Halsted Rd
River Bluff Blvd
Riverside Blvd
Bennington Rd/Light St

The following video vehicle detection system shall meet the specifications outlined in this section and are currently approved for use in District 2:

Iteris Vantage RZ4 (4 Camera System)
Autoscope Solo Pro (4 Camera System)

The quantity and type of cable that will be required to complete the installation will vary depending on the equipment manufacturer.

The Contractor shall be responsible for determining the cable type and quantities of cable required for the video detection installations. All cable used shall meet current Department specifications, manufacturer's recommendations, and shall be subject to approval by the Engineer.

The system to be installed shall be the latest model. It shall include four (4) cameras plus one (1) spare, per intersection, to be delivered to the city of Rockford Traffic Engineer, the processor unit, connectors, software, and all cabling necessary back to the controller. All the equipment shall compatible with the controller to be installed on this project. All equipment shall be installed according to manufacturer’s recommendations. The video detection cameras shall be capable of being zoomed and focused from a connection in the controller cabinet.

The video vehicle detection system shall include all necessary cables, electrical junction boxes, electrical and coaxial surge suppression, hardware, software, programming, and any camera brackets that are required for installation. These items should be taken into consideration and shall be included in the bid price 4 camera system and 1 spare camera for the VIDEO CAMERA DETECTOR SYSTEM, per intersection.

If the unit requires the use of a power strip, the power strip/surge suppressor shall conform to the following minimum specifications:

- Let Through Voltage: <85 Volts
- Operating Voltage: 120VAC, 50/60H
- UL Suppressed Voltage Rating: 330V
- Energy Rating: 320J
- Peak Current NM/CM: 13k Amps NM, 13k Amps CM
- EMI/RFI Noise Filtration: >25-60dB

A total of one 12" color video monitor and trackball shall be included in the installation, to allow for the setup and monitoring of the video detection system.

All vehicle video detection systems shall be equipped with the latest software or firmware revisions.

The video vehicle system shall be configured and installed to NEMA TS1 Standards.

The Contractor shall be responsible for furnishing and installing all necessary camera brackets that are required for the camera installation. The camera mounting brackets shall be of aluminum or steel construction with a natural or white powder coated finish. The installation shall include any solid-state extension pole mountings necessary to obtain the proper sight distance. All brackets shall be submitted to the Department for approval prior to installation.

The minimum requirements for a video vehicle detection system are listed below:

1.0 General

This Specification sets forth the minimum requirements for a system that monitors vehicles on a roadway via processing of video images and provides detector outputs to a traffic controller or similar device. All video detection systems must be approved by the Department. Currently, only Iteris RZ4, RZ4C, and Econolite Autoscope Solo Pro video detection systems are approved for use within District 2.

1.1 System Hardware

The system shall consist of four video cameras, one spare camera, and an automatic control unit (ACU), per intersection. The ACU shall process all detected calls and shall be equipped with the latest firmware revisions.

1.2 System Software

The system shall be able to detect either approaching or receding vehicles in multiple traffic lanes. A minimum of 24 detection zones shall be user-definable per camera. The user shall be able to modify and delete previously defined detection zones. The software shall provide remote access operation and shall be the latest revision.

2.0 Functional Capabilities

2.1 Real-Time Detection

2.2 The ACU shall be capable of simultaneously processing information from up to four (4) video sources. The video shall be digitized and analyzed at a rate of 30 times per second.

2.3 The system shall be able to detect the presence of vehicles in a minimum of 96 detection zones within the combined field of view of the image sensors.

3.0 Vehicle Detection

3.1 Detection Zone Placement

The video detection system shall provide flexible detection zone placement anywhere and at any orientation within the combined field of view of the image sensors. In addition, detection zones shall be coordinated with the signal phases. Each detection zone shall provide a minimum of two kinds of detection (extend, delay, presence or counting) as each phase may require. The type of detection provided by the detection zone is to be determined by the active status of the zone's governing phase.

3.2 Optimal Detection

The video detection system shall reliably detect vehicle presence when the image sensor is mounted 30 feet (10 m) or higher above the roadway, when the image sensor is adjacent to the desired coverage area, and when the length of the detection area or field of view (FOV) is not greater than ten (10) times the mounting height of the image sensor. The image sensor shall not be required to be mounted directly over the roadway. A single image sensor, placed at the proper mounting height with the proper lens, shall be able to monitor six (6) to eight (8) traffic lanes simultaneously.

3.3 Detection Performance

Overall performance of the video detection system shall be comparable to inductive loops. Using standard image sensor optics and in the absence of occlusion, the system shall be able to detect vehicle presence with 98% accuracy under normal conditions, (days & night) and 96% accuracy under adverse conditions (fog, rain, snow). The ACU shall output a constant call for each enabled detector output channel if a loss of video signal occurs in any camera. The ACU shall be capable of processing a minimum of twenty detector zones placed anywhere in the field of view of the camera.

4.0 ACU Hardware

4.1 ACU Mounting

The ACU shall be shelf or rack mountable. Nominal outside dimensions excluding connectors shall not exceed 7.25" x 19" x 10.5" (H x W x D).

4.2 ACU Environmental

The ACU shall be designed to operate reliably in the adverse environment found in the typical roadside traffic cabinet. It shall meet the environmental requirements set forth by the NEMA (National Electrical Manufacturers Association) TS1 and TS2 standards as well as the environmental requirements for Type 170 and Type 179 controllers. The minimum operating temperature range shall be from -35 to +74 degrees C at 0% to 95% relative humidity, non-condensing.

5.0 ACU Electrical

5.1 The ACU shall be modular in design and provide processing capability equivalent to the Intel Pentium microprocessor. The bus connections used to interconnect the modules of the ACU shall be gold-plated DIN connectors.

5.2 The ACU shall be powered by 89 - 135 VAC, 60 Hz, single phase, and draw 0.25 amps, or by 190 - 270 VAC, 50 Hz, single phase, and draw 0.12 amps. If a rack mountable ACU is supplied, it shall be capable of operating from 10 to 28 VDC. The power supply shall automatically adapt to the input power level. Surge ratings shall be as set forth in the NEMA TS1 and TS2 specifications.

5.3 Serial communications to a remote computer equipped with remote monitoring software shall be through an RS-232 serial port. A 9-pin "D" subminiature connector on the front of the ACU shall be used for serial communications.

5.4 The ACU shall be equipped with a NEMA TS2 RS-485 SDLC interface for communicating input and output information. Front panel LEDs shall provide status information when communications are open.

5.5 The ACU and/or camera hookup panel shall be equipped with four RS-170 (B&W)/NTSC (color) composite video inputs for coaxial camera connections so that signals from four image sensors can be processed in real-time.

5.6 The ACU shall be equipped with a port to provide communications to a computer running the remote access software.

5.7 The ACU and/or camera hookup panels used for a rack mountable ACU shall be equipped with a video output port.

5.8 The ACU shall be equipped with viewable front panel detection LED indications.

6.0 Camera

6.1 The video detection system shall use medium resolution, monochrome or color, image sensors as the video source for real-time vehicle detection. As a minimum, each image sensor shall provide the following capabilities:

a. Images shall be produced with a CCD sensing element with horizontal resolution of at least 500 lines and vertical resolution of at least 350 lines.

b. Useable video and resolvable features in the video image shall be produced when those features have luminance levels as low as 0.1 lux at night.

c. Useable video and resolvable features in the video image shall be produced when those features have luminance levels as high as 10,000 lux during the day.

d. Automatic gain, automatic iris, and absolute black reference controls shall be furnished.

e. An optical filter and appropriate electronic circuitry shall be included in the image sensor to suppress "blooming" effects at night.

6.2 The image sensor shall be equipped with an integrated zoom lens with zoom and focus capabilities that can be changed using either configuration computer software or handheld controller. The machine vision processor (MVP) may be enclosed within the camera.

6.3 The image sensor and lens assembly shall be housed in an environmental enclosure that provides the following capabilities:

a. The enclosure shall be waterproof and dust-tight to NEMA-4 specifications.

b. The enclosure shall allow the image sensor to operate satisfactorily over an ambient temperature range from -34C to +74C while exposed to precipitation as well as direct sunlight.

c. The enclosure shall allow the image sensor horizon to be rotated in the field during installation.

d. The enclosure shall include a provision at the rear of the enclosure for connection of power and video signal cables fabricated at the factory. Input power to the environmental enclosure shall be either 115 VAC 60 Hertz or 24 VAC/DC 60 Hertz.

e. A heater shall be at the front of the enclosure to prevent the formation of ice and condensation in cold weather, as well as to assure proper operation of the lens' iris mechanism. The heater shall not interfere with the operation of the image sensor electronics, and it shall not cause interference with the video signal.

f. The enclosure shall be light-colored and shall include a sun shield to minimize solar heating. The front edge of the sunshield shall protrude beyond the front edge of the environmental enclosure and shall include provision to divert water flow to the sides of the sunshield. The amount of overhang of the sun shield shall be adjustable to prevent direct sunlight from entering the lens or hitting the faceplate.

g. The total weight of the image sensor in the environmental enclosure with sunshield shall be less than 6 pounds.

h. When operating in the environmental enclosure with power and video signal cables connected, the image sensor shall meet FCC class B requirements for electromagnetic interference emissions.

6.4 The video output of the image sensor shall be isolated from earth ground. All video connections from the image sensor to the video interface panel shall also be isolated from earth ground.

6.5 The video output, communication, and power to the image sensor shall include transient protection to prevent damage to the sensor due to transient voltages occurring on the cable leading from the image sensor to other field locations.

6.6 A stainless steel junction box shall be available as an option with each image sensor for installation on the structure used for image sensor mounting. The junction box shall contain a terminal block for terminating power to the image sensor and connection points for coaxial cables from the image sensor and from the ACU.

6.7 A video interface panel shall be included for installation inside of the traffic cabinet. The panel shall provide coaxial cable / twisted pair connection points and an Edco RMCXI-06 or approved equal transient suppressor for each image sensor. The shield side of the coaxial cable connection at the transient suppressor shall be connected to earth ground via the transient suppressor.

If the coaxial cable / twisted pair used to connect the video signal from the image sensor to the ACU are to be routed through a conduit containing unbundled AC power cables, a video isolation amplifier shall be installed in addition to the video interface panel if interference is present. There will be no additional compensation for providing the video isolation amplifier if necessitated by the presence of video interference. The isolation amplifier shall buffer the video signal and provide transient suppression. The isolation amplifier shall have a minimum common mode rejection ratio at 60 Hz of 100 dB.

6.8 The image sensor shall be connected to the ACU such that the video signal originating from the image sensor is not attenuated more than 3 dB when measured at the ACU.
When the connection between the image sensor and the ACU is coaxial cable, the coaxial cable used shall be a low loss 75 ohm precision video cable suited for outdoor installation, such as Belden 8281, West Penn P806, or approved equal.

7.0 Software

7.1 The system shall include the remote access software that is used to setup and configure the video detection system. The software shall be of the latest revision.

7.2 All necessary cable, adapters, and other equipment shall be included with the system.

8.0 Installation and Training

8.1 The supplier of the video detection system shall supervise the installation and testing of the video and video vehicle detection equipment. A factory certified representative from the supplier shall be on-site during installation.

8.2 Training shall be available upon request.

9.0 Warranty, Maintenance, and Support

9.1 The video detection system shall be warranted by its supplier for a minimum of two (2) years from date of turn-on. This warranty shall cover all material defects and shall also provide all parts and labor as well as unlimited technical support.

9.2 Ongoing software support by the supplier shall include updates of the ACU and supervisor software. These updates shall be provided free of charge during the warranty period.

9.3 The supplier shall maintain a program for technical support and software updates following expiration of the warranty period. This program shall be made available to the contracting agency in the form of a separate agreement for continuing support.

Basis of Payment: The above work will be paid for at the contract unit price Each for VIDEO CAMERA DETECTOR SYSTEM which price will be payment in full for all labor, equipment, and materials required to supply, install, configure, and test the video vehicle detection system described above, complete.

WATER MAIN LINE STOP

This item shall be furnished and installed in accordance with the City of Rockford Water Division Specifications and the requirements of the Engineer.

The contractor shall tap the existing water main at the locations indicated on the plans and plug the existing main with a rubber bladder to isolate the existing main during construction of water main improvements to achieve a workable shut down..

The cost of the trench backfill, where applicable, shall be included in the contract unit price bid for this item.

Method of Measurement: Measurement for this work will be per each in place.

Basis of Payment: This work will be paid for at the contract unit price per each for WATER MAIN LINE STOP 6", WATER MAIN LINE STOP 8", and WATER MAIN LINE STOP 12" which price shall include any labor, materials, and trench backfill necessary for a complete installation.

WATER MAIN PROTECTION

This work shall conform to the applicable articles of current, Rockford Water Division Specifications, Standard Specifications for Water and Sewer Main Construction in Illinois, and the requirements of the Engineer.

This work shall consist of supplying material and the installation of SDR 26 PVC water main quality casing pipe of size specified on the plan set, proper backfilling around the casing pipe with an Engineer approved material, sealing the ends of casing pipe, proper disposal of excavated material and all other work required to complete installation of the casing pipe.

The need for water main and water service casing will be determined in the field at sewer crossings and shall be authorized by the Engineer or the City of Rockford.

Method of Measurement: Measurement for this work will be in place per foot and not to exceed what the Engineer has authorized in writing.

Basis of Payment: This work will be paid for at the contract unit price per foot for WATER MAIN PROTECTION, of the size specified which price shall include any labor, materials, and trench backfill necessary for a complete installation..

WATER MAIN REMOVAL

This work shall include the removal of existing water mains where shown on the plans. The existing valve vault shall be excavated and removed for the full depth of the structure. The contractor shall sawcut the existing water main and remove the valve and associated appurtenances. The existing pipes shall be plugged.

This item shall include removal and proper disposal of all material. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per foot.

Basis of Payment: This work will be paid for at the contract unit price per foot for WATER MAIN REMOVAL, 6", WATER MAIN REMOVAL , 8", and WATER MAIN REMOVAL, 12" which price shall include any labor, materials, and trench backfill necessary for a complete installation.

WATER SERVICE RECONNECTION

This work shall conform to the City of Rockford Water Division Specifications and the requirements of the Engineer. This item shall consist of furnishing and installation of water service line, of the proper size, complete with corporation stop valve, curb stop valve and curb stop box. Unless otherwise indicated on the plans, curb stop boxes shall be placed as described below, or as directed by the Engineer. Curb stop boxes shall be placed on the right-of-way (ROW) line for locations where existing structures to remain are set back from the ROW, and the ROW is outside of proposed pedestrian surfaces. For locations where existing structures to remain are at or near the ROW and the ROW line is within proposed pedestrian surfaces, the curb stop boxes shall be placed 1'-0" behind the face of the proposed curb and provide a minimum clear space of 4'-0" for all pedestrian surfaces. Also included in this item are the cost of all connections (including disconnection and reconnection of existing water services), removal of the existing curb stop and curb box, excavation, sidewalk removal, curb and gutter removal, and trench backfill. These services shall be installed at the locations shown on the plans. Final location to be field verified by the Contractor to match existing service location at the point of connection, unless indicated otherwise. All services extending under the roadway shall be installed in a trench-less procedure as approved by the Engineer.

All water services are required to be installed / tapped by licensed plumber and inspected by City of Rockford (Building Department) prior to backfilling. A crimping tool shall not be used to temporarily stop a water service, except in an emergency. If a crimping tool is used to stop a service line, the final repair shall be as directed by the Engineer, but in no case shall un-crimping the line be allowed.

Method of Measurement: Measurement for this work will be per EACH.

Basis of Payment: This work will be paid for at the contract unit price per each for WATER SERVICE RECONNECTION (2" Dia or Less) and WATER SERVICE RECONNECTION (4" Dia or Greater) which price shall include any labor, materials, and trench backfill necessary for a complete installation.

WATER SERVICE TO BE ABANDONED, (2" DIA OR LESS), (OVER 2" DIA)

This work shall conform to the City of Rockford Water Division Specifications, Section 12 and the requirements of the Engineer. This item shall consist of furnishing and installation of all materials necessary for abandoning the water service at the main. For services 2 inches and smaller, the disconnection involves excavating the service where it is connected to the water main, removing the corporation stop and installing a repair clamp. The repair clamp shall be a full circle single band stainless steel clamp such as Dresser Style 360, Smith-Blair 200 series or approved equal. For services larger than 2 inches, the service tee shall be capped with a mechanical cap.

All clamps and capped tees shall be wrapped in polywrap per the City of Rockford Water Division Specifications, Section 12.

This item shall include removal and proper disposal of all material. The excavated hole shall be properly backfilled and shall include trench backfill where required.

Method of Measurement: Measurement for this work will be per EACH.

Basis of Payment: This work will be paid for at the contract unit price per each for WATER SERVICE TO BE ABANDONED (2" DIA OR LESS) and WATER SERVICE TO BE ABANDONED (OVER 2" DIA) which price shall include any labor, materials, and trench backfill necessary for a complete installation.

WATER VALVES 8"

This work shall consist of furnishing all labor, equipment and material necessary to install 8" Gate Valves, complete with valve boxes at the locations shown on the plans or as directed by the Engineer and in accordance with the City of Rockford Water Main Specifications and Section 602 of the IDOT Standard Specifications.

The cost of the valve box and trench backfill, where applicable, shall be included in the contract unit price bid for this item.

Method of Measurement: Measurement for this work will be per each in place.

Basis of Payment: This work will be paid for at the contract unit price per each for WATER VALVES 8" which price shall include any labor, materials, and trench backfill necessary for a complete installation.

WORK ZONE PAVEMENT MARKING AND REMOVAL
Effective: December 29, 2008

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 Section 703 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.

REMOVAL AND DISPOSAL OF REGULATED SUBSTANCES

The 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 2339V-6 – Greenwood Cemetery

- Station 534+50 to Station 538+60 (CL Proposed IL Route 2, Main Street), 0 to 45 feet RT (Greenwood Cemetery, PESA Site 2339V-6, 1500-2100 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(p)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Arsenic, Lead, and Manganese.
- Station 538+60 to Station 540+10 (CL Proposed IL Route 2, Main Street), 0 to 50 feet RT (Greenwood Cemetery, PESA Site 2339V-6, 1500-2100 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(p)pyrene and Manganese.
- Station 540+10 to Station 541+55 (CL Proposed IL Route 2, Main Street), 0 to 50 feet RT (Greenwood Cemetery, PESA Site 2339V-6, 1500-2100 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(p)pyrene, Dibenzo(a,h)anthracene, Lead, and Manganese.
- Station 541+55 to Station 544+55 (CL Proposed IL Route 2, Main Street), 0 to 50 feet RT (Greenwood Cemetery, PESA Site 2339V-6, 1500-2100 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(p)pyrene, Lead, and Manganese.
- Station 544+55 to Station 546+00 (CL Proposed IL Route 2, Main Street), 0 to 45 feet RT (Greenwood Cemetery, PESA Site 2339V-6, 1500-2100 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead and Manganese.
- Station 546+00 to Station 552+40 (CL Proposed IL Route 2, Main Street), 0 to 45 feet RT (Greenwood Cemetery, PESA Site 2339V-6, 1500-2100 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(p)pyrene, Lead, and Manganese.
- Station 552+40 to Station 553+90 (CL Proposed IL Route 2, Main Street), 0 to 50 feet RT (Greenwood Cemetery, PESA Site 2339V-6, 1500-2100 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(p)pyrene, Lead, and Manganese.
- Station 553+90 to Station 554+85 (CL Proposed IL Route 2, Main Street), 0 to 45 feet RT (Greenwood Cemetery, PESA Site 2339V-6, 1500-2100 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(p)pyrene and Lead.

Site 2339V-11 – Commercial Building No. 1

- Station 534+30 to Station 535+00 (CL Proposed IL Route 2, Main Street), 0 to 40 feet LT (Commercial Building No. 1, PESA Site 2339V-11, 1702-1704 N. Main Street, Rockford). This material meets the criteria of Article 669.09(b)(1) and shall be managed in accordance to Article 669.09.

Site 2339V-12 – JGC United Publishing

- Station 535+00 to Station 536+70 (CL Proposed IL Route 2, Main Street), 0 to 60 feet LT (JGC United Publishing, PESA Site 2339V-12, 1706 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Site 2339V-17 – Apartment Building

- Station 542+00 to Station 543+00 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Apartment Building, PESA Site 2339V-17, 1904 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(p)pyrene and Lead.

Site 2339V-23: Mixed Use Building

- Station 553+40 to Station 554+80 (CL Proposed IL Route 2, Main Street), 0 to 75 feet LT (Mixed Use Building, PESA Site 2339V-23, 2128 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(p)pyrene and Lead.

Site 2339V-24: Carpenter's Auto Repair

- Station 554+85 to Station 556+75 (CL Proposed IL Route 2, Main Street), 0 to 75 feet RT (Carpenter's Auto Repair, PESA Site 2339V-24, 2201 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Site 2339V-25: Mulligan's Pub and Grill

- Station 554+85 to Station 555+80 (CL Proposed IL Route 2, Main Street), 0 to 75 feet LT (Mulligan's Pub and Grill, PESA Site 2339V-25, 2212 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(b)flouranthene and Dibenzo(a,h)anthracene.
- Station 555+80 to Station 556+90 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Mulligan's Pub and Grill, PESA Site 2339V-25, 2212 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Arsenic.

Site 2339V-27: Visiting Nurses Association

- Station 556+75 to Station 558+35 (CL Proposed IL Route 2, Main Street), 0 to 65 feet RT (Visiting Nurses Association, PESA Site 2339V-27, 2215-2217 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and manganese.

Site 2339V-28: Commercial Building No. 3

- Station 556+90 to Station 558+50 (CL Proposed IL Route 2, Main Street), 0 to 60 feet LT (Commercial Building No.3, PESA Site 2339V-28, 2216-2220 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead and Manganese.

Site 2339V-30: Olympic Tavern

- Station 558+35 to Station 559+70 (CL Proposed IL Route 2, Main Street), 0 to 60 feet RT (Olympic Tavern, PESA Site 2339V-30, 2327 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Lead, and Manganese.
- Station 559+70 to Station 560+60 (CL Proposed IL Route 2, Main Street), 0 to 60 feet RT (Olympic Tavern, PESA Site 2339V-30, 2327 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.
- Station 560+60 to Station 562+30 (CL Proposed IL Route 2, Main Street), 0 to 80 feet RT (Olympic Tavern, PESA Site 2339V-30, 2327 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 181+60 to Station 182+50 (CL Proposed Fulton Avenue), 0 to 40 feet RT (Olympic Tavern, PESA Site 2339V-30, 2327 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

Site 2339V-36: The Chop Shop

- Station 562+30 to Station 563+00 (CL Proposed IL Route 2, Main Street), 0 to 100 feet RT (The Chop Shop, PESA Site 2339V-36, 2401 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead and Manganese.
- Station 563+00 to Station 564+70 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (The Chop Shop, PESA Site 2339V-36, 2401 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Dibenzo(a,h)anthracene.

Site 2339V-40: World Class Tool and Machine Company

- Station 563+00 to Station 564+00 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (World Class Tool and Machine Company, PESA Site 2339V-40, 2422 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Manganese.

Site 2339V-41: Pure-Flo H2O

- Station 564+70 to Station 566+70 (CL Proposed IL Route 2, Main Street), 0 to 65 feet LT (Pure-Flo H2O, PESA Site 2339V-41, 2430-2432 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Site 2339V-42: Vacant Land No.2

- Station 564+70 to Station 568+10 (CL Proposed IL Route 2, Main Street), 0 to 70 feet RT (Vacant Land No. 2, PESA Site 2339V-42, 2500 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Manganese.
- Station 210+90 to Station 212+50 (CL Ford Avenue), 0 to 50 feet RT (Vacant Land No. 2, PESA Site 2339V-42, 2500 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Site 2339V-43: Industrial Building No.1

- Station 566+70 to Station 567+60 (CL Proposed IL Route 2, Main Street), 0 to 60 feet LT (Industrial Building No. 1, PESA Site 2339V-43, 2500 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.
- Station 567+60 to Station 568+10 (CL Proposed IL Route 2, Main Street), 0 to 100 feet LT (Industrial Building No. 1, PESA Site 2339V-43, 2500 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, and Benzo(b)flouranthene.
- Station 198+15 to Station 199+10 (CL Ford Avenue), 0 to 20 feet RT (Industrial Building No. 1, PESA Site 2339V-43, 2500 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Lead, and Manganese.

Site 2339V-44: Commercial Building No.4

- Station 196+80 to Station 199+10 (CL Ford Avenue), 0 to 20 feet LT (Commercial Building No. 4, PESA Site 2339V-44, 2516 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)pyrene.
- Station 568+10 to Station 568+75 (CL Proposed IL Route 2, Main Street), 0 to 100 feet LT (Commercial Building No. 4, PESA Site 2339V-44, 2516 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.
- Station 568+75 to Station 570+15 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Commercial Building No. 4, PESA Site 2339V-44, 2516 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Benzo(b)flouranthene, and Dibenzo(a,h)anthracene.

Site 2339V-45: Pino's on Main

- Station 210+35 to Station 212+10 (CL Ford Avenue), 0 to 30 feet LT (Pino's on Main, PESA Site 2339V-45, 2511 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Manganese.
- Station 568+10 to Station 568+75 (CL Proposed IL Route 2, Main Street), 0 to 30 feet RT (Pino's on Main, PESA Site 2339V-45, 2511 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Manganese.
- Station 568+75 to Station 569+65 (CL Proposed IL Route 2, Main Street), 0 to 30 feet RT (Pino's on Main, PESA Site 2339V-45, 2511 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)pyrene.
- Station 569+65 to Station 570+80 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Pino's on Main, PESA Site 2339V-45, 2511 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Site 2339V-49: Commercial Building No. 5

- Station 575+00 to Station 576+40 (CL Proposed IL Route 2, Main Street), 0 to 70 feet LT (Commercial Building No. 5, PESA Site 2339V-49, 2704 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Site 2339V-50: Crown Machine Inc.

- Station 240+50 to Station 242+20 (CL Edson Street), 0 to 40 feet LT (Crown Machine Inc., PESA Site 2339V-50, 2707 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Manganese.
- Station 575+00 to Station 575+90 (CL Proposed IL Route 2, Main Street), 0 to 55 feet RT (Crown Machine Inc., PESA Site 2339V-50, 2707 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Manganese.
- Station 575+90 to Station 577+15 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Crown Machine Inc., PESA Site 2339V-50, 2707 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead.

Site 2339V-51: Commercial Building No. 6

- Station 577+15 to Station 578+50 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Crown Machine Inc., PESA Site 2339V-50, 2715 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, and Lead.

Site 2339V-52: Panino's

- Station 578+50 to Station 580+00 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Panino's, PESA Site 2339V-52, 2725 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Manganese.

Site 2339V-53: Industrial Building No. 2

- Station 578+75 to Station 580+00 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Industrial Building No.2, PESA Site 2339V-53, 2816 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.
- Station 580+00 to Station 583+20 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Industrial Building No.2, PESA Site 2339V-53, 2816 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead and Manganese.
- Station 583+20 to Station 585+90 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Industrial Building No.2, PESA Site 2339V-53, 2816 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.

Site 2339V-54: Olson Cremation & Funeral Services, Inc.

- Station 580+00 to Station 581+10 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Olson Cremation & Funeral Services, Inc., PESA Site 2339V-54, 2811 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, Lead, and Manganese.

Site 2339V-55: Spectrum Progressive School

- Station 581+10 to Station 582+20 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Spectrum Progressive School, PESA Site 2339V-55, 2909 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Lead, and Manganese.
- Station 582+20 to Station 583+20 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Spectrum Progressive School, PESA Site 2339V-55, 2909 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, Lead, and Manganese.
- Station 583+20 to Station 585+20 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Spectrum Progressive School, PESA Site 2339V-55, 2909 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, Lead, and Manganese.

Site 2339V-56: The Beauty Salon

- Station 585+20 to Station 586+25 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (The Beauty Salon, PESA Site 2339V-56, 2915 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Manganese.

Site 2339V-61: Commercial Building No. 7

- Station 589+00 to Station 590+45 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Commercial Building No. 7, PESA Site 2339V-61, 3007 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, Lead, and Manganese.

Site 2339V-62: Commercial Building No. 8

- Station 588+00 to Station 589+30 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Commercial Building No. 8, PESA Site 2339V-62, 3004-3006 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.

Site 2339V-63: Butitta Brothers Auto Repair

- Station 589+30 to Station 591+35 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Butitta Brothers Auto Repair, PESA Site 2339V-63, 3012 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.

Site 2339V-64: Cube Smart

- Station 590+45 to Station 592+00 (CL Proposed IL Route 2, Main Street), 0 to 75 feet RT (Cube Smart, PESA Site 2339V-64, 3015 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.

Site 2339V-65: Iowa, Chicago & Eastern Railroad

- Station 592+00 to Station 593+50 (CL Proposed IL Route 2, Main Street), 0 to 130 feet RT (Iowa, Chicago & Eastern Railroad, PESA Site 2339V-65, 3000 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 591+35 to Station 593+00 (CL Proposed IL Route 2, Main Street), 0 to 130 feet RT (Iowa, Chicago & Eastern Railroad, PESA Site 2339V-65, 3000 block of N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.

Site 2339V-67: Auto Zone

- Station 593+50 to Station 594+80 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Auto Zone, PESA Site 2339V-67, 3101 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Lead.
- Station 594+80 to Station 595+70 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Auto Zone, PESA Site 2339V-67, 3101 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, and Manganese.
- Station 595+70 to Station 596+80 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Auto Zone, PESA Site 2339V-67, 3101 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Site 2339V-70: Happy Wok

- Station 596+80 to Station 598+00 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Happy Wok, PESA Site 2339V-70, 3137 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, and manganese.
- Station 598+00 to Station 599+25 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Happy Wok, PESA Site 2339V-70, 3137 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)pyrene.

Site 2339V-73: Commercial Building No. 9

- Station 599+25 to Station 601+00 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Commercial Building No. 9, PESA Site 2339V-73, 3211-3223 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, and Indeno(1,2,3-cd)pyrene.

Site 2339V-80: Mobil Gas Station

- Station 606+15 to Station 607+80 (CL Proposed IL Route 2, Main Street), 0 to 80 feet LT (Mobil Gas Station, PESA Site 2339V-80, 3338 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Dibenzo(a,h)anthracene, and Manganese.
- Station 338+10 to Station 339+10 (CL Halsted Road), 0 to 30 feet RT (Mobil Gas Station, PESA Site 2339V-80, 3338 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Dibenzo(a,h)anthracene.

Site 2339V-81: Walgreen's

- Station 605+80 to Station 607+15 (CL Proposed IL Route 2, Main Street), 0 to 50 feet RT (Walgreen's, PESA Site 2339V-81, 3325 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 607+15 to Station 607+80 (CL Proposed IL Route 2, Main Street), 0 to 50 feet RT (Walgreen's, PESA Site 2339V-81, 3325 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Manganese.
- Station 340+50 to Station 341+75 (CL Halsted Road), 0 to 60 feet RT (Walgreen's, PESA Site 2339V-81, 3325 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

Site 2339V-82: Road Ranger

- Station 607+80 to Station 608+45 (CL Proposed IL Route 2, Main Street), 0 to 80 feet RT (Road Ranger, PESA Site 2339V-82, 3429 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene and Lead.
- Station 608+45 to Station 609+20 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Road Ranger, PESA Site 2339V-82, 3429 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Lead, and Manganese.
- Station 609+20 to Station 610+00 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Road Ranger, PESA Site 2339V-82, 3429 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.
- Station 610+00 to Station 611+00 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Road Ranger, PESA Site 2339V-82, 3429 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

Site 2339V-83: Commercial Building No. 10

- Station 607+80 to Station 610+20 (CL Proposed IL Route 2, Main Street), 0 to 85 feet LT (Commercial Building No. 10, PESA Site 2339V-83, 3402 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Lead, and Manganese.

Site 2339V-85: Commercial Building No. 11

- Station 611+95 to Station 612+05 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Commercial Building No. 11, PESA Site 2339V-85, 3431-3445 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(5) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, and Manganese.
- Station 380+50 to Station 381+80 (CL Proposed Belmont Boulevard), 0 to 30 feet RT (Commercial Building No. 11, PESA Site 2339V-85, 3431-3445 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.

Site 2339V-96: Roy McNitt, D.D.S.

- Station 617+90 to Station 619+25 (CL Proposed IL Route 2, Main Street), 0 to 40 feet RT (Roy McNitt, D.D.S., PESA Site 2339V-96, 3535 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(4) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)anthracene, Benzo(a)pyrene, Benzo(b)flouranthene, Dibenzo(a,h)anthracene, and Lead.

Site 2339V-99: North Towne Mall

- Station 400+50 to Station 401+85 (CL River Bluff Blvd.), 0 to 60 feet LT (North Towne Mall, PESA Site 2339V-99, 3601-3641 N. Main Street and 808-1098 W. Riverside Blvd., Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 621+00 to Station 621+90 (CL Proposed IL Route 2, Main Street), 0 to 60 feet RT (North Towne Mall, PESA Site 2339V-99, 3601-3641 N. Main Street and 808-1098 W. Riverside Blvd., Rockford). This material meets the criteria of Article 669.09(a)(3) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene.
- Station 622+70 to Station 624+25 (CL Proposed IL Route 2, Main Street), 0 to 65 feet RT (North Towne Mall, PESA Site 2339V-99, 3601-3641 N. Main Street and 808-1098 W. Riverside Blvd., Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.

Site 2339V-105: Commercial Building No. 12

- Station 628+20 to Station 629+50 (CL Proposed IL Route 2, Main Street), 0 to 80 feet LT (Commercial Building No. 12, PESA Site 2339V-105, 3710 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 714+65 to Station 716+45 (CL Proposed Riverside Blvd.), 0 to 60 feet LT (Commercial Building No. 12, PESA Site 2339V-105, 3710 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Manganese.
- Station 717+75 to Station 718+95 (CL Proposed Riverside Blvd.), 0 to 70 feet LT (Commercial Building No. 12, PESA Site 2339V-105, 3710 N. Main Street, Rockford). This material meets the criteria of Article 669.09(a)(2) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Lead.

Site 2339-8: Meineke Discount Muffler and Brake

- Station 726+20 to Station 727+90 (CL Proposed Riverside Blvd.), 0 to 50 feet LT (Meineke Discount Muffler and Brake, PESA Site 2339-8, 905 W. Riverside Blvd., Rockford). This material meets the criteria of Article 669.09(a)(1) and shall be managed in accordance to Article 669.09. Contaminants of concern sampling parameters: Benzo(a)pyrene, Lead, and Manganese.

Engineered Barrier. An engineered barrier shall be installed in storm sewer trenches to limit the exposure and control the migration of contamination from the contaminated soil that remains within the trench excavation. It shall be placed beneath the trench backfill material in the following areas:

- Station 555+80 to Station 556+90 (CL Proposed IL Route 2, Main Street), 0 to 50 feet LT (Mulligan's Pub and Grill, PESA Site 2339V-25, 2212 N. Main Street, Rockford). Contaminants of concern sampling parameters: Benzo(a)pyrene and Arsenic.

The engineered barrier shall consist of a geosynthetic clay liner system, geomembrane liner, or equivalent material as approved by the Engineer. A geosynthetic clay liner shall be composed of a bentonite clay liner approximately 6.4 millimeters (0.25 inches) thick. The engineered barrier shall have a permeability of less than 10^{-7} cm/sec. Installation of the geosynthetic clay liner system shall be in accordance with the manufacturer's recommendations except that all laps shall face down-slope.

The geomembrane liner shall have a minimum thickness of 30 mil. The geomembrane liner shall line the entire trench and in accordance with the manufacturer's recommendations.

No equipment will be allowed on the engineered barrier until it is covered by a minimum of 305 millimeters (1 foot) of backfill. Any damage to the engineered barrier caused by the Contractor shall be repaired at no additional expense to the Department in accordance with the manufacturer's recommendations and as directed by the Engineer.

Method of Measurement. Engineered barrier will be measured for payment in place and the area computed in square meters (square yards).

Basis of Payment. The engineered barrier will be paid for at the contract unit price per square meters (square yards) for ENGINEERED BARRIER.

SEGMENTAL CONCRETE BLOCK WALL
Effective: January 7, 1999 Revised: October 30, 2012

Description. This work shall consist of furnishing the design computations, shop plans, materials, equipment and labor to construct a Segmental Concrete Block Retaining Wall to the limits shown on the plans.

General. The wall shall consist of a leveling pad, precast concrete blocks (either dry-cast or wet cast), select fill and, if required by the design, soil reinforcement. The wall shall be designed and constructed according to the lines, grades, and dimensions shown on the contract plans and approved shop plans.

Submittals. The wall supplier shall submit design computations and shop plans to the Engineer according to Article 1042.03(b) of the Standard Specifications. 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. The shop plans 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 first course of blocks at all changes in horizontal alignment. These shall be calculated using the offsets to the front face of the block shown on the contract plans and the suppliers proposed wall batter. The plan view shall indicate bottom (and top course of block when battered), the excavation and select fill limits as well as any soil reinforcing required by the design. The centerline of any drainage structure or pipe behind or passing through/under the wall shall also be shown.

(2) An elevation view of the wall, indicating the elevation and all steps in the top course of blocks along the length of the wall. The top of these blocks shall be at or above the theoretical top of block line shown on the contract plans. This view shall also show the steps and proposed top of leveling pad elevations as well as the finished grade line at the wall face specified on the contract plans. These leveling pad elevations shall be located at or below the theoretical top of leveling line shown on the contract plans. The location, size, and length of any soil reinforcing connected to the blocks shall be indicated.

(3) Typical cross section(s) showing the limits of the select fill, soil reinforcement if used in the design. The right-of-way limits shall be indicated as well as the proposed excavation, cut slopes, and the elevation relationship between existing ground conditions and proposed grades.

(4) All general notes required for constructing the wall.

(b) All details for the leveling pads, including the steps, shall be shown. The theoretical top of the leveling pad shall either be below the anticipated frost depth or 1.5 ft. (450 mm) below the finished grade line at the wall face, whichever is greater; unless otherwise shown on the plans. The minimum leveling pad thickness shall be 6 in. (152 mm)

(c) Cap blocks shall be used to cover the top of the standard block units. The top course of blocks and cap blocks shall be stepped to satisfy the top of block line shown on the contract plans.

(d) All details of the block and/or soil reinforcement placement around all appurtenances located behind, on top of, or passing through the wall shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular design arrangement shall also be submitted.

(e) All details of the blocks, including color and texture shall be shown. The exterior face shall preferably be straight, textured with a “split rock face” pattern, and dark gray in color unless otherwise stated on the plans.

(f) All block types (standard, cap, corner, and radius turning blocks) shall be detailed showing all dimensions.

(g) All blocks shall have alignment/connection devices such as shear keys, leading/trailing lips, or pins. The details for the connection devices between adjacent blocks and the block to soil reinforcement shall be shown. The block set back or face batter shall be limited to 20 degrees from vertical, unless otherwise shown by the plans.

Materials. The materials shall meet the following requirements:

(a) Dry-Cast Concrete Block: Dry-cast concrete block proposed for use shall be pre-cast and produced according Article 1042.02 and the requirements of ASTM C1372 except as follows:

1. Fly ash shall be according to Articles 1010.01 and 1010.02(b).

2. Ground granulated blast-furnace slag shall be according to Articles 1010.01 and 1010.05.

3. Aggregate shall be according to Articles 1003.02 and 1004.02, with the exception of gradation.

4. Water shall be according to Section 1002.

5. Testing for freeze-thaw durability will not be required. However, unsatisfactory field performance as determined by the Department will be cause to prohibit the use of the block on Department projects.

(b) Wet-cast Concrete Block: Wet-cast concrete block proposed for use shall be pre-cast and produced according to Section 1020 and Article 1042.02. The concrete shall be Class PC with a minimum compressive strength of at least 3000 psi (31 MPa) at 28 days.

(c) Select fill: 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. 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 (Na_2SO_4) 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 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.

(5) 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. However, the pH will be required only when geosynthetic reinforcing is used. 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 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 only 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.

When a fine aggregate is selected, the rear of all block joints shall be covered by a non-woven needle punch geotextile filter material according to Article 1080.05 of the Standard Specifications and shall have a minimum permeability according to ASTM D4491 of 0.008 cm/sec. All fabric overlaps shall be 6 in. (150 mm) and non-sewn. As an alternative to the geotextile, a coarse aggregate shall be placed against the back face of the blocks to create a minimum 12 in. (300 mm) wide continuous gradation filter to prevent the select fill material from passing through the block joints.

(d) Leveling pad: The material shall be either Class SI concrete according to Article 1020.04 or compacted coarse aggregate according to Articles 1004.04, (a) and (b). The compacted coarse aggregate gradation shall be CA 6 or CA 10.

(e) Soil Reinforcement: If soil reinforcement is required by the approved design, the Contractor shall submit a manufacturer's certification for the soil reinforcement properties which equals or exceeds those required in the design computations. The soil reinforcement shall be manufactured from high density polyethylene (HDPE) uniaxial or polypropylene biaxial resins or high tenacity polyester fibers with a PVC coating, stored between -20 and 140° F (-29 and 60° C). The following standards shall be used in determining and demonstrating the soil reinforcement capacities:

ASTM D638 Test Method for Tensile Properties of Plastic
ASTM D1248 Specification for Polyethylene Plastics Molding and Extrusion Materials
ASTM D4218 Test Method for Carbon Black Content in Polyethylene Compounds
ASTM D5262 Test Method for Evaluating the Unconfined Tension Creep Behavior of Geosynthetics
GG1-Standard Test Method for Geogrid Rib Tensile Strength
GG2-Standard Test Method for Geogrid Junction Strength
GG4-Standard Practice for Determination of the Long Term Design Strength of Geogrid
GG5-Standard Practice for Evaluating Geogrid Pullout Behavior

Design Criteria. The design shall be according to AASHTO Specifications and commentaries for Earth Retaining Walls or FHWA Publication No. HI-95-038, SA-96-071 and SA-96-072. The wall supplier shall be responsible for all internal stability aspects of the wall design.

Internal stability design shall insure that adequate factors of safety against overturning and sliding are present at each level of block. If required by design, soil reinforcement shall be utilized and the loading at the block/soil reinforcement connection as well as the failure surface must be indicated. The calculations to determine the allowable load of the soil reinforcement and the factor of safety against pullout shall also be included. The analysis of settlement, bearing capacity, and overall slope stability are 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.

Construction Requirements. The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include all costs related to this technical assistance in the unit price bid for this item.

The foundation material for the leveling pad and select fill volume shall be graded to the design elevation and compacted according to Article 205.05, except the minimum required compaction shall be 95 percent of the standard laboratory density. The Engineer will perform one density test per 1500 ft (450 m) of the entire length of foundation material through both cut and fill areas. Any foundation soils found to be unsuitable shall be removed and replaced as directed by the Engineer and shall be paid for according to Article 109.04.

The select fill lift placement shall closely follow the erection of each course of blocks. All aggregate shall be swept from the top of the block prior to placing the next block lift. If soil reinforcement is used, the select fill material shall be leveled and compacted before placing and attaching the soil reinforcement to the blocks. The soil reinforcement shall be pulled taut, staked in place, and select fill placed from the rear face of the blocks outward. The lift thickness shall be the lesser of 10 in. (255 mm) loose measurement or the proposed block height.

The select fill shall be compacted according to Article 205.05, except the minimum required compaction shall be 95 percent of the standard laboratory density. Compaction shall be achieved using a minimum of 3 passes of a lightweight 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 (0.6m) of lift. The top 12 in. (300 mm) of backfill shall be a cohesive, impervious material capable of supporting vegetation, unless other details are specified on the plans.

The blocks shall be maintained in position as successive lifts are compacted along the rear face of the block. Vertical, horizontal, and rotational alignment tolerances shall not exceed 0.5 in. (12 mm) when measured along a 10 ft. (3 m) straight edge.

Method of Measurement. Segmental Concrete Block Wall will be measured by the square foot (square meter) of wall face from the top of block line to the theoretical top of the leveling pad for the length of the wall in a vertical plane, as shown on the contract plans.

Basis of Payment. This work will be paid for at the contract unit price per square foot (square meter) for SEGMENTAL CONCRETE BLOCK WALL.

AGGREGATE SUBGRADE IMPROVEMENT (BDE)
Effective: April 1, 2012 Revised: January 1, 2013

Add the following Section to the Standard Specifications:

"**SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT**

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

303.02 Materials. Materials shall be according to the following.

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

Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01, 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:

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

(a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete.

(b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.

(c) Gradation.

(1) The coarse aggregate gradation for total subgrade thickness less than or equal to 12 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, CS 02 or RR 01(see Article 1005.01(c)).

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

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Grad No.	Sieve Size and Percent Passing				
	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."

COARSE AGGREGATE QUALITY (BDE)
Effective: July 1, 2015

Revise Article 1004.01(b) of the Standard Specifications to read:

"(b) Quality. The coarse aggregate shall be according to the quality standards listed in the following table.

COARSE AGGREGATE QUALITY				
QUALITY TEST	CLASS			
	A	B	C	D
Na_2SO_4 Soundness 5 Cycle, ITP 104 [1/], % Loss max.	15	15	20	25 [2/]
Los Angeles Abrasion, ITP 96 [11/], % Loss max.	40 [3/]	40 [4/]	40 [5/]	45
Minus No. 200 (75 µm) Sieve Material, ITP 11	1.0 [6/]	---	2.5 [7/]	---
Deleterious Materials [10/]				
Shale, % max.	1.0	2.0	4.0 [8/]	---
Clay Lumps, % max.	0.25	0.5	0.5 [8/]	---
Coal & Lignite, % max.	0.25	---	---	---
Soft & Unsound Fragments, % max.	4.0	6.0	8.0 [8/]	---
Other Deleterious, % max.	4.0 [9/]	2.0	2.0 [8/]	---
Total Deleterious, % max.	5.0	6.0	10.0 [8/]	---
Oil-Stained Aggregate [10/], % max	5.0	---	---	

1/ Does not apply to crushed concrete.

2/ For aggregate surface course and aggregate shoulders, the maximum percent loss shall be 30.

3/ For portland cement concrete, the maximum percent loss shall be 45.

4/ Does not apply to crushed slag or crushed steel slag.

5/ For hot-mix asphalt (HMA) binder mixtures, except when used as surface course, the maximum percent loss shall be 45.

6/ For crushed aggregate, if the material finer than the No. 200 (75 µm) sieve consists of the dust from fracture, essentially free from clay or silt, this percentage may be increased to 2.5.

7/ Does not apply to aggregates for HMA binder mixtures.

8/ Does not apply to Class A seal and cover coats.

9/ Includes deleterious chert. In gravel and crushed gravel aggregate, deleterious chert shall be the lightweight fraction separated in a 2.35 heavy media separation. In crushed stone aggregate, deleterious chert shall be the lightweight fraction separated in a 2.55 heavy media separation. Tests shall be run according to ITP 113.

10/ Test shall be run according to ITP 203.

11/ Does not apply to crushed slag.

All varieties of chert contained in gravel coarse aggregate for portland cement concrete, whether crushed or uncrushed, pure or impure, and irrespective of color, will be classed as chert and shall not be present in the total aggregate in excess of 25 percent by weight (mass).

Aggregates used in Class BS concrete (except when poured on subgrade), Class PS concrete, and Class PC concrete (bridge superstructure products only, excluding the approach slab) shall contain no more than two percent by weight (mass) of deleterious materials. Deleterious materials shall include substances whose disintegration is accompanied by an increase in volume which may cause spalling of the concrete."

COILABLE NONMETALLIC CONDUIT (BDE)
Effective: August 1, 2014 Revised: January 1, 2015

Revise Article 1088.01(c) of the Standard Specifications to read:

"(c) Coilable Nonmetallic Conduit. The conduit shall be a high density polyethylene duct which is intended for underground use can be manufactured and coiled or reeled in continuous transportable lengths and uncoiled for further processing and/or installation without adversely affecting its properties or performance. The conduit and its manufacture shall be according to UL 651A for Schedule 40 conduit, except Schedule 80 shall be used under pavement, stabilized shoulder, paved median, paved driveway, curb and/or gutter and sidewalk.

Performance Tests. Testing procedures and test results shall meet the requirements of UL 651A. Certified copies of the test report shall be submitted to the Engineer prior to the installation of the conduit."

CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH (BDE)
Effective: April 1, 2014 Revised: August 1, 2014

Add the following to Article 606.02 of the Standard Specifications:

"(i) Polyurethane Joint Sealant .....1050.04"

Revise the fifth paragraph of Article 606.07 of the Standard Specifications to read:

"Transverse contraction and longitudinal construction joints shall be sealed according to Article 420.12, except transverse joints in concrete curb and gutter shall be sealed with polysulfide or polyurethane joint sealant."

Add the following to Section 1050 of the Standard Specifications:

"**1050.04 Polyurethane Joint Sealant.** The joint sealant shall be a polyurethane sealant, Type S, Grade NS, Class 25 or better, Use T (T_1 or T_2), according to ASTM C 920."

CONCRETE MIX DESIGN – DEPARTMENT PROVIDED (BDE)
Effective: January 1, 2012 Revised: January 1, 2014

For the concrete mix design requirements in Article 1020.05(a) of the Supplemental Specifications and Recurring Special Provisions, 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.

CONTRACT CLAIMS (BDE)
Effective: April 1, 2014

Revise the first paragraph of Article 109.09(a) of the Standard Specifications to read:

"(a) Submission of Claim. All claims filed by the Contractor shall be in writing and in sufficient detail to enable the Department to ascertain the basis and amount of the claim. As a minimum, the following information must accompany each claim submitted."

Revise Article 109.09(e) of the Standard Specifications to read:

"(e) Procedure. The Department provides two administrative levels for claims review.

Level I Engineer of Construction
Level II Chief Engineer/Director of Highways or Designee

(1) Level I. All claims shall first be submitted at Level I. Two copies each of the claim and supporting documentation shall be submitted simultaneously to the District and the Engineer of Construction. The Engineer of Construction, in consultation with the District, will consider all information submitted with the claim and render a decision on the claim within 90 days after receipt by the Engineer of Construction. Claims not conforming to this Article will be returned without consideration. The Engineer of Construction may schedule a claim presentation meeting if in the Engineer of Construction's judgment such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. If a Level I decision is not rendered within 90 days of receipt of the claim, or if the Contractor disputes the decision, an appeal to Level II may be made by the Contractor.

(2) Level II. An appeal to Level II shall be made in writing to the Engineer of Construction within 45 days after the date of the Level I decision. Review of the claim at Level II shall be conducted as a full evaluation of the claim. A claim presentation meeting may be scheduled if the Chief Engineer/Director of Highways determines that such a meeting would aid in resolution of the claim, otherwise a decision will be made based on the claim documentation submitted. A Level II final decision will be rendered within 90 days of receipt of the written request for appeal.

Full compliance by the Contractor with the provisions specified in this Article is a contractual condition precedent to the Contractor's right to seek relief in the Court of Claims. The Director's written decision shall be the final administrative action of the Department. Unless the Contractor files a claim for adjudication by the Court of Claims within 60 days after the date of the written decision, the failure to file shall constitute a release and waiver of the claim."

DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE)
Effective: September 1, 2000 Revised: January 2, 2015

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

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

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

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

(a) Withholding progress payments;

(b) Assessing sanctions;

(c) Liquidated damages; and/or

(d) Disqualifying the Contractor from future bidding as non-responsible.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR Part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. The determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform **8.00%** of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work. A bidder makes a good faith effort for award consideration if either of the following is done in accordance with the procedures set for in this Special Provision:

(a) The bidder documents that enough DBE participation has been obtained to meet the goal or,

(b) The bidder documents that a good faith effort has been made to meet the goal, even though the effort did not succeed in obtaining enough DBE participation to meet the goal.

DBE LOCATOR REFERENCES. Bidders shall consult the IL UCP DBE Directory as a reference source for DBE-certified companies. In addition, the Department maintains a letting and item specific DBE locator information system whereby DBE companies can register their interest in providing quotes on particular bid items advertised for letting. Information concerning DBE companies willing to quote work for particular contracts may be obtained by contacting the Department's Bureau of Small Business Enterprises at telephone number (217) 785-4611, or by visiting the Department's website at www.dot.il.gov.

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

(a) The bidder shall submit a Disadvantaged Business Utilization Plan on Department forms SBE 2025 and 2026 with the bid.

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

(c) The Utilization Plan shall include a DBE Participation Commitment Statement, Department form SBE 2025, for each DBE proposed for the performance of work to achieve the contract goal. For bidding purposes, submission of the completed SBE 2025 forms, signed by the DBEs and faxed to the bidder will be acceptable as long as the original is available and provided upon request. All elements of information indicated on the said form shall be provided, including but not limited to the following:

(1) The names and addresses of DBE firms that will participate in the contract;

(2) A description, including pay item numbers, of the work each DBE will perform;

(3) The dollar amount of the participation of each DBE firm participating. The dollar amount of participation for identified work shall specifically state the quantity, unit price, and total subcontract price for the work to be completed by the DBE. If partial pay items are to be performed by the DBE, indicate the portion of each item, a unit price where appropriate and the subcontract price amount;

(4) DBE Participation Commitment Statements, form SBE 2025, signed by the bidder and each participating DBE firm documenting the commitment to use the DBE subcontractors whose participation is submitted to meet the contract goal;

(5) If the bidder is a joint venture comprised of DBE companies and non-DBE companies, the plan must also include a clear identification of the portion of the work to be performed by the DBE partner(s); and,

(6) If the contract goal is not met, evidence of good faith efforts; the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor is selected over a DBE for work on the contract.

GOOD FAITH EFFORT PROCEDURES. The contract will not be awarded until the Utilization Plan submitted by the apparent successful bidder is approved. All information submitted by the bidder must be complete, accurate and adequately document that enough DBE participation has been obtained or document that good faith efforts of the bidder, in the event enough DBE participation has not been obtained, before the Department will commit to the performance of the contract by the bidder. The Utilization Plan will be approved by the Department if the Utilization Plan documents sufficient commercially useful DBE work performance to meet the contract goal or the bidder submits sufficient documentation of a good faith effort to meet the contract goal pursuant to 49 CFR Part 26, Appendix A. The Utilization Plan will not be approved by the Department if the Utilization Plan does not document sufficient DBE participation to meet the contract goal unless the apparent successful bidder documented in the Utilization Plan that it made a good faith effort to meet the goal. This means that the bidder must show that all necessary and reasonable steps were taken to achieve the contract goal. Necessary and reasonable steps are those which, by their scope, intensity and appropriateness to the objective, could reasonably be expected to obtain sufficient DBE participation, even if they were not successful. The Department will consider the quality, quantity, and intensity of the kinds of efforts that the bidder has made. Mere *pro forma* efforts, in other words, efforts done as a matter of form, are not good faith efforts; rather, the bidder is expected to have taken genuine efforts that would be reasonably expected of a bidder actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

(a) The following is a list of types of action that the Department will consider as part of the evaluation of the bidder's good faith efforts to obtain participation. These listed factors are not intended to be a mandatory checklist and are not intended to be exhaustive. Other factors or efforts brought to the attention of the Department may be relevant in appropriate cases, and will be considered by the Department.

(1) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBE companies that have the capability to perform the work of the contract. The bidder must solicit this interest within sufficient time to allow the DBE companies to respond to the solicitation. The bidder must determine with certainty if the DBE companies are interested by taking appropriate steps to follow up initial solicitations.

(2) Selecting portions of the work to be performed by DBE companies in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the prime Contractor might otherwise prefer to perform these work items with its own forces.

(3) Providing interested DBE companies with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

(4) a. Negotiating in good faith with interested DBE companies. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBE companies that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBE companies to perform the work.

b. A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBE companies is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidders are not, however, required to accept higher quotes from DBE companies if the price difference is excessive or unreasonable. In accordance with Section 6 of the above Bidding Procedures, the documentation of good faith efforts must include copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract.

(5) Not rejecting DBE companies as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.

(6) Making efforts to assist interested DBE companies in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.

(7) Making efforts to assist interested DBE companies in obtaining necessary equipment, supplies, materials, or related assistance or services.

(8) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; local, state, and federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBE companies.

(b) If the Department determines that the apparent successful bidder has made a good faith effort to secure the work commitment of DBE companies to meet the contract goal, the Department will award the contract provided that it is otherwise eligible for award. If the Department determines that the bidder has failed to meet the requirements of this Special Provision or that a good faith effort has not been made, the Department will notify the responsible company official designated in the Utilization Plan that the bid is not responsive. The notification shall include a statement of reasons for the determination.

(c) The bidder may request administrative reconsideration of a determination adverse to the bidder within the five working days after the receipt of the notification date of the determination by delivering the request to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764 (Telefax: (217) 785-1524). Deposit of the request in the United States mail on or before the fifth business day shall not be deemed delivery. The determination shall become final if a request is not made and delivered. A request may provide additional written documentation or argument concerning the issues raised in the determination statement of reasons, provided the documentation and arguments address efforts made prior to submitting the bid. The request will be forwarded to the Department's Reconsideration Officer. The Reconsideration Officer will extend an opportunity to the bidder to meet in person in order to consider all issues of documentation and whether the bidder made a good faith effort to meet the goal. After the review by the Reconsideration Officer, the bidder will be sent a written decision within ten working days after receipt of the request for consideration, explaining the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so. A final decision by the Reconsideration Officer that a good faith effort was made shall approve the Utilization Plan submitted by the bidder and shall clear the contract for award. A final decision that a good faith effort was not made shall render the bid not responsive.

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

(a) DBE as the Contractor: 100 percent goal credit for that portion of the work performed by the DBE's own forces, including the cost of materials and supplies. Work that a DBE subcontracts to a non-DBE does not count toward the DBE goals.

(b) DBE as a joint venture Contractor: 100 percent goal credit for that portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work performed by the DBE's own forces.

(c) DBE as a subcontractor: 100 percent goal credit for the work of the subcontract performed by the DBE's own forces, including the cost of materials and supplies, excluding the purchase of materials and supplies or the lease of equipment by the DBE subcontractor from the prime Contractor or its affiliates. Work that a DBE subcontractor in turn subcontracts to a non-DBE does not count toward the DBE goal.

(d) DBE as a trucker: 100 percent goal credit for trucking participation provided the DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible. At least one truck owned, operated, licensed, and insured by the DBE must be used on the contract. Credit will be given for the following:

(1) The DBE may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

(2) The DBE may also lease trucks from a non-DBE firm, including from an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission is receives as a result of the lease arrangement.

(e) DBE as a material supplier:

(1) 60 percent goal credit for the cost of the materials or supplies purchased from a DBE regular dealer.

(2) 100 percent goal credit for the cost of materials of supplies obtained from a DBE manufacturer.

(3) 100 percent credit for the value of reasonable fees and commissions for the procurement of materials and supplies if not a regular dealer or manufacturer.

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

(a) NO AMENDMENT. No amendment to the Utilization Plan may be made without prior written approval from the Department's Bureau of Small Business Enterprises. All requests for amendment to the Utilization Plan shall be submitted to the Department of Transportation, Bureau of Small Business Enterprises, Contract Compliance Section, 2300 South Dirksen Parkway, Room 319, Springfield, Illinois 62764. Telephone number (217) 785-4611. Telefax number (217) 785-1524.

(b) CHANGES TO WORK. Any deviation from the DBE condition-of-award or contract plans, specifications, or special provisions must be approved, in writing, by the Department as provided elsewhere in the Contract. The Contractor shall notify affected DBEs in writing of any changes in the scope of work which result in a reduction in the dollar amount condition-of-award to the contract. Where the revision includes work committed to a new DBE subcontractor, not previously involved in the project, then a Request for Approval of Subcontractor, Department form BC 260A, must be signed and submitted. If the commitment of work is in the form of additional tasks assigned to an existing subcontract, than a new Request for Approval of Subcontractor shall not be required. However, the Contractor must document efforts to assure that the existing DBE subcontractor is capable of performing the additional work and has agreed in writing to the change.

(c) SUBCONTRACT. The Contractor must provide DBE subcontracts to IDOT upon request. Subcontractors shall ensure that all lower tier subcontracts or agreements with DBEs to supply labor or materials be performed in accordance with this Special Provision.

(d) ALTERNATIVE WORK METHODS. In addition to the above requirements for reductions in the condition of award, additional requirements apply to the two cases of Contractor-initiated work substitution proposals. Where the contract allows alternate work methods which serve to delete or create underruns in condition of award DBE work, and the Contractor selects that alternate method or, where the Contractor proposes a substitute work method or material that serves to diminish or delete work committed to a DBE and replace it with other work, then the Contractor must demonstrate one of the following:

(1) That the replacement work will be performed by the same DBE (as long as the DBE is certified in the respective item of work) in a modification of the condition of award; or

(2) That the DBE is aware that its work will be deleted or will experience underruns and has agreed in writing to the change. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so; or

(3) That the DBE is not capable of performing the replacement work or has declined to perform the work at a reasonable competitive price. If this occurs, the Contractor shall substitute other work of equivalent value to a certified DBE or provide documentation of good faith efforts to do so.

(e) TERMINATION AND REPLACEMENT PROCEDURES. The Contractor shall not terminate or replace a DBE listed on the approved Utilization Plan, or perform with other forces work designated for a listed DBE except as provided in this Special Provision. The Contractor shall utilize the specific DBEs listed to perform the work and supply the materials for which each is listed unless the Contractor obtains the Department's written consent as provided in subsection (a). Unless Department consent is provided for termination of a DBE subcontractor, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the DBE listed in the Utilization Plan.

As stated above, the Contractor shall not terminate or replace a DBE subcontractor listed in the approved Utilization Plan without prior written consent. This includes, but is not limited to, instances in which the Contractor seeks to perform work originally designated for a DBE subcontractor with its own forces or those of an affiliate, a non-DBE firm, or with another DBE firm. Written consent will be granted only if the Bureau of Small Business Enterprises agrees, for reasons stated in its concurrence document, that the Contractor has good cause to terminate or replace the DBE firm. Before transmitting to the Bureau of Small Business Enterprises any request to terminate and/or substitute a DBE subcontractor, the Contractor shall give notice in writing to the DBE subcontractor, with a copy to the Bureau, of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor shall give the DBE five days to respond to the Contractor's notice. The DBE so notified shall advise the Bureau and the Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why the Bureau should not approve the Contractor's action. If required in a particular case as a matter of public necessity, the Bureau may provide a response period shorter than five days.

For purposes of this paragraph, good cause includes the following circumstances:

(1) The listed DBE subcontractor fails or refuses to execute a written contract;

(2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;

(3) The listed DBE subcontractor fails or refuses to meet the prime Contractor's reasonable, nondiscriminatory bond requirements;

(4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;

(5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1,200 or applicable state law.

(6) You have determined that the listed DBE subcontractor is not a responsible contractor;

(7) The listed DBE subcontractor voluntarily withdraws from the projects and provides to you written notice of its withdrawal;

(8) The listed DBE is ineligible to receive DBE credit for the type of work required;

(9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;

(10) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime Contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime Contractor can self-perform the work for which the DBE contractor was engaged or so that the prime Contractor can substitute another DBE or non-DBE contractor after contract award.

When a DBE is terminated, or fails to complete its work on the Contract for any reason the Contractor shall make a good faith effort to find another DBE to substitute for the original DBE to perform at least the same amount of work under the contract as the terminated DBE to the extent needed to meet the established Contract goal. The good faith efforts shall be documented by the Contractor. If the Department requests documentation under this provision, the Contractor shall submit the documentation within seven days, which may be extended for an additional seven days if necessary at the request of the Contractor. The Department shall provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

(f) PAYMENT RECORDS. The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefore to the DBE by the Contractor, but not later than thirty calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Agreement on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the DBE Payment Agreement shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Utilization Plan and after good faith efforts are reviewed, the Department may deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages. The Contractor may request an administrative reconsideration of any amount deducted as damages pursuant to subsection (h) of this part.

(g) ENFORCEMENT. The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.

(h) RECONSIDERATION. Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor my request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of “Good Faith Effort Procedures” of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

EQUAL EMPLOYMENT OPPORTUNITY (BDE)
Effective: April 1, 2015

FEDERAL AID CONTRACTS. Revise the following section of Check Sheet #1 of the Recurring Special Provisions to read:

"EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act, or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

(1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

(2) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (according to the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.

(3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status or an unfavorable discharge from military service.

(4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

(5) That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.

(6) That it will permit access to all relevant books, records, accounts, and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.

(7) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations."

STATE CONTRACTS. Revise Section II of Check Sheet #5 of the Recurring Special Provisions to read:

"II. EQUAL EMPLOYMENT OPPORTUNITY

In the event of the Contractor's noncompliance with the provisions of this Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Illinois Department of Human Rights Rules and Regulations, the Contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political sub-divisions or municipal corporations, and the contract may be cancelled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

During the performance of this Contract, the Contractor agrees as follows:

1. That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.

2. That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability (according to the Illinois Department of Human Rights Rules and Regulations) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.

3. That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, sexual orientation, marital status, order of protection status, national origin or ancestry, citizenship status, age, physical or mental disability unrelated to ability, military status, or an unfavorable discharge from military service.

4. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations. If any labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and IDOT and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

5. That it will submit reports as required by the Illinois Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Illinois Department of Human Rights or IDOT, and in all respects comply with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.

6. That it will permit access to all relevant books, records, accounts and work sites by personnel of IDOT and the Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Illinois Department of Human Rights Rules and Regulations.

7. That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that the provisions will be binding upon the subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by subcontractors; and further it will promptly notify IDOT and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply with these provisions. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations."

FRICTION AGGREGATE (BDE)
Effective: January 1, 2011 Revised: November 1, 2014

Revise Article 1004.01(a)(4) of the Standard Specifications to read:

"(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.

a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).

b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase."

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Combination [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag [1/] Crushed Concrete

<table>
<tr><th>Use</th><th>Mixture</th><th>Aggregates Allowed</th></tr>
<tr><td>HMA
High ESAL
Low ESAL</td><td>Binder
IL-19.0
or IL-19.0L

SMA Binder</td><td><u>Allowed Alone or in Combination</u> [5/]:

Crushed Gravel
Carbonate Crushed Stone[2/]
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Concrete[3/]</td></tr>
<tr><td>HMA
High ESAL
Low ESAL</td><td>C Surface and Leveling Binder
IL-9.5 or IL-9.5L

SMA
Ndesign 50 Surface</td><td><u>Allowed Alone or in Combination</u> [5/]:

Crushed Gravel
Carbonate Crushed Stone[2/]
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag[4/]
Crushed Concrete[3/]</td></tr>
<tr><td rowspan="5">HMA
High ESAL</td><td rowspan="5">D Surface and Leveling Binder
IL-9.5

SMA
Ndesign 50
Surface</td><td><u>Allowed Alone or in Combination</u> [5/]:

Crushed Gravel
Carbonate Crushed Stone (other than Limestone)[2/]
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag[4/]
Crushed Concrete[3/]</td></tr>
<tr><td><u>Other Combinations Allowed:</u>

Up to... | With...</td></tr>
<tr><td>25% Limestone | Dolomite</td></tr>
<tr><td>50% Limestone | Any Mixture D aggregate other than Dolomite</td></tr>
<tr><td>75% Limestone | Crushed Slag (ACBF) or Crushed Sandstone</td></tr>
</table>

<table>
<tr><td rowspan="5">HMA
High ESAL</td><td rowspan="5">E Surface
IL-9.5

SMA
Ndesign 80
Surface</td><td colspan="2"><u>Allowed Alone or in Combination</u> [5/]:

Crushed Gravel
Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag
Crushed Concrete[3/]

No Limestone.</td></tr>
<tr><td colspan="2"><u>Other Combinations Allowed:</u></td></tr>
<tr><td>Up to...</td><td>With...</td></tr>
<tr><td>50% Dolomite[2/]</td><td>Any Mixture E aggregate</td></tr>
<tr><td>75% Dolomite[2/]</td><td>Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone</td></tr>
<tr><td>HMA
High ESAL</td><td>75% Crushed Gravel or Crushed Concrete[3/]</td><td>Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag</td></tr>
<tr><td rowspan="4">HMA
High ESAL</td><td rowspan="4">F Surface
IL-9.5

SMA
Ndesign 80
Surface</td><td colspan="2"><u>Allowed Alone or in Combination</u> [5/]:

Crystalline Crushed Stone
Crushed Sandstone
Crushed Slag (ACBF)
Crushed Steel Slag
No Limestone.</td></tr>
<tr><td colspan="2"><u>Other Combinations Allowed</u>:</td></tr>
<tr><td>Up to...</td><td>With...</td></tr>
<tr><td>50% Crushed Gravel, Crushed Concrete[3/], or Dolomite[2/]</td><td>Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone</td></tr>
</table>

1/ Crushed steel slag allowed in shoulder surface only.
2/ Carbonate crushed stone shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.

3/ Crushed concrete will not be permitted in SMA mixes.
4/ Crushed steel slag shall not be used as leveling binder.
5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."

GROOVING FOR RECESSED PAVEMENT MARKINGS (BDE)
Effective: November 1, 2012 Revised: August 1, 2014

Description. This work shall consist of grooving the pavement surface in preparation for the application of recessed pavement markings.

Equipment. Equipment shall be according to the following.

(a) Pavement Marking Tape Installations: The grooving equipment shall have a free-floating saw blade cutting head equipped with gang-stacked diamond saw blades. The diamond saw blades shall be of uniform wear and shall produce a smooth textured surface. Any ridges in the groove shall have a maximum height of 15 mils (0.38 mm).

(b) Liquid and Thermoplastic Pavement Marking Installations: The grooving equipment shall be equipped with either a free-floating saw blade cutting head or a free-floating grinder cutting head configuration with diamond or carbide tipped cutters and shall produce an irregular textured surface.

CONSTRUCTION REQUIREMENTS

General. The Contractor shall supply the Engineer with a copy of the pavement marking material manufacturer's recommendations for constructing a groove.

Pavement Grooving Methods. The grooves for recessed pavement markings shall be constructed using the following methods.

(a) Wet Cutting Head Operation. When water is required or used to cool the cutting head, the groove shall be flushed with high pressure water immediately following the cut to avoid build up and hardening of slurry in the groove. The pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

(b) Dry Cutting Head Operation. When used on HMA pavements, the groove shall be vacuumed or cleaned by blasting with high-pressure air to remove loose aggregate, debris, and dust generated during the cutting operation. When used on PCC pavements, the groove shall be flushed with high pressure water or shot blasted to remove any PCC particles that may have become destabilized during the grooving process. If high pressure water is used, the pavement surface shall be allowed to dry for a minimum of 24 hours prior to the final cleaning of the groove and application of the pavement marking material.

Pavement Grooving. Grooving shall not cause ravels, aggregate fractures, spalling or disturbance of the joints to the underlying surface of the pavement. Grooves shall be cut into the pavement prior to the application of the pavement marking material. Grooves shall be cut such that the width is 1 in. (25 mm) greater than the width of the pavement marking line as specified on the plans. Grooves for letters and symbols shall be cut in a square or rectangular shape so that the entire marking will fit within the limits of the grooved area. The position of the edge of the grooves shall be a minimum of 4 in. (100 mm) from the edge of all longitudinal joints. The depth of the groove shall not be less than the manufacturer's recommendations for the pavement marking material specified, but shall be installed to a minimum depth of 110 mils (2.79 mm) and a maximum depth of 200 mils (5.08 mm) for pavement marking tapes thermoplastic markings and a minimum depth of 40 mils (1.02 mm) and a maximum depth of 80 mils (2.03 mm) for liquid markings. The cutting head shall be operated at the appropriate speed in order to prevent undulation of the cutting head and grooving at an inconsistent depth.

At the start of grooving operations, a 50 ft (16.7 m) test section shall be installed and depth measurements shall be made at 10 ft (3.3 m) intervals within the test section. The individual depth measurements shall be within the allowable ranges according to this Article. If it is determined the test section has not been grooved at the appropriate depth or texture, adjustments shall be made to the cutting head and another 50 ft (16.7 m) test section shall be installed and checked. This process shall continue until the test section meets the requirements of this Article.

For new HMA pavements, grooves shall not be installed within 14 days of the placement of the final course of pavement.

Final Cleaning. Immediately prior to the application of the pavement marking material or primer sealer, the groove shall be cleaned with high-pressure air blast.

Method of Measurement. This work will be measured for payment in place, in feet (meter) for the groove width specified.

Grooving for letter, numbers and symbols will be measured in square feet (square meters).

Basis of Payment. This work will be paid for at the contract unit price per foot (meter) for GROOVING FOR RECESSED PAVEMENT MARKING of the groove width specified, and per square foot (square meter) for GROOVING FOR RECESSED PAVEMENT MARKING, LETTERS AND SYMBOLS.

The following shall only apply when preformed plastic pavement markings are to be recessed:

Add the following paragraph after the first paragraph of Article 780.07 of the Standard Specifications.

"The markings shall be capable of being applied in a grooved slot on new and existing portland cement concrete and HMA surfaces, by means of a pressure-sensitive, precoated adhesive, or liquid contact cement which shall be applied at the time of installation. A primer sealer shall be applied with a roller and shall cover and seal the entire bottom of the groove. The primer sealer shall be recommended by the manufacturer of the pavement marking material and shall be compatible with the material being used. The Contractor shall install the markings in the groove as soon as possible after the primer sealer cures according to the manufacturer's recommendations. The markings placed in the groove shall be rolled and tamped into the groove with a roller or tamper cart cut to fit the groove and loaded with or weighing at least 200 lb (90kg). Vehicle tires shall not be used for tamping. The Contractor shall roll and tamp the material with a minimum of 6 passes to prevent easy removal or peeling."

HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)
Effective: January 1, 2010 Revised: April 1, 2012

Description. This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

Quality Control/Quality Assurance (QC/QA). Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

a. Confined Edge. Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.

b. Unconfined Edge. Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced ten feet apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4%	91.0%
IL-9.5, IL-12.5	Ndesign ≥ 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L, IL-12.5	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0, IL-25.0	Ndesign ≥ 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L, IL-25.0	Ndesign < 90	93.0 – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%
All Other	Ndesign = 30	93.0 - 97.4%	90.0%"

HOT-MIX ASPHALT – MIXTURE DESIGN COMPOSITION AND VOLUMETRIC REQUIREMENTS (BDE)
Effective: November 1, 2013 Revised: November 1, 2014

Revise the last sentence of the first paragraph of Article 312.05 of the Standard Specifications to read:

"The minimum compacted thickness of each lift shall be according to Article 406.06(d)."

Delete the minimum compacted lift thickness table in Article 312.05 of the Standard Specifications.

Revise the second paragraph of Article 355.02 of the Standard Specifications to read:

"The mixture composition used shall be IL-19.0."

Revise Article 355.05(a) of the Standard Specifications to read:

"(a) The top lift thickness shall be 2 1/4 in. (60 mm) for mixture composition IL-19.0."

Revise the Leveling Binder table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder	
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition
≤ 1 1/4 (32)	IL-4.75, IL-9.5, or IL-9.5L
> 1 1/4 to 2 (32 to 50)	IL-9.5 or IL-9.5L

The density requirements of Article 406.07(c) shall apply for leveling binder, machine method, when the nominal compacted thickness is: 3/4 in. (19 mm) or greater for IL-4.75 mixtures; and 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures."

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

"MINIMUM COMPACTED LIFT THICKNESS	
Mixture Composition	Thickness, in. (mm)
IL-4.75	3/4 (19)
IL-9.5, IL-9.5L	1 1/4 (32)
SMA-12.5	2 (51)
IL-19.0, IL-19.0L	2 1/4 (57)"

Revise the ninth paragraph of Article 406.14 of the Standard Specifications to read:

"Test strip mixture will be evaluated at the contract unit price according to the following."

Revise Article 406.14(a) of the Standard Specifications to read:

"(a) If the HMA placed during the initial test strip is determined to be acceptable the mixture will be paid for at the contract unit price."

Revise Article 406.14(b) of the Standard Specifications to read:

"(b) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was not produced within 2.0 to 6.0 percent air voids or within the individual control limits of the JMF according to the Department's test results, the mixture will not be paid for and shall be removed at the Contractor's expense. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Revise Article 406.14(c) of the Standard Specifications to read:

"(c) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF according to the Department's test results, the mixture shall be removed. Removal will be paid according to Article 109.04. This initial mixture will be paid for at the contract unit price. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Delete Article 406.14(d) of the Standard Specifications.

Delete Article 406.14(e) of the Standard Specifications.

Delete the last sentence of Article 407.06(c) of the Standard Specifications.

Revise Note 2. of Article 442.02 of the Standard Specifications to read:

"Note 2. The mixture composition of the HMA used shall be IL-19.0 binder, designed with the same Ndesign as that specified for the mainline pavement."

Delete the second paragraph of Article 482.02 of the Standard Specifications.

Revise the first sentence of the sixth paragraph of Article 482.05 of the Standard Specifications to read:

"When the mainline HMA binder and surface course mixture option is used on resurfacing projects, shoulder resurfacing widths of 6 ft (1.8 m) or less may be placed simultaneously with the adjacent traffic lane for both the binder and surface courses."

Revise the second sentence of the fourth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 5 in. (125 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise the second sentence of the fifth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 8 in. (200 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22. The fine aggregate gradation for SMA shall be FA/FM 20.

For mixture IL-4.75 and surface mixtures with an Ndesign = 90, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag meeting the FA 20 gradation.

For mixture IL-19.0, Ndesign = 90 the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 or FA 22 gradation. For mixture IL-19.0, Ndesign = 50 or 70 the fine aggregate fraction shall consist of at least 50 percent manufactured sand meeting FA 20 or FA 22 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof.

Gradation FA 1, FA 2, or FA 3 shall be used when required for prime coat aggregate application for HMA."

Remove footnote 3/ from the tables and at the end of the tables in Article 1004.01(c) of the Standard Specifications.

Delete the last sentence of the first paragraph of Article 1004.03(b) of the Standard Specifications.

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

"Use	Size/Application	Gradation No.
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & 3	Cover	CA 14
HMA High ESAL	IL-19.0 IL-9.5	CA 11 [1/] CA 16 and/or CA 13 CA 16
HMA Low ESAL	IL-19.0L IL-9.5L Stabilized Subbase or Shoulders	CA 11 [1/] CA 16

1/ CA 16 or CA 13 may be blended with the gradations listed."

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

"High ESAL	IL-19.0 binder; IL-9.5 surface
Low ESAL	IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA)[1/]; HMA Shoulders[2/]

1/ Uses 19.0L binder mix.

2/ Uses 19.0L for lower lifts and 9.5L for surface lift."

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

"**1030.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate	1004.03
(b) Fine Aggregate	1003.03
(c) RAP Material	1031
(d) Mineral Filler	1011
(e) Hydrated Lime	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2)	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

Note 1. Slaked quicklime shall be according to ASTM C 5.

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay.

Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements.

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

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

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

High ESAL, MIXTURE COMPOSITION (% PASSING) [1/]								
Sieve Size	IL-19.0 mm		SMA 12.5 [4/]		IL-9.5 mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max
1 1/2 in (37.5 mm)								
1 in. (25 mm)		100						
3/4 in. (19 mm)	90	100		100				
1/2 in. (12.5 mm)	75	89	90	99		100		100
3/8 in. (9.5 mm)			50	85	90	100		100
#4 (4.75 mm)	40	60	20	40	32	69	90	100
#8 (2.36 mm)	26	42	16	24 [5/]	32	52 [2/]	70	90
#16 (1.18 mm)	15	30			10	32	50	65
#50 (300 µm)	6	15			4	15	15	30
#100 (150 µm)	4	9			3	10	10	18
#200 (75 µm)	3	6	8.0	11.0 [3/]	4	6	7	9
Ratio Dust/Asphalt Binder		1.0				1.0		1.0 [3/]

1/ Based on percent of total aggregate weight.

2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.

3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.

4/ The maximum percent passing the #635 (20 µm) sieve shall be ≤ 3 percent.

5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above 24 percent."

Delete Article 1030.04(a)(3) of the Standard Specifications.

Delete Article 1030.04(a)(4) of the Standard Specifications.

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

"VOLUMETRIC REQUIREMENTS High ESAL				
	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
Ndesign	IL-19.0	IL-9.5	IL-4.75[1/]	
50	13.5	15.0	18.5	65 – 78 [2/]
70				65 - 75
90				

1/ Maximum Draindown for IL-4.75 shall be 0.3 percent

2/ VFA for IL-4.75 shall be 76-83 percent"

Revise the table in Article 1030.04(b)(2) of the Standard Specifications to read:

"VOLUMETRIC REQUIREMENTS Low ESAL				
Mixture Composition	Design Compactive Effort	Design Air Voids Target %	VMA (Voids in the Mineral Aggregate), % min.	VFA (Voids Filled with Asphalt Binder), %
IL-9.5L	N_{DES} =30	4.0	15.0	65-78
IL-19.0L	N_{DES} =30	4.0	13.5	N/A"

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

"(3) SMA Mixtures.

ESALs (million)	Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
≤ 10	50	4.0	16.0	75 – 80
> 10	80	4.0	17.0	75 – 80"

Delete Article 1030.04(b)(4) of the Standard Specifications.

Delete Article 1030.04(b)(5) from the Supplemental Specifications.

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

"Parameter	Frequency of Tests High ESAL Mixture Low ESAL Mixture	Test Method See Manual of Test Procedures for Materials
Aggregate Gradation % passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 µm) No. 200 (75 µm)	1 washed ignition oven test on the mix per half day of production Note 3.	Illinois Procedure
Asphalt Binder Content by Ignition Oven Note 1.	1 per half day of production	Illinois-Modified AASHTO T 308
VMA Note 2.	Day's production ≥ 1200 tons: 1 per half day of production	Illinois-Modified AASHTO R 35
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	
Air Voids Bulk Specific Gravity of Gyratory Sample Note 4.	Day's production ≥ 1200 tons: 1 per half day of production	Illinois-Modified AASHTO T 312
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	
Maximum Specific Gravity of Mixture	Day's production ≥ 1200 tons: 1 per half day of production	Illinois-Modified AASHTO T 209
	Day's production < 1200 tons: 1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	

Note 1. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.

Note 2. The G_{sb} used in the voids in the mineral aggregate (VMA) calculation shall be the same average G_{sb} value listed in the mix design.

Note 3. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident.

Note 4. The WMA compaction temperature for mixture volumetric testing shall be 270 ± 5 °F (132 ± 3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270 ± 5 °F (132 ± 3 °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature, it shall be reheated to standard HMA compaction temperatures."

Revise the table in Article 1030.05(d)(2)b. of the Standard Specifications to read:

"Parameter	High ESAL Mixture Low ESAL Mixture
Ratio Dust/Asphalt Binder	0.6 to 1.2
Moisture	0.3 %"

Revise the Article 1030.05(d)(4) of the Supplemental Specifications to read:

"(4) Control Limits. Target values shall be determined by applying adjustment factors to the AJMF where applicable. The target values shall be plotted on the control charts within the following control limits.

CONTROL LIMITS						
Parameter	High ESAL Low ESAL		SMA		IL-4.75	
	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: 1/						
1/2 in. (12.5 mm)	± 6 %	± 4 %	± 6 %	± 4 %		
3/8 in. (9.5mm)			± 4 %	± 3 %		
No. 4 (4.75 mm)	± 5 %	± 4 %	± 5 %	± 4 %		
No. 8 (2.36 mm)	± 5 %	± 3 %	± 4 %	± 2 %		
No. 16 (1.18 mm)			± 4 %	± 2 %	± 4 %	± 3 %
No. 30 (600 µm)	± 4 %	± 2.5 %	± 4 %	± 2.5 %		
Total Dust Content No. 200 (75 µm)	± 1.5 %	± 1.0 %			± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
VMA	-0.7 % 2/	-0.5 % 2/	-0.7 % 2/	-0.5 % 2/	-0.7 % 2/	-0.5 % 2/

1/ Based on washed ignition oven

2/ Allowable limit below minimum design VMA requirement

DENSITY CONTROL LIMITS		
Mixture Composition	Parameter	Individual Test
IL-4.75	Ndesign = 50	93.0 - 97.4 % 1/
IL-9.5	Ndesign = 90	92.0 - 96.0 %
IL-9.5,IL-9.5L	Ndesign < 90	92.5 - 97.4 %
IL-19.0	Ndesign = 90	93.0 - 96.0 %
IL-19.0, IL-19.0L	Ndesign < 90	93.0 2/- 97.4 %
SMA	Ndesign = 50 & 80	93.5 - 97.4 %

1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.

2/ 92.0 % when placed as first lift on an unimproved subgrade."

Revise the table in Article 1030.05(d)(5) of the Supplemental Specifications to read:

"CONTROL CHART REQUIREMENTS	High ESAL, Low ESAL, SMA & IL-4.75
Gradation [1/ 3/]	% Passing Sieves: 1/2 in. (12.5 mm) [2/] No. 4 (4.75 mm) No. 8 (2.36 mm) No. 30 (600 µm)
Total Dust Content [1/]	No. 200 (75 µm)
	Asphalt Binder Content
	Bulk Specific Gravity
	Maximum Specific Gravity of Mixture
	Voids
	Density
	VMA

1/ Based on washed ignition oven.

2/ Does not apply to IL-4.75.

3/ SMA also requires the 3/8 in. (9.5 mm) sieve."

Delete Article 1030.05(d)(6)a.1.(b.) of the Standard Specifications.

Delete Article 1030.06(b) of the Standard Specifications.

Delete Article 1102.01(e) of the Standard Specifications.

HOT-MIX ASPHALT – MIXTURE DESIGN VERIFICATION AND PRODUCTION (BDE)
Effective: November 1, 2013 Revised: November 1, 2014

Description. This special provision provides the requirements for Hamburg Wheel and tensile strength testing for High ESAL, IL-4.75, and Stone Matrix Asphalt (SMA) hot-mix asphalt (HMA) mixes during mix design verification and production. This special provision also provides the plant requirements for hydrated lime addition systems used in the production of High ESAL, IL-4.75, and SMA mixes.

Mix Design Testing. Add the following below the referenced AASHTO standards in Article 1030.04 of the Standard Specifications:

AASHTO T 324 Hamburg Wheel Test

AASHTO T 283 Tensile Strength Test

Add the following to Article 1030.04 of the Standard Specifications:

"(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (Illinois Modified AASHTO T 324) and the Tensile Strength Test (Illinois Modified AASHTO T 283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department's verification test, the Contractor shall make necessary changes to the mix and provide passing Hamburg Wheel and tensile strength test results from a private lab. The Department will verify the passing results.

All new and renewal mix designs shall meet the following requirements for verification testing.

(1) Hamburg Wheel Test Criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements [1/]

PG Grade	Number of Passes
PG 58-xx (or lower)	5,000
PG 64-xx	7,500
PG 70-xx	15,000
PG 76-xx (or higher)	20,000

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

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

Production Testing. Revise Article 1030.06(a) of the Standard Specifications to read:

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

Before start-up, target values shall be determined by applying gradation correction factors to the JMF when applicable. These correction factors shall be determined from previous experience. The target values, when approved by the Engineer, shall be used to control HMA production. Plant settings and control charts shall be set according to target values.

Before constructing the test strip, target values shall be determined by applying gradation correction factors to the JMF when applicable. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows.

Parameter	Adjustment
1/2 in. (12.5 mm)	± 5.0 %
No. 4 (4.75 mm)	± 4.0 %
No. 8 (2.36 mm)	± 3.0 %
No. 30 (600 µm)	*
No. 200 (75 µm)	*
Asphalt Binder Content	± 0.3 %

* In no case shall the target for the amount passing be greater than the JMF.

Any adjustments outside the above limitations will require a new mix design.

Mixture sampled to represent the test strip shall include additional material sufficient for the Department to conduct Hamburg Wheel testing according to Illinois Modified AASHTO T324 (approximately 60 lb (27 kg) total).

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria is being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

The Department may conduct additional Hamburg Wheel tests on production material as determined by the Engineer."

Revise the title of Article 1030.06(b) of the Standard Specifications to read:

"(b) Low ESAL Mixtures."

System for Hydrated Lime Addition. Revise the fourth sentence of the third paragraph of Article 1030.04(c) of the Standard Specifications to read:

"The method of application shall be according to Article 1102.01(a)(10)."

Replace the first three sentences of the second paragraph of Article 1102.01(a)(10) of the Standard Specifications to read:

"When hydrated lime is used as the anti-strip additive, a separate bin or tank and feeder system shall be provided to store and accurately proportion the lime onto the aggregate either as a slurry, as dry lime applied to damp aggregates, or as dry lime injected onto the hot aggregates prior to adding the liquid asphalt cement. If the hydrated lime is added either as a slurry or as dry lime on damp aggregates, the lime and aggregates shall be mixed by a power driven pugmill to provide a uniform coating of the lime prior to entering the dryer. If dry hydrated lime is added to the hot dry aggregates in a dryer-drum plant, the lime shall be added in such a manner that the lime will not become entrained into the air stream of the dryer-drum and that thorough dry mixing shall occur prior to the injection point of the liquid asphalt. When a batch plant is used, the hydrated lime shall be added to the mixture in the weigh hopper or as approved by the Engineer."

Basis of Payment. Replace the seventh paragraph of Article 406.14 of the Standard Specifications with the following:

"For mixes designed and verified under the Hamburg Wheel criteria, the cost of furnishing and introducing anti-stripping additives in the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

If an anti-stripping additive is required for any other HMA mix, the cost of the additive will be paid for according to Article 109.04. The cost incurred in introducing the additive into the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the anti-stripping additive."

HOT MIX ASPHALT – PRIME COAT (BDE)
Effective: November 1, 2014

Revise Note 1 of Article 406.02 of the Standard Specifications to read:

"Note 1. The bituminous material used for prime coat shall be one of the types listed in the following table.

When emulsified asphalts are used, any dilution with water shall be performed by the emulsion producer. The emulsified asphalt shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion.

Application	Bituminous Material Types
Prime Coat on Brick, Concrete, or HMA Bases	SS-1, SS-1h, SS-1hP, SS-1vh, RS-1, RS-2, CSS-1, CSS-1h, CSS-1hp, CRS-1, CRS-2, HFE-90, RC-70
Prime Coat on Aggregate Bases	MC-30, PEP"

Add the following to Article 406.03 of the Standard Specifications.

"(i) Vacuum Sweeper 1101.19
(j) Spray Paver ..... 1102.06"

Revise Article 406.05(b) of the Standard Specifications to read:

"(b) Prime Coat. The bituminous material shall be prepared according to Article 403.05 and applied according to Article 403.10. The use of RC-70 shall be limited to air temperatures less than 60 °F (15 °C).

(1) Brick, Concrete or HMA Bases. The base shall be cleaned of all dust, debris and any substance that will prevent the prime coat from adhering to the base. Cleaning shall be accomplished by sweeping to remove all large particles and air blasting to remove dust. As an alternative to air blasting, a vacuum sweeper may be used to accomplish the dust removal. The base shall be free of standing water at the time of application. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface as specified in the following table.

Type of Surface to be Primed	Residual Asphalt Rate lb/sq ft (kg/sq m)
Milled HMA, Aged Non-Milled HMA, Milled Concrete, Non-Milled Concrete & Tined Concrete	0.05 (0.244)
Fog Coat between HMA Lifts, IL-4.75 & Brick	0.025 (0.122)

The bituminous material for the prime coat shall be placed one lane at a time. If a spray paver is not used, the primed lane shall remain closed until the prime coat is fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

(2) Aggregate Bases. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of 0.25 lb/sq ft ± 0.01 (1.21 kg/sq m ±0.05).

The prime coat shall be permitted to cure until the penetration has been approved by the Engineer, but at no time shall the curing period be less than 24 hours for MC-30 or four hours for PEP. Pools of prime occurring in the depressions shall be broomed or squeegeed over the surrounding surface the same day the prime coat is applied.

The base shall be primed 1/2 width at a time. The prime coat on the second half/width shall not be applied until the prime coat on the first half/width has cured so that it will not pickup under traffic.

The residual asphalt rate will be verified a minimum of once per type of surface to be primed as specified herein for which at least 2000 tons (1800 metric tons) of HMA will be placed. The test will be according to the "Determination of Residual Asphalt in Prime and Tack Coat Materials" test procedure.

Prime coat shall be fully cured prior to placement of HMA to prevent pickup by haul trucks or paving equipment. If pickup occurs, paving shall cease in order to provide additional cure time, and all areas where the pickup occurred shall be repaired.

If after five days, loss of prime coat is evident prior to covering with HMA, additional prime coat shall be placed as determined by the Engineer at no additional cost to the Department."

Revise the last sentence of the first paragraph of Article 406.13(b) of the Standard Specifications to read:

"Water added to emulsified asphalt, as allowed in Article 406.02, will not be included in the quantities measured for payment."

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

"Aggregate for covering prime coat will not be measured for payment."

Revise the first paragraph of Article 406.14 of the Standard Specifications to read:

"**406.14 Basis of Payment.** Prime Coat will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT), or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)."

Revise Article 407.02 of the Standard Specifications to read:

"**407.02 Materials.** Materials shall be according to Article 406.02, except as follows.

Item	Article/Section
(a) Packaged Rapid Hardening Mortar or Concrete	1018"

Revise Article 407.06(b) of the Standard Specifications to read:

"(b) A bituminous prime coat shall be applied between each lift of HMA according to Article 406.05(b)."

Delete the second paragraph of Article 407.12 of the Standard Specifications.

Revise the first paragraph of Article 408.04 of the Standard Specifications to read:

"**408.04 Method of Measurement.** Bituminous priming material will be measured for payment according to Article 406.13."

Revise the first paragraph of Article 408.05 of the Standard Specifications to read:

"**408.05 Basis of Payment.** This work will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT) or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) and at the contract unit price per ton (metric ton) for INCIDENTAL HOT-MIX ASPHALT SURFACING."

Revise Article 1032.02 of the Standard Specifications to read:

"**1032.02 Measurement.** Asphalt binders, emulsified asphalts, rapid curing liquid asphalt, medium curing liquid asphalts, slow curing liquid asphalts, asphalt fillers, and road oils will be measured by weight."

A weight ticket for each truck load shall be furnished to the inspector. The truck shall be weighed at a location approved by the Engineer. The ticket shall show the weight of the empty truck (the truck being weighed each time before it is loaded), the weight of the loaded truck, and the net weight of the bituminous material.

When an emulsion or cutback is used for prime coat, the percentage of asphalt residue of the actual certified product shall be shown on the producer's bill of lading or attached certificate of analysis. If the producer adds extra water to an emulsion at the request of the purchaser, the amount of water shall also be shown on the bill of lading.

Payment will not be made for bituminous materials in excess of 105 percent of the amount specified by the Engineer."

Add the following to the table in Article 1032.04 of the Standard Specifications.

"SS-1vh	160-180	70-80
RS-1, CRS-1	75-130	25-55"

Add the following to Article 1032.06 of the Standard Specifications.

"(g) Non Tracking Emulsified Asphalt SS-1vh shall be according to the following.

Requirements for SS-1vh			
Test		SPEC	AASHTO Test Method
Saybolt Viscosity @ 25C,	SFS	20-200	T 72
Storage Stability, 24hr.,	%	1 max.	T 59
Residue by Evaporation,	%	50 min.	T 59
Sieve Test,	%	0.3 max.	T 59
Tests on Residue from Evaporation			
Penetration @25°C, 100g., 5 sec., dmm		20 max.	T 49
Softening Point,	°C	65 min.	T 53
Solubility,	%	97.5 min.	T 44
Orig. DSR @ 82°C,	kPa	1.00 min.	T 315"

Revise the last table in Article 1032.06(f)(2)d. of the Standard Specifications to read:

"Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, SS-1vh	Prime or fog seal
PEP	Bituminous surface treatment prime
RS-2, HFE-90, HFE-150, HFE- 300, CRSP, HFP, CRS-2, HFRS-2	Bituminous surface treatment
CSS-1h Latex Modified	Microsurfacing"

Add the following to Article 1101 of the Standard Specifications.

"**1101.19 Vacuum Sweeper.** The vacuum sweeper shall have a minimum sweeping path of 52 in. (1.3 m) and a minimum blower rating of 20,000 cu ft per minute (566 cu m per minute)."

Add the following to Article 1102 of the Standard Specifications:

"**1102.06 Spray Paver.** The spreading and finishing machine shall be capable of spraying a rapid setting emulsion tack coat, paving a layer of HMA, and providing a smooth HMA mat in one pass. The HMA shall be spread over the tack coat in less than five seconds after the application of the tack coat during normal paving speeds. No wheel or other part of the paving machine shall come into contact with the tack coat before the HMA is applied. In addition to meeting the requirements of Article 1102.03, the spray paver shall also meet the requirements of Article 1102.05 for the tank, heating system, pump, thermometer, tachometer or synchronizer, and calibration. The spray bar shall be equipped with properly sized and spaced nozzles to apply a uniform application of tack coat at the specified rate for the full width of the mat being placed."

LRFD STORM SEWER BURIAL TABLES (BDE)
Effective: November 1, 2013 Revised: April 1, 2015

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

"Item	Article Section
(a) Clay Sewer Pipe	1040.02
(b) Extra Strength Clay Pipe	1040.02
(c) Concrete Sewer, Storm Drain, and Culvert Pipe	1042
(d) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	1042
(e) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe (Note 1)	1042
(f) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe (Note 1)	1042
(g) Polyvinyl Chloride (PVC) Pipe	1040.03
(h) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	1040.03
(i) Corrugated Polypropylene (CPP) Pipe with Smooth Interior	1040.08
(j) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe	1056
(k) Mastic Joint Sealer for Pipe	1055
(l) External Sealing Band	1057
(m) Fine Aggregate (Note 2)	1003.04
(n) Coarse Aggregate (Note 3)	1004.05
(o) Reinforcement Bars and Welded Wire Fabric	1006.10
(p) Handling Hole Plugs	1042.16
(q) Polyethylene (PE) Pipe with a Smooth Interior	1040.04
(r) Corrugated Polyethylene (PE) Pipe with a Smooth Interior	1040.04

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

Note 2. The fine aggregate shall be moist.

Note 3. The coarse aggregate shall be wet."

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

"Class	***Materials***
A	Rigid Pipes: Clay Sewer Pipe Extra Strength Clay Pipe Concrete Sewer, Storm Drain, and Culvert Pipe Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
B	Rigid Pipes: Clay Sewer Pipe Extra Strength Clay Pipe Concrete Sewer, Storm Drain, and Culvert Pipe Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe Flexible Pipes: Polyvinyl Chloride (PVC) Pipe Corrugated Polyvinyl Chloride Pipe (PVC) with a Smooth Interior Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polyethylene (PE) Pipe with a Smooth Interior Corrugated Polypropylene (CPP) Pipe with a Smooth Interior"

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

STORM SEWERS
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter in.	Type 1								Type 2							
	Fill Height: 3' and less With 1' minimum cover								Fill Height: Greater than 3' not exceeding 10'							
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP
10	NA	3	X	X	X	X	X	NA	NA	1	*X	X	X	X	X	NA
12	IV	NA	X	X	X	X	X	X	II	1	*X	X	X	X	X	X
15	IV	NA	NA	X	X	NA	X	X	II	1	*X	X	X	NA	X	X
18	IV	NA	NA	X	X	X	X	X	II	2	X	X	X	X	X	X
21	III	NA	NA	X	X	NA	NA	NA	II	2	X	X	X	NA	NA	NA
24	III	NA	NA	X	X	X	X	X	II	2	X	X	X	X	X	X
27	III	NA	NA	NA	NA	NA	NA	NA	II	3	X	NA	NA	NA	NA	NA
30	IV	NA	NA	X	X	X	X	X	II	3	X	X	X	X	X	X
33	III	NA	NA	NA	NA	NA	NA	NA	II	NA	X	NA	NA	NA	NA	NA
36	III	NA	NA	X	X	X	X	X	II	NA	X	X	X	X	X	X
42	II	NA	X	X	NA	X	X	NA	II	NA	X	X	NA	X	NA	NA
48	II	NA	X	X	NA	X	X	X	II	NA	X	X	NA	X	NA	NA
54	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
60	II	NA	NA	NA	NA	NA	NA	X	II	NA	NA	NA	NA	NA	NA	X
66	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
72	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
78	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
84	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
90	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
96	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA
102	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA
108	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
CSP Concrete Sewer, Storm drain, and Culvert Pipe
PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe
ESCP Extra Strength Clay Pipe
PE Polyethylene Pipe with a Smooth Interior
CPE Corrugated Polyethylene Pipe with a Smooth Interior
CPP Corrugated Polypropylene pipe with a Smooth Interior

X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.
* May also use Standard Strength Clay Pipe

STORM SEWERS (Metric)
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter in.	Type 1								Type 2							
	Fill Height: 1 m and less With 300 mm minimum cover								Fill Height: Greater than 1 m not exceeding 3 m							
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP
250	NA	3	X	X	X	X	X	NA	NA	1	*X	X	X	X	X	NA
300	IV	NA	X	X	X	X	X	X	II	1	*X	X	X	X	X	X
375	IV	NA	NA	X	X	NA	X	X	II	1	*X	X	X	NA	X	X
450	IV	NA	NA	X	X	X	X	X	II	2	X	X	X	X	X	X
525	III	NA	NA	X	X	NA	NA	NA	II	2	X	X	X	NA	NA	NA
600	III	NA	NA	X	X	X	X	X	II	2	X	X	X	X	X	X
675	III	NA	NA	NA	NA	NA	NA	NA	II	3	X	NA	NA	NA	NA	NA
750	IV	NA	NA	X	X	X	X	X	II	3	X	X	X	X	X	X
825	III	NA	NA	NA	NA	NA	NA	NA	II	NA	X	NA	NA	NA	NA	NA
900	III	NA	NA	X	X	X	X	X	II	NA	X	X	X	X	X	X
1050	II	NA	X	X	NA	X	X	NA	II	NA	X	X	NA	X	NA	NA
1200	II	NA	X	X	NA	X	X	X	II	NA	X	X	NA	X	NA	NA
1350	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
1500	II	NA	NA	NA	NA	NA	NA	X	II	NA	NA	NA	NA	NA	NA	X
1650	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
1800	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
1950	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
2100	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
2250	II	NA	NA	NA	NA	NA	NA	NA	II	NA	NA	NA	NA	NA	NA	NA
2400	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA
2550	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA
2700	II	NA	NA	NA	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
CSP Concrete Sewer, Storm drain, and Culvert Pipe
PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe
ESCP Extra Strength Clay Pipe
PE Polyethylene Pipe with a Smooth Interior
CPE Corrugated Polyethylene Pipe with a Smooth Interior
CPP Corrugated Polypropylene pipe with a Smooth Interior
X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.
* May also use Standard Strength Clay Pipe

STORM SEWERS
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter in.	Type 3								Type 4						
	Fill Height: Greater than 10' not exceeding 15'								Fill Height: Greater than 15' not exceeding 20'						
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPP
10	NA	2	X	X	X	X	X	NA	NA	3	X	X	X	X	NA
12	III	2	X	X	X	X	NA	X	IV	NA	NA	X	X	X	NA
15	III	3	X	X	X	NA	NA	X	IV	NA	NA	X	X	NA	X
18	III	NA	X	X	X	X	NA	X	IV	NA	NA	X	X	X	NA
21	III	NA	NA	X	X	NA	NA	NA	IV	NA	NA	X	X	NA	NA
24	III	NA	NA	X	X	X	NA	NA	IV	NA	NA	X	X	X	NA
27	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
30	III	NA	NA	X	X	X	NA	X	IV	NA	NA	X	X	X	NA
33	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
36	III	NA	NA	X	X	X	NA	NA	IV	NA	NA	X	X	X	NA
42	III	NA	NA	X	NA	X	NA	NA	IV	NA	NA	X	NA	X	NA
48	III	NA	NA	X	NA	X	NA	NA	IV	NA	NA	X	NA	X	NA
54	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
60	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
66	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
72	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
78	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
84	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
90	III	NA	NA	NA	NA	NA	NA	NA	1680	NA	NA	NA	NA	NA	NA
96	III	NA	NA	NA	NA	NA	NA	NA	1690	NA	NA	NA	NA	NA	NA
102	III	NA	NA	NA	NA	NA	NA	NA	1700	NA	NA	NA	NA	NA	NA
108	1360	NA	NA	NA	NA	NA	NA	NA	1710	NA	NA	NA	NA	NA	NA

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

STORM SEWERS (metric)
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter in.	Type 3								Type 4						
	Fill Height: Greater than 3 m not exceeding 4.5 m								Fill Height: Greater than 4.5 m not exceeding 6 m						
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPP
250	NA	2	X	X	X	X	X	NA	NA	3	X	X	X	X	NA
300	III	2	X	X	X	X	NA	X	IV	NA	NA	X	X	X	NA
375	III	3	X	X	X	NA	NA	X	IV	NA	NA	X	X	NA	X
450	III	NA	X	X	X	X	NA	X	IV	NA	NA	X	X	X	NA
525	III	NA	NA	X	X	NA	NA	NA	IV	NA	NA	X	X	NA	NA
600	III	NA	NA	X	X	X	NA	NA	IV	NA	NA	X	X	X	NA
675	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
750	III	NA	NA	X	X	X	NA	X	IV	NA	NA	X	X	X	NA
825	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
900	III	NA	NA	X	X	X	NA	NA	IV	NA	NA	X	X	X	NA
1050	III	NA	NA	X	NA	X	NA	NA	IV	NA	NA	X	NA	X	NA
1200	III	NA	NA	X	NA	X	NA	NA	IV	NA	NA	X	NA	X	NA
1350	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
1500	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
1650	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
1800	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
1950	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
2100	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
2250	III	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA
2400	III	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA
2550	III	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA
2700	70	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
CSP Concrete Sewer, Storm drain, and Culvert Pipe
PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe
ESCP Extra Strength Clay Pipe
PE Polyethylene Pipe with a Smooth Interior
CPE Corrugated Polyethylene Pipe with a Smooth Interior
CPP Corrugated Polypropylene pipe with a Smooth Interior
X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.
* May also use Standard Strength Clay Pipe
Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to produce a 25.4 micro-meter crack.

STORM SEWERS
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter in.	Type 5			Type 6			Type 7	
	Fill Height: Greater than 20' not exceeding 25'			Fill Height: Greater than 25' not exceeding 30'			Fill Height: Greater than 30' not exceeding 35'	
	RCCP	PVC	CPVC	RCCP	PVC	CPVC	RCCP	CPVC
10	NA	X	X	NA	X	X	NA	X
12	IV	X	X	V	X	X	V	X
15	IV	X	X	V	X	X	V	X
18	IV	X	X	V	X	X	V	X
21	IV	X	X	V	X	X	V	X
24	IV	X	X	V	X	X	V	X
27	IV	NA	NA	V	NA	NA	V	NA
30	IV	X	X	V	X	X	V	X
33	IV	NA	NA	V	NA	NA	V	NA
36	IV	X	X	V	X	X	V	X
42	IV	X	NA	V	X	NA	V	NA
48	IV	X	NA	V	X	NA	V	NA
54	IV	NA	NA	V	NA	NA	V	NA
60	IV	NA	NA	V	NA	NA	V	NA
66	IV	NA	NA	V	NA	NA	V	NA
72	V	NA	NA	V	NA	NA	V	NA
78	2020	NA	NA	2370	NA	NA	2730	NA
84	2020	NA	NA	2380	NA	NA	2740	NA
90	2030	NA	NA	2390	NA	NA	2750	NA
96	2040	NA	NA	2400	NA	NA	2750	NA
102	2050	NA	NA	2410	NA	NA	2760	NA
108	2060	NA	NA	2410	NA	NA	2770	NA

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

STORM SEWERS (metric)
KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED
FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

Nominal Diameter in.	Type 5			Type 6			Type 7	
	Fill Height: Greater than 20' not exceeding 25'			Fill Height: Greater than 25' not exceeding 30'			Fill Height: Greater than 30' not exceeding 35'	
	RCCP	PVC	CPVC	RCCP	PVC	CPVC	RCCP	CPVC
250	NA	X	X	NA	X	X	NA	X
300	IV	X	X	V	X	X	V	X
375	IV	X	X	V	X	X	V	X
450	IV	X	X	V	X	X	V	X
525	IV	X	X	V	X	X	V	X
600	IV	X	X	V	X	X	V	X
675	IV	NA	NA	V	NA	NA	V	NA
750	IV	X	X	V	X	X	V	X
825	IV	NA	NA	V	NA	NA	V	NA
900	IV	X	X	V	X	X	V	X
1050	IV	X	NA	V	X	NA	V	NA
1200	IV	X	NA	V	X	NA	V	NA
1350	IV	NA	NA	V	NA	NA	V	NA
1500	IV	NA	NA	V	NA	NA	V	NA
1650	IV	NA	NA	V	NA	NA	V	NA
1800	V	NA	NA	V	NA	NA	V	NA
1950	100	NA	NA	110	NA	NA	130	NA
2100	100	NA	NA	110	NA	NA	130	NA
2250	100	NA	NA	110	NA	NA	130	NA
2400	100	NA	NA	120	NA	NA	130	NA
2550	100	NA	NA	120	NA	NA	130	NA
2700	100	NA	NA	120	NA	NA	130	NA

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

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

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

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

"**550.08 Deflection Testing for Storm Sewers.** All PVC, PE, and CPP storm sewers shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

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

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

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

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

"**1040.03 Polyvinyl Chloride (PVC) Pipe.** Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

"(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.

(d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

"**1040.08 Polypropylene (PP) Pipe.** Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

(a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size – 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.

(b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size – 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

MECHANICAL SIDE TIE BAR INSERTER (BDE)
Effective: August 1, 2014 Revised: January 1, 2015

Add the following to Article 420.03 of the Standard Specifications:

"(k) Mechanical Side Tie Bar Inserters .....1103.18"

Revise Article 420.05(b) of the Standard Specifications to read:

"(b) Longitudinal Construction Joint. The tie bars shall be installed using one of the following methods.

(1) Preformed or Drilled Holes. The tie bars shall be installed with an approved nonshrink grout or chemical adhesive providing a minimum pull-out strength as follows.

Bar Size	Minimum Pull-Out Strength
No. 6 (No. 19)	11,000 lb (49 kN)
No. 8 (No. 25)	19,750 lb (88 kN)

Holes shall be blown clean and dry prior to placing the grout or adhesive. If compressed air is used, the pneumatic tool lubricator shall be bypassed and a filter installed on the discharge valve to keep water and oil out of the lines. The installation shall be with methods and tools conforming to the grout or adhesive manufacturer's recommendations.

The Contractor shall load test five percent of the first 500 tie bars installed. No further installation will be allowed until the initial five percent testing has been completed and approval to continue installation has been given by the Engineer. Testing will be required for 0.5 percent of the bars installed after the initial 500. For each bar that fails to pass the minimum requirements, two more bars selected by the Engineer shall be tested. Each bar that fails to meet the minimum load requirement shall be reinstalled and retested. The equipment and method used for testing shall meet the requirements of ASTM E 488. All tests shall be performed within 72 hours of installation. The tie bars shall be installed and approved before concrete is placed in the adjacent lane."

(2) Inserted. The tie bars shall be installed with the use of a mechanical side tie bar inserter. The inserter shall insert the tie bars with vibration while still within the extrusion process, after the concrete has been struck off and consolidated without deformation of the slab. The inserter shall remain stationary relative to the pavement when inserting tie bars, while the formless paver continues to move in the direction of paving.

A void greater than 1/8 in. (3 mm) at any location around the tie bar shall require immediate adjustment of the paving operation. A void greater than 1/2 in.(13 mm) shall be repaired with a nonshrink grout or chemical adhesive after the concrete has hardened. If at the end of the day of paving more than 20 percent of the tie bars show a void larger than 1/8 in. (3 mm) at any point around the bar, the use of the side tie bar inserter shall be discontinued.

(3) Formed in Place. The tie bar shall be formed in place as shown on the plans.

The sealant reservoir shall be formed either by sawing after the concrete has set according to Article 420.05(a) or by hand tools when the concrete is in a plastic state."

Add the following to Section 1103 of the Standard Specifications:

"**1103.18 Mechanical Side Bar Inserters.** The mechanical side tie bar inserter shall be self-contained and supported on the formless paver with the ability to move independently from the formless paver. The insertion apparatus shall vibrate within a frequency of 2000 to 6000 vpm. A vibrating reed tachometer, hand type, shall be provided according to Article 1103.12."

PAVEMENT PATCHING (BDE)
Effective: January 1, 2010

Revise the first sentence of the second paragraph of Article 701.17(e)(1) of the Standard Specifications to read:

"In addition to the traffic control and protection shown elsewhere in the contract for pavement, two devices shall be placed immediately in front of each open patch, open hole, and broken pavement where temporary concrete barriers are not used to separate traffic from the work area."

PAVEMENT STRIPING - SYMBOLS (BDE)
Effective: January 1, 2015

Revise the Symbol Table of Article 780.14 of the Supplemental Specifications to read:

"SYMBOLS

Symbol	Large Size sq ft (sq m)	Small Size sq ft (sq m)
Through Arrow	11.5 (1.07)	6.5 (0.60)
Left or Right Arrow	15.6 (1.47)	8.8 (0.82)
2 Arrow Combination Left (or Right) and Through	26.0 (2.42)	14.7 (1.37)
3 Arrow Combination Left, Right, and Through	38.4 (3.56)	20.9 (1.94)
Lane Drop Arrow	41.5 (3.86)	--
Wrong Way Arrow	24.3 (2.26)	--
Railroad "R" 6 ft (1.8 m)	3.6 (0.33)	--
Railroad "X" 20 ft (6.1 m)	54.0 (5.02)	--
International Symbol of Accessibility	3.1 (0.29)	--
Bike Symbol	4.7 (0.44)	--
Shared Lane Symbol	8.0 (0.74)	--"

PRECAST CONCRETE HANDHOLE (BDE)
Effective: August 1, 2014

Revise the third paragraph of Article 814.03 of the Standard Specifications to read:

"Handholes shall be constructed as shown on the plans and shall be cast-in-place, composite concrete, or precast units. Heavy duty handholes shall be either cast-in-place or precast units."

Add the following to Article 814.03 of the Standard Specifications:

"(c) Precast Concrete. Precast concrete handholes shall be fabricated according to Article 1042.17. Where a handhole is contiguous to a sidewalk, preformed joint filler of 1/2 inch (13 mm) thickness shall be placed between the handhole and the sidewalk."

Add the following to Section1042 of the Standard Specifications:

"**1042.17 Precast Concrete Handholes.** Precast concrete handholes shall be according to Articles 1042.03(a)(c)(d)(e)."

PROGRESS PAYMENTS (BDE)
Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

"(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than $1000.00 will be approved for payment other than the final payment.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved."

RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)
Effective: November 1, 2012 Revise: January 2, 2015

Revise Section 1031 of the Standard Specifications to read:

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

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

(a) Reclaimed Asphalt Pavement (RAP). RAP is the material produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.

(b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum "Reclaimed Asphalt Shingle (RAS) Sources", by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.

(1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.

(2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

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

(a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

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

Mixture FRAP will be used in:	Sieve Size that 100% of FRAP Shall Pass
IL-25.0	2 in. (50 mm)
IL-19.0	1 1/2 in. (40 mm)
IL-12.5	1 in. (25 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

(2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered “homogenous” with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.

(3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.

(4) Conglomerate “D” Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, HMA (High or Low ESAL), or ”All Other” (as defined by Article 1030.04(a)(3)) mixtures. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag.

(5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as “Non-Quality”.

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

(b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be “B Quality” or better from an approved Aggregate Gradation Control System source. The sand shall be accounted for in the mix design and during HMA production.

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

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

(a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.

(1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).

(2) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

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

(b) RAS Testing. RAS or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Illinois Department of Transportation Policy Memorandum, “Reclaimed Asphalt Shingle (RAS) Source”.

Samples shall be collected during stockpiling at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.

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

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

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

(a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable G_{mm}. Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous /Conglomerate	Conglomerate "D" Quality
1 in. (25 mm)		± 5 %
1/2 in. (12.5 mm)	± 8 %	± 15 %
No. 4 (4.75 mm)	± 6 %	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 µm)	± 5 %	
No. 200 (75 µm)	± 2.0 %	± 4.0 %
Asphalt Binder	± 0.4 % 1/	± 0.5 %
G_{mm}	± 0.03	

1/ The tolerance for FRAP shall be ± 0.3 %.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

(b) Evaluation of RAS and RAS Blended with Manufactured Sand Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	± 4 %
No. 200 (75 µm)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

1031.05 Quality Designation of Aggregate in RAP/FRAP.

(a) RAP. The aggregate quality of the RAP for homogenous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.

(1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.

(2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.

(3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.

(4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.

(b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Coarse and fine FRAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant prequalified by the Department for the specified testing. The consultant shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

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

(a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.

(1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.

(2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.

(3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous RAP and FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.

(4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.

(5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.

(6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given N Design.

(b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.

(c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.

(1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures [1/, 2/]	RAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10
105	10	10	10

1/ For HMA “All Other” (shoulder and stabilized subbase) N-30, the RAP/RAS ABR shall not exceed 50 percent of the mixture.

2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

(2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given N design.

FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures 1/, 2/	FRAP/RAS Maximum ABR %		
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified 3/, 4/
30	50	40	10
50	40	35	10
70	40	30	10
90	40	30	10
105	40	30	10

1/ For HMA "All Other" (shoulder and stabilized subbase) N30, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.

2/ When FRAP/RAS ABR exceeds 20 percent for all mixes the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).

3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.

4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 percent.

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

(a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix design at the percent previously verified.

(b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

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

(a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

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

If the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

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

(c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

a. Date, month, year, and time to the nearest minute for each print.

b. HMA mix number assigned by the Department.

c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

d. Accumulated dry weight of RAP/FRAP/RAS in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.

f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.

g. Residual asphalt binder in the RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.

h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)

(2) Batch Plants.

a. Date, month, year, and time to the nearest minute for each print.

b. HMA mix number assigned by the Department.

c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).

d. Mineral filler weight to the nearest pound (kilogram).

e. RAP/FRAP/RAS weight to the nearest pound (kilogram).

f. Virgin asphalt binder weight to the nearest pound (kilogram).

g. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Shoulders. The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders Type B shall be as follows.

(a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except “Non-Quality” and “FRAP”. The testing requirements of Article 1031.03 shall not apply. RAP used to construct aggregate surface course and aggregate shoulders shall be according to the current Bureau of Materials and Physical Research’s Policy Memorandum, “Reclaimed Asphalt Pavement (RAP) for Aggregate Applications”.

(b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted.”

RETROREFLECTIVE SHEETING FOR HIGHWAY SIGNS (BDE)
Effective: November 1, 2014

Revise the first sentence of the first paragraph of Article 1091.03(a)(3) of the Standard Specifications to read:

"When tested according to ASTM E 810, with averaging, the sheeting shall have a minimum coefficient of retroreflection as show in the following tables."

Replace the Tables for Type AA sheeting, Type AP sheeting, Type AZ sheeting and Type ZZ sheeting in Article 1091.03(a)(3) with the following.

Type AA Sheeting
Minimum Coefficient of Retroreflection
Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AA (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FO
0.2	-4	800	600	120	80	40	200
0.2	+30	400	300	60	35	20	100
0.5	-4	200	150	30	20	10	75
0.5	+30	100	75	15	10	5	35

Type AA (45 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	Yellow	FO
0.2	-4	500	165
0.2	+30	115	40
0.5	-4	140	65
0.5	+30	60	30

Type AP Sheeting
Minimum Coefficient of Retroreflection
Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AP (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	Brown	FO
0.2	-4	500	380	75	55	35	25	150
0.2	+30	180	135	30	20	15	10	55
0.5	-4	300	225	50	30	20	15	90
0.5	+30	90	70	15	10	7.5	5	30

Type AZ Sheeting
Minimum Coefficient of Retroreflection
Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type AZ (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY
0.2	-4	375	280	75	45	25	300	230
0.2	+30	235	170	40	25	15	190	150
0.5	-4	245	180	50	30	20	200	155
0.5	+30	135	100	25	15	10	100	75
1.0	-4	50	37.5	8.5	5	2	45	25
1.0	+30	22.5	20	5	3	1	25	12.5

Type ZZ Sheeting
Minimum Coefficient of Retroreflection
Candelas/foot candle/sq ft (candelas/lux/sq m) of material

Type ZZ (Average of 0 and 90 degree rotation)

Observation Angle (deg.)	Entrance Angle (deg.)	White	Yellow	Red	Green	Blue	FYG	FY	FO
0.2	-4	570	425	90	60	30	460	340	170
0.2	+30	190	140	35	20	10	150	110	65
0.5	-4	400	300	60	40	20	320	240	120
0.5	+30	130	95	20	15	7	100	80	45
1.0	-4	115	90	17	12	5	95	70	35
1.0	+30	45	35	7	5	2	35	25	15

REINFORCEMENT BARS (BDE)
Effective: November 1, 2013

Revise the first and second paragraphs of Article 508.05 of the Standard Specifications to read:

"**508.05 Placing and Securing.** All reinforcement bars shall be placed and tied securely at the locations and in the configuration shown on the plans prior to the placement of concrete. Manual welding of reinforcement may only be permitted or precast concrete products as indicated in the current Bureau of Materials and Physical Research Policy Memorandum "Quality Control / Quality Assurance Program for Precast Concrete Products", and for precast prestressed concrete products as indicated in the Department's current "Manual for Fabrication of Precast Prestressed Concrete Products". Reinforcement bars shall not be placed by sticking or floating into place or immediately after placement of the concrete.

Bars shall be tied at all intersections, except where the center to center dimension is less than 1 ft (300 mm) in each direction, in which case alternate intersections shall be tied. Molded plastic clips may be used in lieu of wire to secure bar intersections, but shall not be permitted in horizontal bar mats subject to construction foot traffic or to secure longitudinal bar laps. Plastic clips shall adequately secure the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. Plastic clips may be recycled plastic, and shall meet the approval of the Engineer. The number of ties as specified shall be doubled for lap splices at the stage construction line of concrete bridge decks when traffic is allowed on the first completed stage during the pouring of the second stage."

Revise the fifth paragraph of Article 508.05 of the Standard Specifications to read:

"Supports for reinforcement in bridge decks shall be metal. For all other concrete construction the supports shall be metal or plastic. Metal bar supports shall be made of cold-drawn wire, or other approved material and shall be either epoxy coated, galvanized or plastic tipped. When the reinforcement bars are epoxy coated, the metal supports shall be epoxy coated. Plastic supports may be recycled plastic. Supports shall be provided in sufficient number and spaced to provide the required clearances. Supports shall adequately support the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. The legs of supports shall be spaced to allow an opening that is a minimum 1.33 times the nominal maximum aggregate size used in the concrete. Nominal maximum aggregate size is defined as the largest sieve which retains any of the aggregate sample particles. All supports shall meet the approval of the Engineer."

Revise the first sentence of the eighth paragraph of Article 508.05 of the Standard Specifications to read:

"Epoxy coated reinforcement bars shall be tied with plastic coated wire, epoxy coated wire, or molded plastic clips where allowed."

Add the following sentence to the end of the first paragraph of Article 508.06(c) of the Standard Specifications:

"In addition, the total slip of the bars within the splice sleeve of the connector after loading in tension to 30 ksi (207 MPa) and relaxing to 3 ksi (20.7 MPa) shall not exceed 0.01 in. (254 microns)."

Revise Article 1042.03(d) of the Standard Specifications to read:

"(d) Reinforcement and Accessories: The concrete cover over all reinforcement shall be within ±1/4 in. (±6 mm) of the specified cover.

Welded wire fabric shall be accurately bent and tied in place.

Miscellaneous accessories to be cast into the concrete or for forming holes and recesses shall be carefully located and rigidly held in place by bolts, clamps, or other effective means. If paper tubes are used for vertical dowel holes, or other vertical holes which require grouting, they shall be removed before transportation to the construction site."

SIDEWALK, CORNER, OR CROSSWALK CLOSURE (BDE)
Effective: January 1, 2015 Revised: April 1, 2015

Revise the first sentence of Article 1106.02(m) of the Supplemental Specifications to read:

"The top and bottom panels shall have alternating white and orange stripes sloping 45 degrees on both sides."

TRACKING THE USE OF PESTICIDES (BDE)
Effective: August 1, 2012

Add the following paragraph after the first paragraph of Article 107.23 of the Standard Specifications:

"Within 48 hours of the application of pesticides, including but not limited to herbicides, insecticides, algaecides, and fungicides, the Contractor shall complete and return to the Engineer, Operations form "OPER 2720"."

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 **4**. In the event the Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather then clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The Contractor shall provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

Method of Measurement. The unit of measurement is in hours.

Basis of Payment. This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price, and total price have been included in the schedule of prices.

IDOT TRAINING PROGRAM GRADUATE ON-THE-JOB TRAINING SPECIAL PROVISION (TPG)

Effective: August 1, 2012 Revised: February 1, 2014

In addition to the Contractor's equal employment opportunity affirmative action efforts undertaken as elsewhere required by this Contract, the Contractor is encouraged to participate in the incentive program to provide additional on-the-job training to certified graduates of IDOT funded pre-apprenticeship training programs outlined by this Special Provision.

It is the policy of IDOT to fund IDOT pre-apprenticeship training programs throughout Illinois to provide training and skill-improvement opportunities to assure the increased participation of minority groups, disadvantaged persons and women in all phases of the highway construction industry. The intent of this IDOT Training Program Graduate (TPG) Special Provision is to place certified graduates of these IDOT funded pre-apprentice training programs on IDOT project sites when feasible, and provide the graduates with meaningful on-the-job training intended to lead to journey-level employment. IDOT and its sub-recipients, in carrying out the responsibilities of a state contract, shall determine which construction contracts shall include "Training Program Graduate Special Provisions." To benefit from the incentives to encourage the participation in the additional on-the-job training under this Training Program Graduate Special Provision, the Contractor shall make every reasonable effort to employ certified graduates of IDOT funded Pre-apprenticeship Training Programs to the extent such persons are available within a reasonable recruitment area.

Participation pursuant to IDOT's requirements by the Contractor or subcontractor in this Training Program Graduate (TPG) Special Provision entitles the Contractor or subcontractor to be reimbursed at $15.00 per hour for training given a certified TPG on this contract. As approved by the Department, reimbursement will be made for training persons as specified herein. This reimbursement will be made even though the Contractor or subcontractor may receive additional training program funds from other sources for other trainees, provided such other source does not specifically prohibit the Contractor or subcontractor from receiving other reimbursement. For purposes of this Special Provision the Contractor is not relieved of requirements under applicable federal law, the Illinois Prevailing Wage Act, and is not eligible for other training fund reimbursements in addition to the Training Program Graduate (TPG) Special Provision reimbursement.

No payment shall be made to the Contractor if the Contractor or subcontractor fails to provide the required training. It is normally expected that a TPG will begin training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project through completion of the contract, so long as training opportunities exist in his work classification or until he has completed his training program. Should the TPG's employment end in advance of the completion of the contract, the Contractor shall promptly notify the designated IDOT staff member under this Special Provision that the TPG's involvement in the contract has ended and supply a written report of the reason for the end of the involvement, the hours completed by the TPG under the Contract and the number of hours for which the incentive payment provided under this Special Provision will be or has been claimed for the TPG.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting its performance under this Special Provision.

METHOD OF MEASUREMENT: The unit of measurement is in hours.

BASIS OF PAYMENT: This work will be paid for at the contract unit price of $15.00 per hour for certified TRAINEES TRAINING PROGRAM GRADUATE. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

The Contractor shall provide training opportunities aimed at developing full journeyworker in the type of trade or job classification involved. The initial number of TPGs for which the incentive is available under this contract is **4**. During the course of performance of the Contract the Contractor may seek approval from the Department for additional incentive eligible TPGs. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the TPGs are to be trained by the subcontractor, provided however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Special Provision. The Contractor shall also insure that this Training Program Graduate Special Provision is made applicable to such subcontract if the TPGs are to be trained by a subcontractor and that the incentive payment is passed on to each subcontractor.

For the Contractor to meet the obligations for participation in this TPG incentive program under this Special Provision, the Department has contracted with several entities to provide screening, tutoring and pre-training to individuals interested in working in the applicable construction classification and has certified those students who have successfully completed the program and are eligible to be TPGs. A designated IDOT staff member, the Director of the Office of Business and Workforce Diversity (OBWD), will be responsible for providing assistance and referrals to the Contractor for the applicable TPGs. For this contract, the Director of OBWD is designated as the responsible IDOT staff member to provide the assistance and referral services related to the placement for this Special Provision. For purposes of this Contract, contacting the Director of OBWD and interviewing each candidate he/she recommends constitutes reasonable recruitment.

Prior to commencing construction, the Contractor shall submit to the Department for approval the TPGs to be trained in each selected classification. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. No employee shall be employed as a TPG in any classification in which he/she has successfully completed a training course leading to journeyman status or in which he/she has been employed as a journeyman. Notwithstanding the on-the-job training purpose of this TPG Special Provision, some offsite training is permissible as long as the offsite training is an integral part of the work of the contract and does not comprise a significant part of the overall training.

Training and upgrading of TPGs of IDOT pre-apprentice training programs is intended to move said TPGs toward journeyman status and is the primary objective of this Training Program Graduate Special Provision. Accordingly, the Contractor shall make every effort to enroll TPGs by recruitment through the IDOT funded TPG programs to the extent such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance and entitled to the Training Program Graduate Special Provision $15.00 an hour incentive.

The Contractor or subcontractor shall provide each TPG with a certificate showing the type and length of training satisfactorily completed.

URBAN HALF ROAD CLOSURE WITH MOUNTABLE MEDIAN (BDE)
Effective: January 1, 2015 Revised: July 1, 2015

Revise the first paragraph of Article 701.18(j) of the Standard Specifications to read:

> "Urban Traffic Control, Standards 701501, 701502, 701601, 701602, 701606, 701611, 701701, and 701801."

Revise Article 701.18(j)(3) of the Standard Specifications to read:

"(3) Standard 701611. When Standard or 701611 is specified, reflective pavement markings shall be used when the closure time exceeds four days. The double yellow centerline shall be used in the two-way traffic area in addition to the barricades or drums. Single yellow left edge line shall be used to outline the barricade island. White right edge line shall be used along the barricades delineating the work area."

Revise the first sentence of Article 701.19(c) of the Standard Specifications to read:

"Traffic control and protection required under Standards 701201, 701206, 701306, 701326, 701336, 701406, 701421, 701451, 701456, 701501, 701502, 701601, 701602, 701606, 701611, 701701 and 701801 will be measured for payment on a lump sum basis."

Add the following to the first paragraph of Article 701.20(b) of the Standard Specifications:

"TRAFFIC CONTROL AND PROTECTION STANDARD 701611;"

WARM MIX ASPHALT (BDE)
Effective: January 1, 2012 Revised: November 1, 2014

Description. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

"**1102.01 Hot-Mix Asphalt Plant.** The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

"(13) Equipment for Warm Mix Technologies.

a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of ± 2 percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

(1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.

(2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

WEEKLY DBE TRUCKING REPORTS (BDE)
Effective: June 2, 2012 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, tons = A x D x (G_{mb} x 46.8) / 2000. For HMA mixtures measured in square meters: Q, metric tons = A x D x (G_{mb} x 1) / 1000. When computing adjustments for full-depth HMA pavement, separate calculations will be made for the binder and surface courses to account for their different G_{mb} and % AC_V.

For bituminous materials measured in gallons: Q, tons = V x 8.33 lb/gal x SG / 2000
For bituminous materials measured in liters: Q, metric tons = V x 1.0 kg/L x SG / 1000

Where: A = Area of the HMA mixture, sq yd (sq m).
D = Depth of the HMA mixture, in. (mm).
G_{mb} = Average bulk specific gravity of the mixture, from the approved mix design.
V = Volume of the bituminous material, gal (L).
SG = Specific Gravity of bituminous material as shown on the bill of lading.

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:

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	☐
Category B Subbases and Aggregate Base Courses	Yes	☐
Category C HMA Bases, Pavements and Shoulders	Yes	☐
Category D PCC Bases, Pavements and Shoulders	Yes	☐
Category E Structures	Yes	☐

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 X 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:

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	☐
Structural Steel	Yes	☐
Reinforcing Steel	Yes	☐
Dowel Bars, Tie Bars and Mesh Reinforcement	Yes	☐
Guardrail	Yes	☐
Steel Traffic Signal and Light Poles, Towers and Mast Arms	Yes	☐
Metal Railings (excluding wire fence)	Yes	☐
Frames and Grates	Yes	☐

Signature: _____ **Date:** _____

SWPPP

Illinois Department of Transportation

Storm Water Pollution Prevention Plan

Route	FAP 734	Marked Rte.	IL 2 (N. Main Street)
Section	78R-2	Project No.	D-92-050-06
County	Winnebago	Contract No.	64C21

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Paul Loete	Signature
Print Name	
Regional Engineer	3/13/15
Title	Date
IDOT, District 2	
Agency	

I. Site Description:

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

The project consists of reconstructing Illinois Route 2 (N. Main Street) from Yonge Street to Benington Road in Rockford. Yonge Street (42.29 Lat. - 89.08 long.) and Benington Road (42.32 lat. - 89.08 long.)

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

The proposed improvements consist of reconstructing four 11-12' through lanes, addition of a 12' bi-directional left-turn lane from Brown Avenue to north of Belmont Boulevard. New curb and gutter, sidewalks, a multi-use path, storm sewer and traffic signal modernization are also proposed.
Existing auxiliary lanes includes right-turn lanes at Eddy Avenue (NB), Riverside Boulevard (NB & SB) and Bennington Road (SB) as well as left-turn lanes at Riverside Boulevard (NB & SB). The section north of River Bluff Boulevard includes a raised median. Curb and gutter with resurfacing in the gutter area exists throughout.

C. Provide the estimated duration of this project:

The construction duration for this project is anticipated to be three years. The project will be split into one mile sections (South of the rail road tracks and north of the tracks to be done each at a time).

D. The total area of the construction site is estimated to be 33 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 6.3 acres.

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

0.85

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

Soil borings show 67% of the subgrade is composed of Sandy loam A-2-6(1), 19% of Clay Loam A-7-6(15) and 16% of Sand A-3(0). The average moisture content of the sampled subgrade was 19.5% ranging from 10-35%. The predominant soil type has a Plastic Limit of 13.2% and an Optimum Moisture Content of 11.1%. This indicates that the existing stability is inherently poor to marginal at best.The following list of soils where found within project

boundaries:
MUID Description
197A Troxel silt loam, 0 to 2 percent slopes. A well drained soil with moderately high to high capacity of the most limiting layer to transmit water.
199A Plano silt loam, 0 to 2 percent slopes. A well drained soil with moderately high to high capacity of the most limiting layer to transmit water.
199B Plano silt loam, 2 to 5 percent slopes. A well drained soil with moderately high to high capacity of the most limiting layer to transmit water.
290A Warsaw loam, 0 to 2 percent slopes. A well drained soil with moderately high to high capacity of the most limiting layer to transmit water.
290B Warsaw loam, 2 to 4 percent slopes. A well drained soil with moderately high to high capacity of the most limiting layer to transmit water.
403C Elizabeth silt loam, 5 to 10 percent slopes. Somewhat excessively drained soil with moderately low to moderately high capacity of the most limiting layer to transmit water.
412B Ogle silt loam, 2 to 5 percent slopes. A well drained soil with moderately high to high capacity of the most limiting layer to transmit water.
623A Kishwaukee silt loam, 0 to 2 percent slopes. A well drained soil with moderately high to high capacity of the most limiting layer to transmit water.
781B Friesland fine sandy loam, 2 to 5 percent slopes. A well drained soil with moderately high to high capacity of the most limiting layer to transmit water.
783A Flagler sandy loam, 0 to 2 percent slopes. Somewhat excessively drained soil with high capacity of the most limiting layer to transmit water.

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

No wetlands exist within the project limits.

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

The potential for erosion exists throughout the project limits. Primary areas of concern are the right side slope embankments along the following stations: 588+00 - 589+00, 592+00 - 594+00 and 601+00 - 604+00.

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):

For all stages, soil disturbing activities will result from removing and replacing the existing along with constructing a bi-directional left turn lanes, new multi-use path and sidewalks, curb and gutter, storm sewer and others. The proposed work mentioned before will disturb the existing ground, result also in removing plant material, trees, digging and trenching.

Stage 1
Move traffic to the existing east lanes of pavement from Yonge Street to Brown Avenue. Operate trafffic on the existing pavement with one northbound lane and one southbound lane. Construct southbound lanes, curb and gutter, storm sewer, entrances, and multi-use path.
All lanes of traffic will then move to the middle of the existing pavement utilizing a horizontal curve ending immediately north of Brown Avenue. Southbound traffic shifts to the west to provide a left turn lane in both directions at Fulton Avenue. Continue to construct enough southbound pavement, curb and gutter, entrances, and multi-use path to be utilized for stage 2. Construct northbound pavement, curb and gutter, storm sewer, entrances, and sidewalk. Operate traffic on the existing pavement.
The southbound lanes shift back to the east just north of Fulton. Construct southbound pavement, curb and gutter, entrances, and sidewalk north of Fulton. Construct storm sewer on the east side of IL 2. Operate traffic on existing pavement.
Traffic will operate on the eastern existing edge of pavement north of Eddy Avenue with one northbound and one southbound lane. The lanes will continue on the eastern edge of pavement to Deborah Avenue. Construct southbound pavement, curb and gutter, storm sewer, multi-use path, entrances, and retaining wall.
Reduce lane width at Deborah Avenue aligned with the eastern edge of pavement. Introduce a left-turn lane at halsted. These wide lanes continue on the eastern edge of pavement until south of Belmont where they wide in each direction through Benington Road. Construct Southbound pavement, curb and gutter, storm sewer, multi-use path, sidewalk, entrances and retaining walls.
Install mainline storm sewer from approximately station 534+00 to 567+00 and station 593+50 to 612+30 behind the proposed west curb. Install mainline storm sewer from aproximate statiton 568+25 to 588+82 behind the east curb. Work zone has been provided from station 571+00 to 589+00 on the east side of the street. Install proposed structures with lateral pipes constructed up to the edge of the current work zone. The existing storm sewer structures will be removed in the current work zone. The median inlets within the work zone will be installed.

Stage 2
Move traffic to the west edge of pavement from Yonge Street to Brown Avenue. Operate traffic on the newly constructed pavement with one northbound lane and one southbound lane. Continue on the western edge of the pavement to Van Wie Avenue. Construct northbound pavement, storm sewer, curb and gutter, sidewalk and retaining wall.
At Van Wie Avenue, all lanes of traffic will move to the eastern edge of pavement. Construct southbound pavement, storm sewer, curb and gutter, and multi-use path.
Traffic will shift back to the western edge of pavement utilizing a horizontal curve at Ford Avenue ending immediately north of Ford Avenue. Construct northbound pavement, storm sewer, curb and gutter and sidewalk.
Northbound lane tapers to the west north of Eddy Avenue. Construct northbound pavement, curb and gutter, sidewalk, entrances and retaining wall.
North of Deborah, the northbound lane shifts to the east to provide northbound and southbound left-turn lanes at Halsted Road. Construct northbound pavement, curb and guttter, sidewalk and entrances.
North of Halsted Road, taper the northbound lane to the west through Belmont Boulevard. Construct northbound pavement, curb and gutter, sidewalk and entrances.
Shift the northbound lane north of Belmont boulevard to the east to provide left-turn lanes at River Bluff Boulevard and Riverside Boulevard. Construct northbound pavement, curb and gutter, sidewalk, and entrances.
North of Riverside Boulevard, continue along the western edge of pavement. Northbound lane shift to the west to the northern project limit. Construct northbound pavement, curb and gutter, sidewalk, and entrances.
Install proposed structures with lateral pipes connceting up to thr stage 1 lateral stubs from station 534+00 to 567+00.
Construct mainline storm sewer from approximate station 614+00 to 635+00 behind the back of the east curb and establish a connection to the existing outlet pipe to the east along Belmont Avenue.
At Riverside Boulevard move traffic to northern edge of pavement. Construct eastbound pavement, storm sewer, curb and gutter, multi-use path, and entrances. Construct mainline storm sewer along the south side of the proposed Riverside Boulevard curb.

Stage 3
Move northbound and southboud traffic to the outer edges of pavement from Yonge Street to Benington Road/Light street. Construct raised median, corrugated median, and turn-lane pavement.
At Fulton Avenue move all traffic to northern edge of pavement. Construct remaining pavement, curb and gutter entrances and sidewalk.
Construct mainline storm sewer along the south side of the street and connect the lateral stubs constructed in stage 1.

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 Rockford Public Works Department
City of Rockford Water Division
Rock River Water Reclamation District

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

City of Rockford - ILS000001

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:

Surficial drainage in the project area is generally toward the east, in the direction of the Rock River. However, since the project area is urbanized and storm drains and sewers are present, most surficial runoff will be controlled by the storm sewer system; such systems typically are designed to follow natural drainage patterns.

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.

This project will result in the use of Brown Park (Rockford Park District). FHWA hereby makes a deminimis impact determination for this use as it will not adversely affect this resource's activities, features, and attributes. The Department will be acquiring 0.066 acres of right-of-way and 0.246 acres of temporary easement from the Brown Park for this project. The area of proposed acquisition is currently utilized as green space or existing sidewalk. No organized activities within the park will be impacted. A commitment has been made to place temporary fencing approximately 3' from the edge of temporary easement in order to ensure delineation of the work area. This temporary fencing will also border the basketball court and the pavilion.
Furthermore, buches along property 631+00 to 631+63 RT will be saved and not disturbed, and temporary fencing will be placed around it.
Also, protect trees or minimize impacts as much as possible by placing temporary fencing at the south west corner of Jonathan Avenue.

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:

- ☒ Soil Sediment
- ☒ Concrete
- ☒ Concrete Truck Waste
- ☒ Concrete Curing Compounds
- ☒ Solid Waste Debris
- ☒ Paints
- ☐ Solvents
- ☒ Fertilizers / Pesticides
- ☒ Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
- ☒ Antifreeze / Coolants
- ☒ Waste water from cleaning construction equipment
- ☐ Other (specify)
- ☐ Other (specify)
- ☐ Other (specify)
- ☐ Other (specify)
- ☐ 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:

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

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

Protection of Trees: All trees designated to be saved, or outside of the limits of construction, shall be protected prior to beginning any clearing or removal work and shall remain protected during subsequent construction work. Proteccion of trees shall be as shown on the plans or directed by the engineer in accordance with Article 201.05 of the IDOT Standard Specifications for Road and Bridge Construction (2012 edition).

Temporary Erosion Control Seeding: This item will be applied to all bare seeding every seven days to minimize the amount of exposed surface areas. Temporary seeding shall consist of areas as shown on the plans, areas disturbed during the removal of soil and erosion control measures or as directed by the Engineer and in

accordance with the IDOT Standar Specifications for Road and Bridge Construction (2012 edition).

Erosion Control Blanket/Mulching: This item will be used within 24 hours after seeding operations that have been completed in ditches/swales and sloped areas that require protection from erosion. Erosion control blankets shall be installed over fill slopes, high velocity areas and slopes steeper that 3:1 that have been brought to final grade. Temporary Mulching will be applied to the relatively flat areas to protect the disturbed areas and prevent further erosion. Erosion Control Blanket will be installed in accordance to IDOT Specification Article 251.04.

Sodding: It will be provided throughout the project. All areas disturbed by construction will be stabilized with sod immediately following finished grading. It will be installed according to IDOT Specification Article 252 throughout the project limits as show on the landscaping plans.

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

Sodding will be used once all soil disturbing activities is done.

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:

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

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

Perimeter Erosin Barrier will be used to demarcate the perimeter of the project location and for the prevention of silt/sediment from leaving the site. Perimeter erosion barrier will be modified as necessary to accommodate the phasing of construction and repaired/replaced as becomes necessary. Perimeter erosion barrier will remain in place untill all remaining items of the project have been completed.

Storm Drain Inlet Protection will be utilized at all manholes, catch basins and inlets with open grates. Inlet protection will consist of silt filter fence within ditch/swales while grates within the roadway will consist of inlet filters. Inlet filters will be installed directly on the drainage structure or under the grate of the drainage structure resting on the lip of the frame. Inlet filters will be checked on a periodic basis and any sediment/debris will be removed to maintain inlet protection. Storm Drain Inlet Protection will be done in accordance with Article 280.04 of the Illinois Department of Transportation Specifications.

Turf Reinforcement Mats will be utilized along of the outlet at the right side of station 1206+48 at Edson Road for stabilization.

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

Perimeter Erosion Barrier will remain in place until all remaining items of the project have been completed and 70% vegetation has been established.

Storm Drain Inlet Protection will be utilized at all manholes, catch basins and inlets with open grates. Inlet protection will consist of silt filter fence within ditch/swales while grates within the roadway will consist of inlet filters. Inlet filters will be checked on a periodic basis and any sediment/debris will be removed to maintain inlet protection. Storm Drain Inlet Protection will be done in accordance with Article 280.04 of the Illinois Department of Transportation Specifications. Storm Drain Inlet Protection shall remain in place until 70% vegetation has been established in the drainage areas sufficient to be utilized as a vegetative buffer.

Turf Reinforcement Mats will be utilized along of the outlet at the right side of station 1206+48 at Edson Road for stabilization and left in place for permanent stabilization..

D. **Treatment Chemicals**

Will polymer flocculants or treatment chemicals be utilized on this project: ☐ Yes ☒ No

If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this project.

E. **Permanent Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water Act.

1. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

   The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

   Description of permanent storm water management controls:

   Station 534+50 to 567+00
   The total drainage area for this system is approximately 29 acres; only 8.3 acres of the tributary area is onsite. Along the east site of Main Street from station 534+50 to 554+50 is Greenwood Cementery, which makes up a large portion of the offsite area. The roadway through this area has B-6.18 curb and has multiple sag locations north of Sta. 546+50. The proposed storm sewer outlets at sta. 543+50 and drains into an existing 27" storm sewer. The proposed system is relatively deep in many locations; the reason for this is the fairly flat roadway slope north of Sta. 546+50. The storm sewer must be deep in order to provide positive drainage and sufficient cover for the northern most inlets; this is consistent with the current storm sewer depth.

   Station 567+00 to 591+00
   This section of the roadway drains to an existing 48" outlet locates at Sta. 585+00. The outlet pipe drains the roadway north and south of Sta. 585+00. Since the pipes draining the south portion of the total tributary area were larger, it has designed a restrictor structure to detain enough water to allow the pipes from the north to flow un-restricted. The detention requirement for the total tributary area has still been met. The total tributary area to Outlet 585 is aproximately 17.3 acres with 6.1 acres of that being onsite area. This system was designed to convey the flows form five existing offsite sewer systems.

   Station 591+00 to 613+70
   This section of roadway drains from north to south where the proposed storm sewer will drain into an existing 30" pipe running parallel to the nearby railway. Just upstream of Outlet 593 will be a restrictor structure that will provide the required detention and maintain the required release rate for the storm sewer system. This

storm sewer system will provide conveyance for two offsite systems which will enter the proposed storm sewer at approximately Sta. 598+30 (15") and 594+30 (18"). The total area tributary to Outlet 593 is approximately 10.6 acres with 5.7 acres of that area being onsite.

Station 613+70 to 635+35
This section of roadway drains from north to south where the proposed storm sewer will drain into an existing 24" pipe running east along Belmont Ave. just upstream of Outlet 614, there will be a restrictor structure that will provide the required detention and maintain a release rate that will not overwhelm the existing 24" outlet pipe. The proposed storm sewer will provide conveyance for two offsite systems which have been modeled as point flows. The existing storm sewer was located under the median from Sta. 628+40 to the northern project limit. The proposed storm sewer will be relocated behind the curb along the east side of Main Street. The total area tributary to Outlet 614 is approximately 12.7 acres with 7.7 acres making up the onsite.

Station 713+30 to 719+40 along Riverside Boulevard
This stretch of roadway drains from east to west along Riverside Blvd. The proposed storm sewer will drain into an existing 15" storm sewer at approximately Sta. 713+30. This drainage system has been designed to convey the flow from three offsite 12" pipes that drain the parking lot on the northwest corner of Main and Riverside. a restrictor structure will be utilized to provide detention and control the flow rate entering the existing 15" storm sewer. The total tributary area to Outlet 713 is approximately 1.7 acres.

Station 723+15 to 729+10
This section of roadway drains from west to the east along Riverside Blvd. The proposed storm sewer will drain to an existing 15" storm sewer at approximately Sta. 729+10. This sewer system has been modeled to account for all of the flow from the offsite area to the north to enter the sewer system as a point flow. This is consistent with the existing storm sewer configuration. The total tributary area to Outlet 729 is approximately 1.5 acres, excluding the area drained by the 12" existing inflow pipes.

Vehicle Entrances and Exits - Stabilized construction and exists must be constructed to prevent tracjing of sediments onto roadway. The contractor will provide the resident engineer with a written plan identifying the location of stabilized entrances and exits and the procedures he will use to construct and maintain them.

Material Delivery, Storage, and Use - The following BMPs shall be implemented to help prevent discharges of construction materials during delivery, storage and use:
All prodecuts delivered to the project site must be properly labeled.
Water tight shipping containers and/or semi-trailers shall be used to store hand tools, small parts, and most construction materials that can be carried by hand, such as paint cans, solvents, and grease.
A storage/containment facility should be chosen for larger items shch as drums and items shipped or stored on pallets. Such material is to be covered by a tin roof or large sheets of plastic to prevent precipitation from coming in contact with the products being stored, large items such as light stands, framing materials and lumber shall be stored in the open in a general storage area. Such material shall be elevated with wood blocks to minimize contact with storm water runoff.
Spill clean-up materials, material safety data sheets, an inventory of materials, and emergency contact numbers shall be maintained and stored in one designated area and each contractor is to inform his/her employees and the resident engineer of this location.

Stockpile Management: BMPs shall be implemented to reduce or eliminate pollution of storm water from stockpiles of soil and paving materials such as but not limited to Portland cement concret rubble, asphalt concrete rubble, aggregate base, aggregate sub base, and pre-mixed aggregate. The following BMPs may be considered: perimeter erosion barrier, temporary/turf seeding, temporary mulch, plastic covers, soil binders and storm drain inlet protection. The contractor will provide the resident engineer with a written plan of the procedures he will use on the project and how they will be maintained.
Waste Disponsal. No materials, including building materials, shall be discharged into Waters of the State, exept as authorized by section 404 permit.
The provisions of this plan shall ensure and demostrate compliance with applicable State and/or local waste disponsal, sanitary sewer or septic system regulations.
The contractor shall provide a written and graphic plan to the resident engineer identifying where each of the above areas will be located and how they are to be managed.

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 practices provided herein are in accordance with the IDOT Standard Specifications for Road and Bridge Construction (January 1, 2012), IDOT supplemental Specifications and Recurring Special Provisions (January 1, 2015).

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.

IV. Inspections:

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by email at: epa.swnoncomp@illinois.gov, telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

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

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

Additional Inspections Required:

V. Failure to Comply:

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.

Illinois Department of Transportation

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	FAP 734	Marked Rte.	IL 2 (N. Main Street)
Section	78R-2	Project No.	D-92-050-06
County	Winnebago	Contract No.	64C21

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:

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. Davis-Bacon and Related Act Provisions

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH–1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency..

(2) Each payroll submitted shall be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for

debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded,"

as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (https://www.epls.gov/), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the

certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

MINIMUM WAGES FOR FEDERAL AND FEDERALLY ASSISTED CONSTRUCTION CONTRACTS

This project is funded, in part, with Federal-aid funds and, as such, is subject to the provisions of the Davis-Bacon Act of March 3, 1931, as amended (46 Sta. 1494, as amended, 40 U.S.C. 276a) and of other Federal statutes referred to in a 29 CFR Part 1, Appendix A, as well as such additional statutes as may from time to time be enacted containing provisions for the payment of wages determined to be prevailing by the Secretary of Labor in accordance with the Davis-Bacon Act and pursuant to the provisions of 29 CFR Part 1. The prevailing rates and fringe benefits shown in the General Wage Determination Decisions issued by the U.S. Department of Labor shall, in accordance with the provisions of the foregoing statutes, constitute the minimum wages payable on Federal and federally assisted construction projects to laborers and mechanics of the specified classes engaged on contract work of the character and in the localities described therein.

General Wage Determination Decisions, modifications and supersedes decisions thereto are to be used in accordance with the provisions of 29 CFR Parts 1 and 5. Accordingly, the applicable decision, together with any modifications issued, must be made a part of every contract for performance of the described work within the geographic area indicated as required by an applicable DBRA Federal prevailing wage law and 29 CFR Part 5. The wage rates and fringe benefits contained in the General Wage Determination Decision shall be the minimum paid by contractors and subcontractors to laborers and mechanics.